

October 27, 2023

Director, Bureau of Water Compliance
Attention: Edward Hampston
New York State Department of Environmental Conservation
625 Broadway, 4th Floor
Albany, NY 12233-35062

Agreement DEC Index No: CO 1-20170626-244

South Shore Water Reclamation Facility
2023 Q3 Quarterly Report

Dear Mr. Hampston:

We are submitting herewith our Quarterly Report for the period of July 1, 2023, through September 30, 2023.

Very truly yours,



Vincent Falkowski, P.E.
Deputy Commissioner for Environmental Programs

| | | | | |
|-----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| c: | NCDPW <i>Kenneth Arnold</i> <i>Jane Houdek</i> <i>Chris Vella</i> | Hazen and Sawyer <i>Mark Hanson</i> <i>Paul Saurer</i> <i>Eric Mills</i> <i>Tom Zakrzewski</i> | ARCADIS <i>Peter Glus</i> <i>Greg Bazydola</i> <i>Maryanne Dioquino</i> | DEC <i>Paul Harding</i> <i>Brian Lee</i> <i>Josh Lin</i> <i>Ryan Waldron</i> <i>Andrew Fera</i> <i>Andrew Fleck</i> <i>Jennifer Pilewski</i> <i>Mandy Yau</i> <i>Dena Putnick</i> |
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DEC Agreement Q3 2023 Report



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Background

On October 29th, 2012 Hurricane Sandy (a.k.a. Superstorm Sandy) pushed into the NY-NJ Metro area and caused widespread and unprecedented damage to coastal communities, low-lying residential neighborhoods, and public infrastructure. The Bay Park Sewage Treatment Plant (the "Bay Park STP"), owned by the Nassau County Department of Public Works (DPW), which serves close to half a million Nassau County residents, was damaged by flooding, power loss, and high winds. The Bay Park STP was partially submerged and the major electrical systems, pumping facilities, and processes were inundated with saltwater from the nearby bay area. To correct the damage to the plant, improve the effluent quality and make the plant less vulnerable to future storms the County committed to construct improvements.

The construction of the improvements is catalogued in the Agreement with the New York State Department of Environmental Conservation CO 1-20170626-244 ("Agreement") in January 2018. In accordance with Section VII, Paragraphs A-C of the Modified Agreement the DPW hereby submits to the New York State Department of Environmental Conservation (DEC) the Quarterly Report for the period of July 1, 2023, through September 30, 2023.

Quarterly reports are posted to the County website and can be found via this link:
<https://www.nassaucountyny.gov/1882/Wastewater-Management-Program>

I.0**Executive Summary**

The Bay Park Sewage Treatment Facility Agreement (“Agreement”) Index No. CO 1-20170626-244, was entered into by the County of Nassau (“County”) and the New York State Department of Environmental Conservation (“DEC”) and became effective on January 11, 2018. The Agreement was modified by mutual consent in this reporting quarter, having been approved by the Nassau County Legislature and signed by the County. The modification was fully executed by the State on January 12, 2021. This report has been prepared with respect to the Modified Agreement.

Pursuant to Section VII, Paragraph A of the modified Agreement, “The County shall submit quarterly construction reports ("Quarterly Reports") to the DEC. The Quarterly Reports shall describe the actions which have been taken toward achieving compliance with this Modified Agreement during the previous three-month period”. The Modified Agreement requires that this report provide:

1. A list of the County's construction contracts necessary to fulfill the requirements of compliance milestones of this Agreement as such milestones are set forth in Appendices A, B, C, D, E and F. This list shall identify, by percentage, the amount of the contract that has been completed;
2. A detailed description of: (a) the work performed pursuant to this Agreement during the reporting period, including the status of all milestones; (b) all anticipated activities for the next three-month period; and (c) the status and cost report for all EBPs required by this Modified Agreement;
3. Information regarding unresolved delays encountered or anticipated that may affect the future schedule for implementation of the County's obligations under this Modified Agreement, and efforts made to mitigate and/or cure those delays or anticipated delays;
4. A description of community relations activities during the reporting period and the activities anticipated for the next three months;
5. Any changes in key personnel; and
6. Any other issues with the potential to materially affect the projects set forth in this Modified Agreement.

Additional information is included to provide a comprehensive representation of the County's efforts towards achieving compliance with the Agreement. This Quarterly Report updates the status and progress of DPW's compliance with the milestones set forth in the Agreement during the period from July 1, 2023, through September 30, 2023 (“Reporting Quarter”).

II.0

Modification Request and Force Majeure Status

Table 1 lists modification requests made by the County and DEC responses to date.

There are three (3) Conveyance Project milestones identified by the project team that will not be met per the current schedule. A modification request will be submitted to address them, all of which currently have a date of 12/30/2023 attached to them. The milestones are:

- Bay Park Effluent Pump Station Construction End
- Cedar Creek Effluent Pump Station/Receiving Station Construction End
- Mechanical Completion

The modification request will include a rationale for the time extension and a projection for completion of these activities.

Table 1 – Modification Requests and Force Majeure Notifications

| Milestone | Agreement Date | Mod request date | Revised date requested | DEC Response Date | Modified Milestone Date |
|-----------------------------------------|----------------|------------------|------------------------|-------------------|-------------------------|
| General Covid-19 FM | N/A | 3/19/2020 | N/A | 6/24/2021 | N/A |
| Bay Park Microtunnel Shafts Complete | 5/1/2022 | 4/1/2022 | 1/3/2023 | 12/27/2022 | 9/1/2023 |
| Bay Park Microtunnel Design Complete | 5/1/2022 | 4/1/2022 | 7/1/2022 | 12/27/2022 | 7/1/2022 |
| Cedar Creek Microtunnel Shafts Complete | 6/1/2022 | 4/1/2022 | 3/9/2023 | 12/27/2022 | 9/1/2023 |
| WW/Flow Reduction | Various | N/A | Various | 12/27/2022 | Various |
| Hassocks Restoration | TBD | N/A | N/A | 12/27/2022 | Various |
| RSP Supply Chain Delays | | 9/13/2022 | N/A | | |

III.0**Design Milestone Status**

The following table lists the design milestones and statuses for Appendix A of the Agreement.

Table 2 – Design Completion Milestones

| Milestone | Agreement Date | Actual/Forecast |
|-------------------------------------|-----------------------|------------------------|
| Effluent Screening and Disinfection | 4/8/2018 | 1/5/2018 * |
| East Avenue Ejector Station | 2/8/2018 | 3/2/2018 * |

**The table in Section X.0 of this report indicates certification of completed activities.*

Project Notes:

All agreement design milestones have been completed and certifications accepted.

IV.0

Construction Milestone Status

The following tables list the construction milestones and statuses for Appendices A and C of the Agreement. The milestone dates which are established in the Bay Park Agreement may be modified in the future if the County formally proposes an extension of the milestone, based upon its facility planning, and DEC formally accepts a projected delay.

Table 3 – Construction NTP Milestones

| Milestone | Agreement Date | Actual/Forecast |
|-------------------------------------|----------------|-----------------|
| Raw Sewage Pumping Facility | 2/26/2021 | 5/3/2021 A |
| Effluent Screening and Disinfection | 10/29/2020 | 11/4/2020 A |
| Secondary Flood Protection | 12/18/2019 | 12/18/2019 A |
| East Avenue Ejector Station | 10/29/2020 | 11/2/2020 A |
| Sidestream Deammonification | 12/31/2019 | 12/31/2019 A |

Table 4 – Construction Completion Milestones

| Milestone | Agreement Date | Actual/Forecast | % Complete |
|---------------------------------------|----------------|-----------------|------------|
| 1 Barnes Avenue – Baldwin | 12/31/2019 | 10/4/2019 A | 100% |
| 2 Raw Sewage Pumping Facility | 2/15/2024 | 7/11/2024 | 78% |
| 3 Sludge Dewatering Facilities | 12/15/2018 | 5/21/2018 A | 100% |
| 4 Effluent Screening and Disinfection | 8/22/2023 | 10/31/2023 | 90% |
| 5 Effluent Tide Pumping Facilities | 1/15/2021 | 5/5/2020 A | 100% |
| 6 Electrical Distribution Phase E1-E3 | 10/23/2020 | 9/1/2020 A | 100% |
| 7 Secondary Flood Protection | 6/17/2022 | 1/28/2022 A | 100% |
| 8 Stormwater Pump Stations | 3/31/2019 | 3/28/2019 A | 100% |
| 9 Upgrade To 3 Generator Operation | 5/19/2019 | 8/30/2019 A | 100% |
| 10 Cedar Dr, Roosevelt et al PS | 5/8/2018 | 1/12/2018 A | 100% |
| 11 Wantagh, Newbridge et al PS | 4/25/2018 | 2/12/2018 A | 100% |
| 12 Ocean Ave, Mill Rd et al PS | 12/5/2018 | 8/17/2018 A | 100% |
| 13 Inwood, Doughty et al PS | 7/4/2019 | 5/13/2019 A | 100% |
| 14 Lawrence & Sage Lake PS | 8/30/2018 | 8/13/2018 A | 100% |
| 15 East Avenue Ejector Station | 10/31/2022 | 10/17/2022 A | 100% |
| 16 Level 1 BNR | 5/5/2020 | 4/30/2020 A | 100% |
| 17 Sidestream Deammonification | 10/3/2022 | 9/20/2022 A | 100% |

* The table in Section X.0 of this report indicates certification of completed activities.

Project Notes:

1. Barnes Avenue – Baldwin

This project has been completed and milestone certification accepted.

