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 Q4 Quarterly Report

Dear Mr. Hampston:

We are submitting herewith our Quarterly Report for the period of October 