2. Raw Sewage Pumping Facility

Progress This Quarter:

- Continued installation of rigid conduit and wiring for power, controls, and lighting.
- Continued demolition and removal of abandoned conduit and piping in the pump room.
- Continued wiring and terminations of equipment inside electrical/pump room.
- A&F Electrical Testing, Inc. continued the electrical testing of equipment.
- Started work in relays related to main power feeders (CO-01).
- Continued work related to main power (A-Side) feeders (CO-07).
- Started testing on compressed air piping for RSP No. 5.
- Started testing on vacuum priming piping for RSP No. 5.
- Finished installation of 30” gate valve extensions in pump room for RSP No. 2.
- Started installation of 30” gate valve extensions in pump room for RSP No. 1.
- Continued installation of valves and support for process equipment and instrumentation.
- Continued wiring and terminations of major electrical equipment.
- Continued connecting to local control stations, control panels, and disconnects inside pump room.
- Continued installation of electrical conduit on pump room conduit rack system (CO-08).
- Continued submission of RFI’s, MOPOs, and submittals.

Expected Progress Next Quarter:

- Finish relocation of fire standpipe in existing staircase.
- Continue miscellaneous metal incomplete items list for stair tower and catwalk.
- Finish installation of 30” gate valve extensions in pump room for RSP No. 1.
- Start installation of 48” gate valve extensions in pump room.
- Continue work related to main power feeders, A-side.
- Continue installation of pump room conduit rack, pull-boxes, and wiring.
- Continue electrical terminations on new equipment.
- Start testing, certifying, and energization of RSP systems.
- Continue terminations of local control stations, control panels, and disconnects inside pump room.
- Finish installation of radar level system conduit from scavenger waste to new electrical room.
- Continue installation of valves and supports for process equipment and instrumentation.
- Continue work on testing and commissioning plan for RSP No. 5 and RSP system.
- Continue submission of RFI’s, MOPOs, and Submittals.
- Install new potable water piping and RPZ in pump room basement.
- Deliver and install in place new dry pit submersible vertical pump No. 5.

- Continue submission of RFI's, Submittals, MOPOs, Shop Drawings and Subcontractor/Vendor approvals.

Note: Current schedule for Raw Sewage Pumps has remained behind schedule due to equipment delivery delays related to COVID and supply chain issues. It is anticipated that the current Consent Agreement completion milestone will not be met as a result. A letter to this effect was issued to DEC June 6, 2022. As of this reporting quarter, all equipment is now available for installation and further delays are not anticipated.

3. Sludge Dewatering Facilities

This project has been completed and milestone certification accepted.

4. Effluent Screening and Disinfection

Progress This Quarter:

- Continued preparation and submission of administrative and technical submittals.
- Attempted startup and test Isolation Butterfly Valves #1 & #2. (Both Valves leaked).

Expected Progress Next Quarter

- Startup and test Isolation Butterfly Valves Nos, 1 and 2 actuators and perform training.
- Receive delivery of Butterfly Valves No. 4.
- Field test flowmeter.
- Complete installation of pressure gauges & temperature instrumentation for the HVAC system.
- Startup and test Heating and Ventilation Unit.
- Program existing Chemical System Control Panel.
- Continue preparation and submission of administrative and technical submittals.

Note: Current schedule for Effluent Screening is behind schedule due to equipment delivery delays. DEC has been notified and updated quarterly. All screens are installed and operating but the delays are exclusively related to the isolation valves. Substantial completion is currently projected 260 days beyond the Consent Agreement. Due to the non-performance of this vendor, the County is considering deleting the remaining isolation valves in this contract and installing stop logs to provide the channel isolation required for maintenance.

5. Effluent Tide Pumping Facilities

This project has been completed and milestone certification accepted.

6. Electrical Distribution System Phases E1-E3

All phases have been completed and milestone certification has been submitted and accepted.

7. Secondary Flood Protection

All phases have been completed and milestone certification has been submitted and accepted.

8. Stormwater Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted and accepted.

9. Upgrade to 3 Simultaneous Generator Operation

Construction is complete, milestone certification has been submitted and accepted.

10. Cedar Dr., Roosevelt Ave, Whitewood, Biltmore and Alhambra Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted and accepted.

11. Wantagh, Newbridge, Merrick & Ray St Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted.

12. Ocean Ave, Mill Rd, Woodmere Blvd & Longacre Ave Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted and accepted.

13. Inwood, Doughty Blvd, Bayview Ave & Roslyn Rd Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted.

14. Lawrence and Sage Lake Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted and accepted.

15. East Avenue Ejector Station

Construction is complete and certification of completion has been submitted and accepted.

16. Level 1 BNR

Construction is complete and certification of completion has been submitted and accepted.

17. Sidestream Deammonification

Progress This Quarter:

- Construction Complete Milestone Certification accepted on November 22, 2022.
- Continued operation of the Sidestream system.
- Continued submission of O&Ms, As-builts, Closeout submittals, and technical submittals.
- Started installation of Submersible Centrate Pump control panels at north and south Equalization Tanks.

Expected Progress Next Quarter:

- Continue general punch list items.
- Complete Change order Installation of Submersible Centrate Pumps.

V.0

Inter Municipal Agreement

Paragraph VII.G of an administrative Consent Order (#C01- 20151020-142) between DEC and the City of Long Beach (City) requires the City to enter into an Inter-municipal Agreement (IMA) with the County. The County was to enter into a fully executed IMA with the City within 180 days of the effective date of this Agreement. The IMA is to address the diversion of wastewater from the WWTP currently owned and operated by the City to the South Shore WRF.

The IMA was executed by both parties on July 26, 2019 as noted in the modified Agreement paragraph VII.F.

The County and the City of Long Beach have executed the first Contract Administration Memorandum (CAM) that details the roles and responsibilities of the two parties with respect to project funding and financing. A second CAM has been executed summarizing the transactional details of payments. A third CAM was executed that constitutes an agreement by which the County will accept sludge residuals from the City due to the City's digester system becoming disabled.

VI.0

Nitrogen Schedule of Compliance

The milestones for the Nitrogen Upgrades as listed in the Modified Agreement are listed in the following table.

Table 5 – Bay Park WPCP Nitrogen Milestones

| Description of Work | Agreement Date | Projected/Actual* |
|-----------------------------------------------------------------------------------------|----------------|-------------------|
| Submit an approvable BNR Operation and Maintenance | 1/8/2020 | 1/8/2020 |
| Begin operation of the 6-month start-up period | 6/1/2020 | 6/1/2020 |
| Begin the 12-month performance period | 1/1/2021 | 1/1/2021 |
| End 12-month performance period | 12/31/2021 | 12/31/2021 |
| Submit performance data | 4/1/2022 | 4/1/2022 |
| Submit an approvable updated BNR O&M and Sidestream O&M Plan | 6/1/2022 | 6/1/2022 |
| Begin operation of the 6-month start-up period for updated BNR and Sidestream O&M plan. | 11/1/2022 | 11/1/2022 |
| Begin the 12-month performance period for updated BNR and Sidestream O&M plan. | 5/1/2023 | 12/1/2023 |
| End 12-month performance period for updated BNR and Sidestream O&M plan. | 4/30/2024 | 12/31/2024 |
| Submit performance data and approvable Final BNR and Sidestream O&M Plan. | 8/1/2024 | 5/1/2025 |

* The table in Section X.0 of this report indicates certification of completed activities.

Performance data demonstrates continued compliance with the revised nitrogen limit that went into effect July 1, 2022.

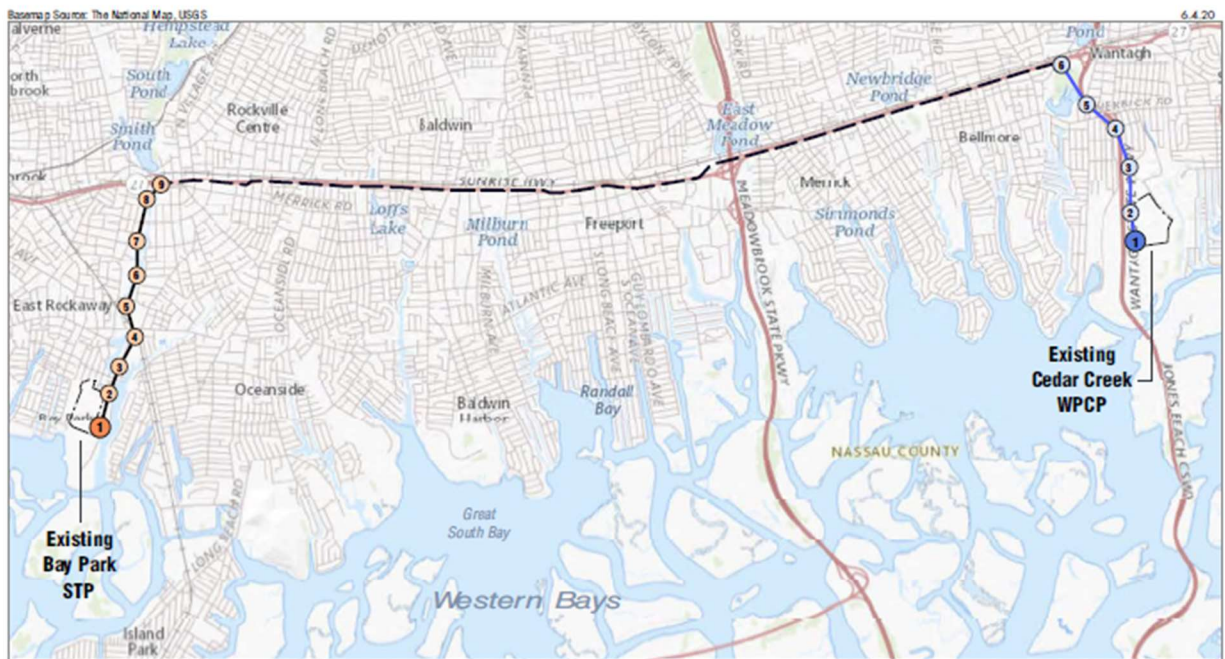
Operational issues upstream of the Sidestream Facility have delayed the implementation of the performance period. A change order in near completion to alleviate the issues and allow for the performance period to begin. A request to extend the beginning of the performance period to December 1, 2023 was submitted to DEC and accepted.

VII.0

Conveyance Project

Executive Summary

The Bay Park Conveyance Project (Project) is being delivered by the Department of Environmental Conservation (DEC) Project Team in partnership with the Nassau County Department of Public Works (DPW) via the design-build project delivery method. The Project would divert treated Bay Park STP effluent from the existing outfall in Reynolds Channel to the Cedar Creek WPCP ocean outfall. The diversion of treated water from Bay Park STP (now known as the South Shore WRF) to Cedar Creek WPCP would remove between 75 to 90 percent of the nitrogen currently discharged into the Western Bays.



The Project includes: (1) constructing a new dedicated pump station at the Bay Park STP, (2) rehabilitating an existing aqueduct under Sunrise Highway, (3) constructing a new 70 inch diameter force main between the Bay Park STP and the existing aqueduct, (4) constructing a new 70 inch diameter force main between the Cedar Creek WPCP and the existing aqueduct, and (5) constructing a standpipe receiving tank connection at the existing Cedar Creek WPCP pump station.

The new pump station at the Bay Park STP will have a 75 MGD capacity and will be fully mitigated from the 500-year storm surge.

The existing aqueduct is a steel pipe that is to be slip-lined with a polymer pipe with the interstitial space filled with grout to maximize protection against leakage.

Construction of the new force mains will use microtunneling technology. Microtunneling is a method of constructing underground tunnels to install pipes, such as sewer mains, using a remotely operated microtunnel boring machine (MTBM). This method avoids the need to excavate long sections of open trenches at the ground surface to lay pipes. The project includes the 14 construction shafts, approximately 30 feet in diameter, at the beginning, end, and at several locations along the force main alignments, establishing staging areas of approximately half an acre around each construction shaft. The tunnel for each new force main would then be drilled between the shafts at depths below current ground surface of approximately 20 to 60 feet.

A steel standpipe is to be constructed at the Cedar Creek WPCP which will serve to protect the force main from transient pressures that could result from power outages. The Cedar Creek pump station is also to be upgraded with new pumps, motors and drives.

The Modified Agreement reflects the project name change from the Effluent Diversion Project to the Conveyance Project. The initial modified milestones for the Conveyance Project are listed in the following table:

Table 6 – Initial Conveyance Project Milestones

| Description of Work | Agreement Date | Projected / Actual | Milestone Submitted | Milestone Accepted |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|----------------------------|---------------------------|
| DEC Conveyance Team Selects Best-Value Proposal | 10/26/2020 | 10/22/2020 | 2/17/2021 | 2/17/2021 |
| County/DEC Project Team to submit approvable major and minor milestones in a Baseline Schedule for Design-Build Project Completion, including Mechanical Completion, Substantial Completion, and Final Acceptance | 3/26/2021 | 4/6/2021 | 4/6/2021 | 4/13/2021 |
| Repair of the Cedar Creek Outfall Diffuser | 10/31/2021 | 10/31/2021 | | |
| Notice to Proceed to Construction | 2/26/2021 | 4/4/2021 | 3/9/2021 | 3/9/2021 |
| Construction Start Early Works | 6/25/2021 | 6/25/2021 | | |
| Commence Diversion of Wastewater from Bay Park to Cedar Creek | 10/25/2024 | 10/25/2024 | | |

Three milestones were achieved and accepted, one of which was a new set of milestones that supersede those in Table 6. The revised list of milestones is shown in Table 7 on the following page.

Table 7 – Conveyance Project Milestones

| Description of Work | No. | Agreement Date | Projected / Actual | Milestone Submitted | Milestone Accepted |
|---------------------------------------|------------|-----------------------|---------------------------|----------------------------|---------------------------|
| Notice to Proceed | 1 | 3/4/2021 | 3/4/2021 | 3/9/2021 | 3/9/2021 |
| BPM Construction Start | 2.1 | 10/1/2021 | 5/1/2021 | 5/12/2021 | 5/12/2021 |
| BPM Design Start | 2.2 | 4/1/2021 | 4/15/2021 | 4/16/2021 | 4/19/2021 |
| BPM Shafts Complete | 2.3 | 9/1/2023 | 8/26/2023 | 9/5/2023 | 9/5/2023 |
| BPM Design Complete | 2.4 | 7/1/2022 | 6/28/2022 | 6/28/2022 | 6/29/2022 |
| BPM Construction End | 2.5 | 12/30/2023 | 12/30/2023 | | |
| CCM Construction Start | 3.1 | 12/1/2022 | 12/1/2022 | 11/8/2022 | 11/19/2022 |
| CCM Design Start | 3.2 | 7/1/2021 | 6/29/2021 | 6/29/2021 | 7/2/2021 |
| CCM Shafts Complete | 3.3 | 9/1/2023 | 2/2/2023 | 9/5/2023 | 9/5/2023 |
| CCM Design Complete | 3.4 | 9/1/2022 | 6/28/2022 | 6/28/2022 | 6/29/2022 |
| CCM Construction End | 3.5 | 12/30/2023 | 12/30/2023 | | |
| BPEPS Construction Start | 4.1 | 5/1/2021 | 5/1/2021 | 5/12/2021 | 5/12/2021 |
| BPEPS Design Start | 4.2 | 4/1/2021 | 4/15/2021 | 4/16/2021 | 4/19/2021 |
| BPEPS Design Completion | 4.3 | 10/1/2022 | 10/1/2022 | 10/11/2022 | 10/12/2022 |
| BPEPS Construction End | 4.4 | 12/30/2023 | 12/30/2023 | | |
| SHA Rehabilitation Construction Start | 5.1 | 10/1/2021 | 10/1/2021 | 9/28/2021 | 9/29/2021 |
| SHA Rehabilitation Design Start | 5.2 | 4/1/2021 | 4/15/2021 | 4/16/2021 | 4/19/2021 |
| SHA Rehabilitation Design Complete | 5.3 | 12/30/2022 | 12/30/2022 | 10/11/2022 | 10/12/2022 |
| SHA Rehabilitation Construction End | 5.4 | 12/30/2023 | 12/30/2023 | | |
| CCEPS/RS Construction Start | 6.1 | 8/1/2022 | 5/25/2022 | 5/25/2022 | 6/1/2022 |
| CCEPS/RS Design Start | 6.2 | 8/1/2021 | 6/29/2021 | 6/29/2021 | 7/2/2021 |
| Cedar Creek Outfall Repair | 6.3 | 12/1/2021 | 12/1/2021 | 11/19/2021 | 12/3/2021 |
| CCEPS/RS Design Completion | 6.4 | 10/1/2022 | 10/1/2022 | 10/11/2022 | 10/12/2022 |
| CCEPS/RS Construction End | 6.5 | 12/30/2023 | 12/30/2023 | | |
| Mechanical Completion | 7 | 12/30/2024 | 12/30/2024 | | |
| Substantial Completion | 8 | 7/30/2024 | 7/30/2024 | | |
| Final Acceptance | 9 | 11/30/2024 | 11/30/2024 | | |

BPM: Bay Park Microtunnel
 CCM: Cedar Creek Microtunnel
 BPEPS: Bay Park Effluent Pump Station
 SHA: Sunrise Highway Aqueduct
 CCEPS/RS: Cedar Creek Effluent Pump Station/Receiving Station

Progress This Quarter:

During 2023 Quarter No. 3, there was continued progress to advance the overall project objectives, which included review and approval of subsequent design changes, RFCDs, RFIs, and design and construction submittals.

The Project's administrative goals in the form of reporting, meetings, document control, schedule reviews, quality assurance, and oversight activities continued. Construction activities such as shaft excavation, backfill, CLSM pour, final build out, SWPPP implementation, and other civil works were completed in accordance with RFCD packages. Summarized below are particulars on design, submittals, and construction progress by each location during the period.

Bay Park Effluent Diversion Pump Station:

- RCFD DP-10B Design Narrative SCADA Tie-in was received for review and approval. DPP-025 BP-1 Riser Pipe Durability was received for review. Following NDCs were reviewed and approved in this quarter: NDC-0028 - BPEDPS Pipe Support Pads, NDC-0029 - SWPPP Amendments BP, CC, SH, NDC-0031 - Updated Steel Lintel for CMU, NDC-0032 - Revised Spec 08452 - Fiberglass Sandwich Panel Assemblies, and NDC-0034 - Revised Spec 16119 - Underground Ducts and Raceways.
- Reviewed and processed numerous construction submittals, including but not limited to, doors and frames, piping drawings, structural steel joist framing & deck shop drawings, interior paint product data, control panels, medium voltage transformer factory acceptance test report, power distribution coordination study, and 480V switchboard test procedures.
- Continued with the installation of masonry wall and installation of 2" Ø sewer pipe. Waterproofing remediation and baffle wall installation continued at Wet Well. At the Diversion Structure, continued with Diversion Chamber upper wall installation and continued and completed rebar installation for the second lift of the Diversion Chamber walls.

Bay Park Microtunnel:

- DPP-024.00 - BP-5 Watertightness Repair was submitted as "for information only" and approved. NDC-0029 - SWPPP Amendments BP, CC, SH was reviewed and approved.
- Reviewed and processed numerous construction submittals, including the revised IJS layouts for BP8 to BP7 and BP8 to BP9.
- Shafts BP1 and BP3 – Micro-tunnel between BP1- BP3 being repaired. Shaft BP2 - Performed MT Pipe grout port repair to BP1 using BP3 shaft as access. Shaft BP4 - Cleaning tunnel and performing repairs as required. Shaft BP5 – Micro-tunneling run BP5 to BP4 completed. Shaft BP7 - Clean up and grouting micro-tunneling operation from BP5. Shaft BP8 – Micro-tunneling run BP8 to BP9 completed. Started mobilizing micro-tunneling equipment for run BP8 to BP7. Shaft BP9 - Installed shaft SOE ring beam and excavation.

Sunrise Highway Sliplining:

- NDC-0029 - SWPPP Amendments BP, CC, SH were reviewed and approved.
- Reviewed and processed numerous construction submittals, including but not limited to, the Sunrise Highway response level plan and the design of the thrust block at Pit A.

- Started restoration of pits along Sunrise Highway, except for Pit V. Pit A - Completed installation of steel pipe connection towards BP9. Started preliminary pressure test on slip-line pipe from Pit A to Pit D. Pit B - Excavation and installation of watermain and hydrant completed. Pit O - Continued welding the hydrostatic test pipe plug bracing. Pit Q - Curb restoration work complete. Pit S - Resumed work for the percolation test. Pit W - Continued with slip-line pipe connection to CC6 shaft. Mill and fill completed 100% at Pit L and partially at Pits M and N.

Cedar Creek Microtunnel:

- Received the final version of technical design submittal DPP-022 - Limited Geotechnical Investigation Cedar Creek Micro-Tunnel Drive 2-1 (NCR-0085) and was approved. NDC-0029 - SWPPP Amendments BP, CC, SH was reviewed and approved.
- Reviewed and processed numerous construction submittals, including but not limited to, the revised IJS layouts for CC4 to CC3 and CC4 to CC5.
- Shaft CC2 - Continue restoration of sitework and punch list work in the tunnel. Shaft CC3 – Micro-tunneling run CC3 to CC4 completed. Completed permeation grouting. Shaft CC4 – Micro-tunneling run CC4 to CC5 completed. Shaft CC5 - Completed contact grouting. Shaft CC6 – Continued pipe connection to Pit W.

Cedar Creek Effluent Pump Station/Receiving Station:

- Received the final version of technical design submittal DPP-022 - Limited Geotechnical Investigation Cedar Creek Micro-Tunnel Drive 2-1 (NCR-0085) and was approved. NDC-0029 - SWPPP Amendments BP, CC, SH were reviewed and approved.
- Reviewed and processed numerous construction submittals, including but not limited to, the revised IJS layouts for CC4 to CC3 and CC4 to CC5.
- Shaft CC2 - Continue restoration of sitework and punch list work in the tunnel. Shaft CC3 – Micro-tunneling run CC3 to CC4 completed. Completed permeation grouting. Shaft CC4 – Micro-tunneling run CC4 to CC5 completed. Shaft CC5 - Completed contact grouting. Shaft CC6 – Continued pipe connection to Pit W.

Expected Progress Next Quarter:

Bay Park Effluent Diversion Pump Station:

- Approval process for RCFD DP-10B Design Narrative SCADA Tie-in will be completed. Expect the resubmission of DPP-025 BP-1 Riser Pipe Durability.
- Continue installing CMU walls at BPPS. Start stripping, bracing, and formwork from second lift of Diversion Chamber walls at Diversion Structure. Continue with Wet Well Waterproofing Repairs. Continue forming and pouring baffle walls. Continue conduit and utilities installation for Pump Station. Set up station floor slab and start installing structural steel for Pump Station.

Bay Park Microtunnel:

- No more contractual design submissions for Bay Park micro-tunnel are anticipated.
- Start and finish micro-tunneling from BP8 to BP7. Finish contact grouting of Flowcrete Pipe from BP8 to BP9. Continue pipe repairs from BP1 to BP5. Site restoration work for shafts BP2, BP3 and BP4.

Sunrise Highway Sliplining:

- NDC-0033 - UCD-012 CARV Alternate Design - Pit B Drywell Final will be submitted for review.
- Pit W restoration and prep for curb restoration on Lakeview Road and reopening of Lakeview Rd in Wantagh. Complete the final restoration of all pits along Sunrise Highway. Trench and tie-in CC6 to Pit W. Complete the hydrostatic testing between Pits A and O.

Cedar Creek Microtunnel:

- No more contractual design submissions for Cedar Creek micro-tunnel are anticipated.
- Stripping tunnel run between CC3 and CC4. Cleaning tunnel pipe between CC2 and CC3. Continue pipe repairs of joints and ports between CC2 and CC3.

Cedar Creek Effluent Pump Station/Receiving Station:

- Will receive a final version of RFCFD package DP-11 – CC Outfall Cleanout Chamber Preliminary Study and an NDC on the receiving tank modifications.
- Approval process for RFCFD DP-10B Design Narrative SCADA Tie-in will be completed.
- At the Cedar Creek Pump Station, continue with the removal and replacement of pumps and continue installing conduits. Continue with pipe support installation and valve installation for the receiving tank. Also continue erecting and painting the receiving tank.

VIII.0

Wet Weather Flow Reduction

The Modified Agreement has added the following compliance schedule for Wet Weather Flow Reduction, as listed in the following table.

Table 8 – Wet Weather Flow Reduction Milestones

| Description of Work | Agreement Date |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1. Capacity, Management, Operation and Maintenance (CMOM) Program a. Submit CMOM plan for Bay Park STP and Cedar Creek WPCP b. Begin implementing the approved CMOM plans | 1/27/2023 Upon DEC Approval |
| 2. CMOM Program – Submit Operating Plan for Bay Park Conveyance System | 3/1/2023 |
| 3. Inflow and Infiltration (I/I) Study Work Plan a. Submit I/I study work plans for Bay Park STP and Cedar Creek WPCP b. Conduct I/I studies c. Submit Final Report on Findings | a) 3/31/2023 b) Upon DEC approval of the I/I Work Plan c) Within 12 months of work plan approval or per approved schedule |
| 4. Inflow and Infiltration (I/I) Reduction Plan The County shall use the results of the I/I Study to identify and prioritize cost-effective I/I reduction projects using a data-driven cost/benefit approach consistent with best industry practices. | Submit plan within six months of I/I Study Final Report Approval |

Both the CMOM and I/I Study Plans have been accepted by DEC in this reporting quarter and the County is proceeding with the initiation of these plans.

IX.0

Environmental Benefit Projects

The formal proposal for the Cedar Creek Kayak Launch was submitted to DEC on August 9, 2021 and was approved on September 24, 2021. The project plan resubmittal was approved by the DEC Region 1 permitting group on June 6, 2022 and the USACE application was submitted on July 11, 2022. Comments were received in Q1 2023 and the package was resubmitted in this reporting quarter.

X.0

Certification of Completed Activities

The following table lists the activities for which certification of compliance were submitted.

Table 9 – Completed Activities

| Milestone | Date Completed | Certification Submitted | Certification Accepted |
|------------------------------------------------|----------------|-------------------------|------------------------|
| Effluent Screening and Disinfection – Design | 1/5/2018 | 7/5/2018 | 9/13/2018 |
| East Avenue Ejector Station - Design | 3/2/2018 | 7/5/2018 | 9/13/2018 |
| Cedar Dr, Roosevelt et al PS - CC | 1/12/2018 | 7/5/2018 | 11/27/2018 |
| Wantagh, Newbridge et al PS – CC | 2/12/2018 | 7/5/2018 | 11/27/2018 |
| Sage Lake and Lawrence PS – CC | 8/13/2018 | 8/24/2018 | 11/27/2018 |
| Ocean Ave, Mill Road et al PS – CC | 8/17/2018 | 9/19/2018 | 11/27/2018 |
| Sludge Dewatering Facilities – CC | 10/12/2018 | 10/24/2018 | 1/4/2019 |
| Inwood, Doughty et al PS – CC | 2/19/2019 | 2/28/2019 | 5/1/2019 |
| Stormwater Pump Stations – CC | 3/28/2019 | 4/3/2019 | 4/19/2019 |
| Upgrade to 3 Generator Operation – CC | 8/30/2019 | 9/12/2019 | 11/7/2019 |
| Barnes Ave-Baldwin – CC | 11/22/2019 | 11/25/2019 | 2/25/2020 |
| Electrical Distribution Upgrades – CC | 9/1/2020 | 10/23/2020 | 10/30/2020 |
| Secondary Flood Protection – NTP | 12/18/19 | 12/31/19 | 12/31/19 |
| Secondary Flood Protection – CC | 1/28/2022 | 2/2/2022 | 4/22/2022 |
| Sidestream Deammonification – NTP | 12/31/19 | 12/31/19 | 12/31/19 |
| East Avenue PS NTP | 10/29/2020 | 10/29/20 | 11/2/2020 |
| Effluent Screening and Disinfection NTP | 10/29/2020 | 10/29/20 | 11/2/2020 |
| Level 1 BNR – CC | 4/30/2020 | 5/5/20 | 10/30/2020 |
| Effluent Pumping Facility – CC | 5/5/2020 | 6/10/20 | 10/30/2020 |
| Sidestream Deammonification – CC | 11/22/2021 | 10/10/2022 | 11/22/2022 |
| Submit Approvable BNR O&M Plan | 1/8/2020 | 1/8/2020 | 4/13/2020 |
| Begin operation of the 6-month start-up period | 6/1/2020 | 7/22/2020 | 11/8/2022 |
| Begin performance period BNR | 1/1/2021 | 1/13/2021 | 1/13/2021 |
| Raw Sewage Pumping Facility NTP | 5/3/2021 | 4/30/2021 | 5/5/2021 |
| Complete performance period BNR | 12/31/2021 | 1/20/2022 | 1/21/2022 |
| Submit Approvable Revised BNR O&M Plan | 6/1/2022 | 6/1/2022 | 6/29/2022 |

| Milestone | Date Completed | Certification Submitted | Certification Accepted |
|---------------------------------------------------|----------------|-------------------------|------------------------|
| Submit CMOM plans for South Shore and Cedar Creek | 1/26/2023 | 1/26/2023 | 7/31/2023 |
| Submit Operation Plan for Conveyance System | 3/7/2023 | 3/7/2023 | |
| Submit I/I Study Work Plans | 3/30/2023 | 3/30/2023 | 10/12/2023 |

XI.0**Community Relations**

From July through September 2023, the State, County, and Design Builder continued in their efforts to disseminate and field community concerns via various community engagement initiatives.

On September 20 from 6 – 7:30pm, the State, County, and Design-Builder held a tenth quarterly general public information session (since the Project’s Notice-to-Proceed) via Zoom to update communities on the Project’s construction progress, reinforce its mission, and to answer any questions from participants. Discussion topics that affect the public included noise and vibration monitoring as well as construction schedules.

Meetings with local elected officials and first responders took place on July 25, August 29, and September 26, where government officials and fire marshals were briefed on the Project’s construction progress, safety measures and traffic control procedures. The invited entities also had the opportunity to ask questions directly to the Project team regarding any concerns.

The Project team continues to respond to and address public inquiries, release monthly project construction lookaheads and quarterly newsletters, engage in outreach to businesses and residents via canvassing, local events, social media, e-blasts, as well as maintaining a project website.

2023 Q3 Outreach Summary:

| Item/ Description | Dates |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Quarterly Public Information Session | <ul style="list-style-type: none"> • September 20 |
| Monthly Meeting with First Responders and Elected Officials | <ul style="list-style-type: none"> • July 25 • August 29 • September 26 |

XII.0

Attachments

1. Program Master Schedule

| Activity Name | Orig Dur | Rem Dur | Start | Finish | % Comp | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | | | |
|---------------------------------------------------------------------------------------|----------|---------|-------------|-------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|
| S35123-L33E - Phase E4 Electrical Utility Connections | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Phase E4 Electrical Utility Connections | 90 | 0 | 15-Dec-17 A | 04-Jun-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise - Final Design - Phase E4 Electrical Utility Connections | 29 | 0 | 12-Oct-18 A | 09-Nov-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - Phase E4 Electrical Utility Connections | 120 | 0 | 09-Nov-18 A | 22-Jan-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design - Phase E4 Electrical Utility Connections | 180 | 0 | 22-Jan-20 A | 16-Sep-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| PSE&G Coordination | 5 | 47 | 12-Aug-13 A | 15-Nov-23 | 0 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Phase E4 Electrical Utility Connection | 7 | 0 | 17-Sep-20 A | 24-Sep-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Phase E4 Electrical Utility Connections | 29 | 0 | 25-Sep-20 A | 23-Oct-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Phase E4 Electrical Utility Connections | 1 | 0 | 27-Oct-20 A | 27-Oct-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Phase E4 Electrical Utility Connections | 180 | 0 | 28-Oct-20 A | 14-Jun-21 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Phase E4 Electrical Utility Connections | 540 | 47 | 15-Jun-21 A | 15-Nov-23* | 91 | | | | | | | | | | | | | | | | | | | |
| Energize & Commission PSEGLI Power | 0 | 0 | | 15-Nov-23* | 0 | | | | | | | | | | | | | | | | | | | |
| PSEG-LI - Phase E4 Primary Power by PSEG-LI | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction - Phase E4 Primary Power by PSEG-LI | 540 | 0 | 02-Oct-20 A | 17-Aug-23 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35121-16A - Engine Facility Auxiliary Upgrades | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design - Engine Facility Auxiliary Upgrades | 195 | 0 | 01-Nov-15 A | 30-Sep-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Engine Facility Auxiliary Upgrades | 21 | 0 | 30-Sep-16 A | 20-Oct-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Engine Facility Auxiliary Upgrades | 29 | 0 | 21-Oct-16 A | 18-Nov-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Engine Facility Auxiliary Upgrades | 1 | 0 | 22-Nov-16 A | 22-Nov-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Engine Facility Auxiliary Upgrades | 90 | 0 | 23-Nov-16 A | 05-Jul-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Engine Facility Auxiliary Upgrades | 365 | 0 | 05-Jul-17 A | 30-Aug-19 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35121-16G - Secondary Flood Protection & Hardening of Critical Facilities | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Secondary Flood Protection | 29 | 0 | 28-Jul-17 A | 25-Aug-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Secondary Flood Protection | 90 | 0 | 26-Aug-17 A | 02-Dec-19 A | 100 | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Secondary Flood Protection | 90 | 0 | 01-Dec-14 A | 29-Oct-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Finalize Technical Memorandum - Secondary Flood Protection | 45 | 0 | 21-Apr-14 A | 29-Oct-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Secondary Flood Protection | 29 | 0 | 30-Oct-15 A | 04-Dec-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - Secondary Flood Protection | 90 | 0 | 05-Dec-15 A | 08-Nov-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design - Secondary Flood Protection | 210 | 0 | 09-Nov-16 A | 07-Jul-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Secondary Flood Protection | 7 | 0 | 10-Jul-17 A | 27-Jul-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Secondary Flood Protection | 29 | 0 | 27-Oct-17 A | 01-Dec-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Secondary Flood Protection | 1 | 0 | 05-Dec-17 A | 05-Dec-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Secondary Flood Protection | 90 | 0 | 06-Dec-17 A | 18-Dec-19 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Secondary Flood Protection | 730 | 0 | 18-Dec-19 A | 28-Jan-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35121-16P - Heating Hot Water Piping Permanent System | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Heating Hot Water Piping Permanent System | 29 | 0 | 24-Sep-21 A | 22-Oct-21 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Heating Hot Water Piping Permanent System | 180 | 0 | 23-Oct-21 A | 05-Sep-23 A | 100 | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Heating Hot Water Piping Permanent System | 90 | 0 | 02-Nov-15 A | 09-Sep-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise - Final Design - Heating Hot Water Piping Permanent System | 29 | 0 | 19-Oct-18 A | 16-Nov-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - Heating Hot Water Piping Permanent System | 159 | 0 | 16-Nov-18 A | 16-Sep-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design - Heating Hot Water Piping Permanent System | 196 | 0 | 16-Sep-20 A | 13-Jan-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Heating Hot Water Piping Permanent | 7 | 0 | 14-Jan-22 A | 03-Feb-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Heating Hot Water Piping Permanent System | 29 | 0 | 04-Feb-22 A | 25-Mar-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Heating Hot Water Piping Permanent System | 1 | 0 | 29-Mar-22 A | 29-Mar-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Heating Hot Water Piping Permanent System | 180 | 0 | 30-Mar-22 A | 04-Sep-23 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Heating Hot Water Piping Permanent System | 730 | 705 | 05-Sep-23 A | 03-Sep-25* | 3 | | | | | | | | | | | | | | | | | | | |

■ Remaining Level of Effort
 ■ Actual Work
 ■ Actual Level of Effort
 ■ Remaining Work

| Activity Name | Orig Dur | Rem Dur | Start | Finish | % Comp | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | | | |
|-------------------------------------------------------------------------------------|----------|---------|-------------|-------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|---|
| | | | | | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q |
| S35121-16TR - Vehicle Fueling & Tanks Reconstruction | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Design - Vehicle Fueling | 53 | 0 | 10-Mar-14 A | 02-May-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Vehicle Fueling | 7 | 0 | 02-May-14 A | 08-May-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Vehicle Fueling | 29 | 0 | 09-May-14 A | 06-Jun-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Vehicle Fueling | 1 | 0 | 10-Jun-14 A | 10-Jun-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Re-Bid / Advertise - Vehicle Fueling | 29 | 0 | 27-Mar-15 A | 24-Apr-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Vehicle Fueling | 1 | 0 | 28-Apr-15 A | 28-Apr-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Vehicle Fueling | 90 | 0 | 29-Apr-15 A | 12-Jun-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Vehicle Fueling | 274 | 0 | 13-Jun-16 A | 30-Jan-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35121-16V - Dechlorination Vault Storm Mitigation | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Design - Dechlor Sample Vault Hardening | 180 | 0 | 27-Mar-15 A | 22-Oct-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Dechlor Sample Vault Hardening | 7 | 0 | 23-Oct-15 A | 29-Oct-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Dechlor Sample Vault Hardening | 36 | 0 | 30-Oct-15 A | 04-Dec-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Dechlor Sample Vault Hardening | 1 | 0 | 08-Dec-15 A | 08-Dec-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Dechlor Sample Vault Hardening | 90 | 0 | 12-Dec-15 A | 11-May-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Dechlor Sample Vault Hardening | 270 | 0 | 11-May-16 A | 11-Aug-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35121-17G - Perimeter Flood Protection | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Perimeter Flood Protection | 30 | 0 | 10-Jan-14 A | 07-Feb-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Perimeter Flood Protection | 90 | 0 | 08-Feb-14 A | 30-Jun-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Geotech Borings - Perimeter Flood Protection | 85 | 0 | 12-Aug-13 A | 17-Dec-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Permitting (EAS) - Perimeter Flood Protection | 125 | 0 | 12-Aug-13 A | 17-Dec-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Berm Design - Perimeter Flood Protection | 83 | 0 | 26-Sep-13 A | 17-Dec-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Finalize Technical Memorandum - Perimeter Flood Protection | 45 | 0 | 12-Aug-13 A | 17-Dec-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Public Review/Comment Period | 30 | 0 | 17-Dec-13 A | 16-Jan-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Perimeter Flood Protection | 7 | 0 | 17-Jan-14 A | 23-Jan-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Perimeter Flood Protection | 29 | 0 | 24-Jan-14 A | 14-Mar-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Perimeter Flood Protection | 1 | 0 | 18-Mar-14 A | 18-Mar-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Perimeter Flood Protection | 76 | 0 | 19-Mar-14 A | 27-May-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Eastern Park Open | 0 | 0 | | 07-Oct-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Perimeter Flood Protection | 740 | 0 | 27-May-14 A | 09-Jun-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35121-18G - Flood Protection Phase 1 Stormwater Pumping Stations | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Flood Protection Phase 1 Stormwater PS | 29 | 0 | 31-Jul-15 A | 28-Aug-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Flood Protection Phase 1 Stormwater PS | 90 | 0 | 29-Aug-15 A | 17-Jun-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design Flood Protection Phase 1 Stormwater PS | 97 | 0 | 18-Dec-13 A | 17-Apr-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design Flood Protection Phase 1 Stormwater PS | 29 | 0 | 18-Apr-14 A | 16-May-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Final Design Flood Protection Phase 1 Stormwater PS | 90 | 0 | 17-May-14 A | 10-Nov-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design Flood Protection Phase 1 Stormwater PS | 210 | 0 | 10-Nov-14 A | 28-Aug-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Flood Protection Phase 1 Stormwater | 7 | 0 | 28-Aug-15 A | 03-Sep-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Flood Protection Phase 1 Stormwater PS | 29 | 0 | 04-Sep-15 A | 02-Oct-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Flood Protection Phase 1 Stormwater PS | 1 | 0 | 06-Oct-15 A | 06-Oct-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Flood Protection Phase 1 Stormwater PS | 90 | 0 | 30-Sep-15 A | 31-May-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Flood Protection Phase 1 Stormwater PS | 760 | 0 | 31-May-16 A | 24-Jun-19 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35121-18S - Flood Protection Phase 2 Stormwater Green Infrastructure | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Flood Protection Phase 2 Stormwater GI | 96 | 0 | 31-Jan-16 A | 26-May-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise - Final Design Flood Protection Phase 2 Stormwater GI | 29 | 0 | 27-May-16 A | 24-Jun-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35123-L37G - Miscellaneous Storm Repairs, Mitigation & Site Restoration | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Misc Storm Repairs, Mitigation & Restoration | 31 | 31 | 01-Apr-25 | 01-May-25 | 0 | | | | | | | | | | | | | | | | | | | |

■ Remaining Level of Effort
 ■ Actual Work
■ Actual Level of Effort
 ■ Remaining Work

| Activity Name | Orig Dur | Rem Dur | Start | Finish | % Comp | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | | | |
|----------------------------------------------------------------|----------|---------|-------------|-------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|---|
| | | | | | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q |
| Bid / Advertise - Pump Station 2 | 29 | 0 | 10-Apr-15 A | 08-May-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Pump Station 2 | 1 | 0 | 12-May-15 A | 12-May-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Pump Station 2 | 90 | 0 | 13-May-15 A | 03-Mar-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Pump Station 2 | 548 | 0 | 03-Mar-16 A | 12-Jan-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| S3P311-03G - Wantagh, Newbridge, Merrick & Ray | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Finalize Technical Memorandum - Pump Station 3 | 140 | 0 | 12-Aug-13 A | 22-Nov-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Pump Station 3 | 67 | 0 | 23-Nov-13 A | 28-Jan-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Pump Station 3 | 30 | 0 | 31-Jan-14 A | 28-Feb-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Fnal Design -Pump Station 3 | 90 | 0 | 01-Mar-14 A | 23-Sep-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design - Pump Station 3 | 90 | 0 | 23-Sep-14 A | 13-Apr-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Pump Station 3 | 7 | 0 | 14-Apr-15 A | 30-Apr-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Pump Station 3 | 29 | 0 | 01-May-15 A | 29-May-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Pump Station 3 | 1 | 0 | 02-Jun-15 A | 02-Jun-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Pump Station 3 | 90 | 0 | 03-Jun-15 A | 03-Mar-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Pump Station 3 | 540 | 0 | 03-Mar-16 A | 12-Feb-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| S3P311-02M - PS2 & PS3 Construction Management | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - PS2 & PS3 | 29 | 0 | 03-Oct-14 A | 31-Oct-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - PS2 & PS3 | 90 | 0 | 01-Nov-14 A | 03-Mar-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| S3P311-04G - Felix, Fox, Northern & Grand | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Finalize Technical Memorandum - Pump Station 4 | 140 | 0 | 12-Aug-13 A | 22-Nov-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Pump Station 4 | 67 | 0 | 23-Dec-13 A | 27-Feb-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Pump Station 4 | 30 | 0 | 28-Feb-14 A | 28-Mar-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Fnal Design -Pump Station 4 | 90 | 0 | 30-Mar-14 A | 17-Sep-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design - Pump Station 4 | 90 | 0 | 17-Sep-14 A | 13-Mar-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Pump Station 4 | 7 | 0 | 13-Mar-15 A | 19-Mar-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Pump Station 4 | 29 | 0 | 20-Mar-15 A | 17-Apr-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Pump Station 4 | 1 | 0 | 21-Apr-15 A | 21-Apr-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Pump Station 4 | 90 | 0 | 22-Apr-15 A | 15-Nov-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Pump Station 4 | 420 | 0 | 16-Nov-15 A | 29-Aug-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| S3P311-05G - Millar, Mott, Long Beach, Royal & Lido | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Finalize Technical Memorandum - Pump Station 5 | 140 | 0 | 12-Aug-13 A | 22-Nov-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Pump Station 5 | 67 | 0 | 23-Jan-14 A | 27-Mar-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Pump Station 5 | 30 | 0 | 28-Mar-14 A | 25-Apr-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Fnal Design -Pump Station 5 | 94 | 0 | 26-Apr-14 A | 01-Dec-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design - Pump Station 5 | 90 | 0 | 01-Dec-14 A | 01-May-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Pump Station 5 | 7 | 0 | 02-May-15 A | 21-May-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Pump Station 5 | 29 | 0 | 22-May-15 A | 19-Jun-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Pump Station 5 | 1 | 0 | 23-Jun-15 A | 23-Jun-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Pump Station 5 | 90 | 0 | 24-Jun-15 A | 15-Nov-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Pump Station 5 | 540 | 0 | 16-Nov-15 A | 29-Aug-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| S3P311-04M - PS4 & PS5 Construction Management | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - PS4 & PS5 | 29 | 0 | 07-Nov-14 A | 05-Jan-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - PS4 & PS5 | 90 | 0 | 06-Jan-15 A | 16-Nov-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| S3P311-06G - Ocean, Mill, Woodmere & Longacre | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Finalize Technical Memorandum - Pump Station 6 | 140 | 0 | 12-Aug-13 A | 22-Nov-13 A | 100 | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Pump Station 6 | 67 | 0 | 23-Feb-14 A | 25-Apr-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Pump Station 6 | 29 | 0 | 09-May-14 A | 30-May-14 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP Fnal Design -Pump Station 6 | 90 | 0 | 31-May-14 A | 15-Apr-15 A | 100 | | | | | | | | | | | | | | | | | | | |
| Final Design - Pump Station 6 | 90 | 0 | 15-Apr-15 A | 17-Sep-15 A | 100 | | | | | | | | | | | | | | | | | | | |

■ Remaining Level of Effort
 ■ Actual Work
■ Actual Level of Effort
 ■ Remaining Work



| Activity Name | Orig Dur | Rem Dur | Start | Finish | % Comp | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|------------------------------------------------------------------------------|----------|---------|-------------|-------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q |
| S3P311-09M - Hempstead Wastewater Pumping Station & Force Main CM | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Hempstead Wastewater Pump Sta & FM | 29 | 0 | 17-Oct-14 A | 14-Nov-14 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Hempstead Wastewater Pump Sta & FM | 90 | 0 | 15-Nov-14 A | 01-Feb-16 A | 100 | | | | | | | | | | | | | | | | |
| S3P311-10G - Lawrence PS (STP) & Sage Lake PS | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Lawrence STP & Sage Lake PS | 28 | 0 | 25-Jan-16 A | 22-Feb-16 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Lawrence STP & Sage Lake PS | 90 | 0 | 23-Feb-16 A | 22-Mar-17 A | 100 | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Lawrence STP & Sage Lake PS | 75 | 0 | 02-Jun-14 A | 12-Sep-14 A | 100 | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Lawrence STP & Sage Lake PS | 29 | 0 | 12-Sep-14 A | 10-Oct-14 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - Lawrence STP & Sage Lake PS | 61 | 0 | 11-Oct-14 A | 15-Sep-15 A | 100 | | | | | | | | | | | | | | | | |
| Final Design - Lawrence STP & Sage Lake PS | 180 | 0 | 15-Sep-15 A | 08-Mar-16 A | 100 | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Lawrence STP & Sage Lake PS | 7 | 0 | 09-Apr-16 A | 14-Apr-16 A | 100 | | | | | | | | | | | | | | | | |
| Bid / Advertise - Lawrence STP & Sage Lake PS | 29 | 0 | 15-Apr-16 A | 13-May-16 A | 100 | | | | | | | | | | | | | | | | |
| Bid Opening - Lawrence STP & Sage Lake PS | 1 | 0 | 17-May-16 A | 17-May-16 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP - Lawrence STP & Sage Lake PS | 90 | 0 | 18-May-16 A | 22-Mar-17 A | 100 | | | | | | | | | | | | | | | | |
| Construction - Lawrence STP & Sage Lake PS | 550 | 0 | 22-Mar-17 A | 13-Aug-18 A | 100 | | | | | | | | | | | | | | | | |
| S3P311-11G - Roslyn Village, Morgan Park & Shore Road | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Roslyn Village, Morgan Park & Shore Rd | 47 | 0 | 05-Oct-18 A | 02-Nov-18 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Roslyn Village, Morgan Park & Shore Rd | 180 | 0 | 03-Nov-18 A | 01-Dec-20 A | 100 | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Roslyn Village, Morgan Park & Shore Rd | 75 | 0 | 01-Mar-16 A | 16-Jun-16 A | 100 | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Roslyn Village, Morgan Park & Shore Rd | 29 | 0 | 17-Jun-16 A | 15-Jul-16 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - Roslyn Village, Morgan Park & Shore Rd | 60 | 0 | 16-Jul-16 A | 02-Feb-17 A | 100 | | | | | | | | | | | | | | | | |
| Final Design - Roslyn Village, Morgan Park & Shore Rd | 154 | 0 | 02-Feb-17 A | 02-Aug-17 A | 100 | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Roslyn Village, Morgan Park & Shore | 7 | 0 | 13-Oct-17 A | 09-Nov-17 A | 100 | | | | | | | | | | | | | | | | |
| Bid / Advertise - Roslyn Village, Morgan Park & Shore Rd | 29 | 0 | 10-Nov-17 A | 08-Dec-17 A | 100 | | | | | | | | | | | | | | | | |
| Bid Opening - Roslyn Village, Morgan Park & Shore Rd | 1 | 0 | 12-Dec-17 A | 12-Dec-17 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP - Roslyn Village, Morgan Park & Shore Rd | 90 | 0 | 13-Dec-17 A | 01-Dec-20 A | 100 | | | | | | | | | | | | | | | | |
| Construction - Roslyn Village, Morgan Park & Shore Rd | 365 | 0 | 01-Dec-20 A | 18-Jul-22 A | 100 | | | | | | | | | | | | | | | | |
| S80019-03GR - Cedar Point Lake (Doxey Brook) Pump Station | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Cedar Point Lake PS | 29 | 0 | 01-Dec-16 A | 23-Dec-16 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Cedar Point Lake PS | 90 | 0 | 24-Dec-16 A | 03-Jan-18 A | 100 | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | |
| Final Design - Cedar Point Lake PS | 180 | 0 | 10-Feb-16 A | 28-Oct-16 A | 100 | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Cedar Point Lake PS | 7 | 0 | 29-Oct-16 A | 01-Dec-16 A | 100 | | | | | | | | | | | | | | | | |
| Bid / Advertise - Cedar Point Lake PS | 29 | 0 | 02-Dec-16 A | 06-Jan-17 A | 100 | | | | | | | | | | | | | | | | |
| Bid Opening - Cedar Point Lake PS | 1 | 0 | 10-Jan-17 A | 10-Jan-17 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP - Cedar Point Lake PS | 90 | 0 | 11-Jan-17 A | 03-Jan-18 A | 100 | | | | | | | | | | | | | | | | |
| Construction - Cedar Point Lake PS | 540 | 0 | 03-Jan-18 A | 20-Dec-19 A | 100 | | | | | | | | | | | | | | | | |
| Nitrogen Reduction Projects | | | | | | | | | | | | | | | | | | | | | |
| S35123-L38G - Sidestream Deammonification | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Sidestream Centrate Treatment | 29 | 0 | 28-Jul-17 A | 25-Aug-17 A | 100 | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Sidestream Centrate Treatment | 90 | 0 | 26-Aug-17 A | 16-Dec-19 A | 100 | | | | | | | | | | | | | | | | |
| RFP Process | | | | | | | | | | | | | | | | | | | | | |
| Develop / Issue RFI - Sidestream Centrate Treatment | 60 | 0 | 30-Sep-14 A | 26-May-15 A | 100 | | | | | | | | | | | | | | | | |
| RFI Response Period - Sidestream Centrate Treatment | 41 | 0 | 26-May-15 A | 07-Aug-15 A | 100 | | | | | | | | | | | | | | | | |
| RFI Evaluation Period - Sidestream Centrate Treatment | 88 | 0 | 08-Aug-15 A | 29-Feb-16 A | 100 | | | | | | | | | | | | | | | | |
| NODPW Review & Award Sidestream Centrate Treatment | 120 | 0 | 01-Mar-16 A | 26-Sep-16 A | 100 | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | |
| Complete Technical Design Report | 60 | 0 | 27-Sep-16 A | 26-Nov-16 A | 100 | | | | | | | | | | | | | | | | |
| Detailed Design - Sidestream Centrate Treatment | 275 | 0 | 27-Sep-16 A | 31-Oct-17 A | 100 | | | | | | | | | | | | | | | | |

█ Remaining Level of Effort
 █ Actual Work
█ Actual Level of Effort
 █ Remaining Work



| Activity Name | Orig Dur | Rem Dur | Start | Finish | % Comp | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | | | |
|----------------------------------------------------------------------|----------|---------|-------------|-------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|---|
| | | | | | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Sidestream Centrate Treatment | 17 | 0 | 01-Nov-17 A | 16-Nov-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Sidestream Centrate Treatment | 29 | 0 | 17-Nov-17 A | 05-Jan-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Sidestream Centrate Treatment | 1 | 0 | 09-Jan-18 A | 09-Jan-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Sidestream Centrate Treatment - Canceled - Re-bid | 90 | 0 | 10-Jan-18 A | 23-Aug-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| Re-Bid / Advertise - Sidestream Centrate Treatment | 29 | 0 | 24-Aug-18 A | 21-Sep-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| Re-Bid Opening - Sidestream Centrate Treatment | 1 | 0 | 25-Sep-18 A | 25-Sep-18 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Sidestream Centrate Treatment | 180 | 0 | 26-Sep-18 A | 31-Dec-19 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Sidestream Centrate Treatment | 730 | 93 | 31-Dec-19 A | 31-Dec-23* | 87 | | | | | | | | | | | | | | | | | | | |
| S35123-L39G - Level 1 BNR Improvements | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Level 1 BNR Improvements | 31 | 0 | 29-Jul-16 A | 26-Aug-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Level 1 BNR Improvements | 90 | 0 | 27-Aug-16 A | 05-Jul-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Design - Level 1 BNR Improvements | 120 | 0 | 30-Nov-15 A | 23-Sep-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Level 1 BNR Improvements | 7 | 0 | 24-Sep-16 A | 29-Sep-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Level 1 BNR Improvements | 29 | 0 | 30-Sep-16 A | 11-Nov-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Level 1 BNR Improvements | 1 | 0 | 15-Nov-16 A | 15-Nov-16 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Level 1 BNR Improvements | 90 | 0 | 16-Nov-16 A | 05-Jul-17 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Level 1 BNR Improvements (Substantial Completion) | 913 | 0 | 05-Jul-17 A | 30-Apr-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Construction - Cyberprop Change Order | 365 | 0 | 01-May-20 A | 31-Dec-21 A | 100 | | | | | | | | | | | | | | | | | | | |
| Long Beach WPCP Consolidation | | | | | | | | | | | | | | | | | | | | | | | | |
| S35109-01GR - Long Beach Pump Station | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Pump Station Final Design - Long Beach Pump Station (PMJV) | 186 | 0 | 06-May-19 A | 21-Jul-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| Prepare Bid for Advertisement - Long Beach Pump Station | 7 | 0 | 22-Jul-20 A | 30-Jul-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Long Beach Pump Station | 29 | 0 | 31-Jul-20 A | 23-Oct-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Long Beach Pump Station | 1 | 0 | 27-Oct-20 A | 27-Oct-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Long Beach Pump Station - Canceled | 205 | 0 | 28-Oct-20 A | 20-Apr-21 A | 100 | | | | | | | | | | | | | | | | | | | |
| Redesign - Long Beach Pump Station | 7 | 0 | 21-Apr-21 A | 18-Nov-21 A | 100 | | | | | | | | | | | | | | | | | | | |
| Prepare Bid for Advertisement - Long Beach Pump Station | 30 | 0 | 31-Jan-22 A | 23-Jun-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Long Beach Pump Station | 57 | 0 | 24-Jun-22 A | 16-Sep-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Long Beach Pump Station | 1 | 0 | 20-Sep-22 A | 20-Sep-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Long Beach Pump Station | 182 | 15 | 21-Sep-22 A | 14-Oct-23 | 92 | | | | | | | | | | | | | | | | | | | |
| Construction - Long Beach Pump Station | 844 | 844 | 14-Oct-23 | 03-Feb-26* | 0 | | | | | | | | | | | | | | | | | | | |
| S35109-01S - Long Beach HDD Force Main | | | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| HDD Final Design - Long Beach HDD Force Main (PMJV) | 186 | 0 | 06-May-19 A | 24-Nov-21 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| Prepare Bid for Advertisement - Long Beach HDD Force Main | 2 | 0 | 31-Jan-22 A | 23-Jun-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Long Beach HDD Force Main | 57 | 0 | 24-Jun-22 A | 16-Sep-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Bid Opening - Long Beach HDD Force Main | 1 | 0 | 20-Sep-22 A | 20-Sep-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP - Long Beach HDD Force Main | 182 | 15 | 21-Sep-22 A | 14-Oct-23 | 92 | | | | | | | | | | | | | | | | | | | |
| Construction - Long Beach HDD Force Main | 828 | 828 | 14-Oct-23 | 18-Jan-26* | 0 | | | | | | | | | | | | | | | | | | | |
| S35109-01MR - Long Beach Consolidation CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Long Beach Consolidation | 29 | 0 | 12-Jun-20 A | 10-Jul-20 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Long Beach Consolidation | 180 | 0 | 11-Jul-20 A | 30-Oct-21 A | 100 | | | | | | | | | | | | | | | | | | | |
| Prepare Rebid CM Services - Long Beach Consolidation | 29 | 0 | 31-Oct-21 A | 23-Jun-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Long Beach Consolidation | 29 | 0 | 24-Jun-22 A | 05-Aug-22 A | 100 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Long Beach Consolidation | 180 | 0 | 06-Aug-22 A | 24-Jul-23 A | 100 | | | | | | | | | | | | | | | | | | | |
| S35109-03G - Hempstead Bay Hassocks Restoration | | | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Hempstead Bay Hassocks Restoration | 31 | 31 | 24-Nov-23 | 24-Dec-23 | 0 | | | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Hempstead Bay Hassocks Restoration | 170 | 170 | 25-Dec-23 | 11-Jun-24 | 0 | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | | | |
| Design - Hempstead Bay Hassocks Restoration | 120 | 0 | 28-Oct-21 A | 21-Jul-22 A | 100 | | | | | | | | | | | | | | | | | | | |

█ Remaining Level of Effort
 █ Actual Work
 █ Actual Level of Effort
 █ Remaining Work



| Activity Name | Orig Dur | Rem Dur | Start | Finish | % Comp | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | |
|----------------------------------------------------------------------------------|----------|---------|-------------|-------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | |
| Prepare Bid for Advertisement - Hempstead Bay Hassocks Restoration | 7 | 7 | 24-Nov-23* | 30-Nov-23 | 0 | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Hempstead Bay Hassocks Restoration | 29 | 29 | 01-Dec-23 | 29-Dec-23 | 0 | | | | | | | | | | | | | | | | | |
| Bid Opening - Hempstead Bay Hassocks Restoration | 1 | 1 | 02-Jan-24 | 02-Jan-24 | 0 | | | | | | | | | | | | | | | | | |
| Award / NTP - Hempstead Bay Hassocks Restoration | 257 | 257 | 03-Jan-24 | 15-Sep-24 | 0 | | | | | | | | | | | | | | | | | |
| Construction - Hempstead Bay Hassocks Restoration | 270 | 270 | 16-Sep-24 | 12-Jun-25* | 0 | | | | | | | | | | | | | | | | | |
| S35109-05G - Collection System Pump Station Mitigation | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - Collection System Pump Station Mitigation | 29 | 29 | 09-Jul-24 | 06-Aug-24 | 0 | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - Collection System Pump Station Mitigation | 180 | 180 | 07-Aug-24 | 02-Feb-25 | 0 | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design - Collection System Pump Station Mitigation | 180 | 0 | 03-Jan-23 A | 15-Jun-23 A | 100 | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - Collection System Pump Station Mitigation | 29 | 0 | 16-Jun-23 A | 21-Jul-23 A | 100 | | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - Collection System Pump Station Mitigation | 180 | 130 | 21-Jul-23 A | 06-Feb-24 | 28 | | | | | | | | | | | | | | | | | |
| Final Design - Collection System Pump Station Mitigation | 153 | 153 | 07-Feb-24 | 08-Jul-24 | 0 | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Collection System Pump Station Mitigation | 7 | 7 | 10-Jul-24 | 16-Jul-24 | 0 | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Collection System Pump Station Mitigation | 29 | 29 | 19-Jul-24 | 16-Aug-24 | 0 | | | | | | | | | | | | | | | | | |
| Bid Opening - Collection System Pump Station Mitigation | 1 | 1 | 20-Aug-24 | 20-Aug-24 | 0 | | | | | | | | | | | | | | | | | |
| Award / NTP - Collection System Pump Station Mitigation | 180 | 180 | 21-Aug-24 | 16-Feb-25 | 0 | | | | | | | | | | | | | | | | | |
| Construction - Collection System Pump Station Mitigation | 548 | 548 | 17-Feb-25 | 18-Aug-26* | 0 | | | | | | | | | | | | | | | | | |
| S35109-06G - Long Beach WPCP Decommissioning | | | | | | | | | | | | | | | | | | | | | | |
| CM Contract | | | | | | | | | | | | | | | | | | | | | | |
| RFP / Advertise CM Services - WPCP Decommissioning | 29 | 29 | 06-Feb-25 | 06-Mar-25 | 0 | | | | | | | | | | | | | | | | | |
| Award / NTP CM Services - WPCP Decommissioning | 180 | 180 | 07-Mar-25 | 02-Sep-25 | 0 | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | |
| Prepare Design RFP - WPCP Decommissioning | 90 | 0 | 03-Apr-23 A | 11-May-23 A | 100 | | | | | | | | | | | | | | | | | |
| RFP / Advertise Final Design - WPCP Decommissioning | 29 | 0 | 12-May-23 A | 30-Jun-23 A | 100 | | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - WPCP Decommissioning | 180 | 131 | 01-Jul-23 A | 07-Feb-24 | 27 | | | | | | | | | | | | | | | | | |
| Final Design - WPCP Decommissioning | 365 | 365 | 07-Feb-24 | 05-Feb-25 | 0 | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - WPCP Decommissioning | 7 | 7 | 07-Feb-25 | 13-Feb-25 | 0 | | | | | | | | | | | | | | | | | |
| Bid / Advertise - WPCP Decommissioning | 29 | 29 | 14-Feb-25 | 14-Mar-25 | 0 | | | | | | | | | | | | | | | | | |
| Bid Opening - WPCP Decommissioning | 1 | 1 | 18-Mar-25 | 18-Mar-25 | 0 | | | | | | | | | | | | | | | | | |
| Award / NTP - WPCP Decommissioning | 180 | 180 | 19-Mar-25 | 14-Sep-25 | 0 | | | | | | | | | | | | | | | | | |
| Construction - WPCP Decommissioning | 450 | 450 | 15-Sep-25 | 08-Dec-26* | 0 | | | | | | | | | | | | | | | | | |
| S35109-02G - Austin Boulevard Force Main | | | | | | | | | | | | | | | | | | | | | | |
| Design Process | | | | | | | | | | | | | | | | | | | | | | |
| Prepare RFP - Austin Boulevard Force Main Design | 7 | 0 | 05-Feb-16 A | 10-Feb-16 A | 100 | | | | | | | | | | | | | | | | | |
| Issue RFP for On-Call Final Design - Austin Boulevard Force Main | 15 | 0 | 11-Feb-16 A | 26-Feb-16 A | 100 | | | | | | | | | | | | | | | | | |
| Award / NTP Final Design - Austin Boulevard Force Main Design | 14 | 0 | 27-Feb-16 A | 01-Jun-16 A | 100 | | | | | | | | | | | | | | | | | |
| Design - Austin Boulevard Force Main | 310 | 0 | 01-Jun-16 A | 07-Sep-18 A | 100 | | | | | | | | | | | | | | | | | |
| Bid / Construction | | | | | | | | | | | | | | | | | | | | | | |
| County Prepare Bid for Advertisement - Austin Boulevard Force Main | 7 | 0 | 08-Sep-18 A | 13-Sep-18 A | 100 | | | | | | | | | | | | | | | | | |
| Bid / Advertise - Austin Boulevard Force Main | 29 | 0 | 14-Sep-18 A | 09-Nov-18 A | 100 | | | | | | | | | | | | | | | | | |
| Bid Opening - Austin Boulevard Force Main | 1 | 0 | 13-Nov-18 A | 13-Nov-18 A | 100 | | | | | | | | | | | | | | | | | |
| Milestones | | | | | | | | | | | | | | | | | | | | | | |
| Program Management Award | 0 | 0 | 12-Aug-13 A | | 100 | | | | | | | | | | | | | | | | | |
| Program Management Complete | 0 | 0 | | 21-Mar-28 | 0 | | | | | | | | | | | | | | | | | |

■ Remaining Level of Effort
 ■ Actual Work
 ■ Remaining Work
 ■ Actual Level of Effort

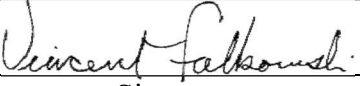


XIII.0

Project Glossary

| Agreement Project Name | County Project Name | County Project Number |
|-------------------------------------|-------------------------------------------------------------------------------|-----------------------|
| Barnes Avenue – Baldwin | Village of Hempstead Wastewater Pump Station | S3P311-09G |
| | Village of Hempstead Force Main | S3P311-09S |
| Raw sewage pumping facility | Raw Sewage Pumping Facility Improvements | S35121-03G |
| Sludge dewatering facilities | Sludge Dewatering Facilities Improvements | S35121-09G |
| Effluent Screening and disinfection | Effluent Screening and Disinfection Facility Improvements | S35121-11G |
| Effluent tide pumping facilities | Effluent Pumping Facility Improvements | S35121-12G |
| Electrical Distribution Phase E1-E3 | Phase E3 Main Substation and Electrical Distribution | S35121-14F |
| Secondary Flood Protection | Secondary Flood Protection and Hardening of Critical Facilities | S35121-16G |
| Stormwater Pump Stations | Flood Protection Phase I – Stormwater Pumping Stations | S35121-18G |
| Upgrade to 3 Generator Operation | Engine Generator Facility Auxiliary Improvements | S35121-16A |
| Hot water piping system | Permanent HW/CW Piping System | S35121-16P |
| Cedar Dr, Roosevelt et al PS | Cedar Drive, Roosevelt, Whitewood, Biltmore and Alhambra Pump Station Repairs | S3P311-02G |
| Wantagh, Newbridge et al PS | Wantagh, Newbridge Road, Merrick Road and Ray Street Pump Station Repairs | S3P311-03G |
| Ocean Ave, Mill Rd et al PS | Ocean Avenue, Mill Road, Woodmere Boulevard and Longacre Pump Station Repairs | S3P311-06G |
| Inwood, Doughty et al PS | Inwood, Bayview Avenue and Doughty Boulevard Pump Station Repairs | S3P311-07G |
| Lawrence & Sage Lake PS | Sage Lake and Lawrence Pump Stations Mitigation and Repair | S3P311-10G |
| East Avenue Ejector Station | East Avenue Pump Station Repairs | S3P311-08G |
| Level 1 BNR | Level 1 BNR Improvements | S35123-L39G |
| Sidestream Deammonification | Sidestream Centrate Treatment | S35123-L38G |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | |
|-----------------------------------------------------------------------------------|--|---------------------|
| Vincent Falkowski, PE, PMP, CCM | | Deputy Commissioner |
| Permittee (Per CRF 122.22) | | Title |
|  | | 10/27/2023 |
| Signature | | Date Signed |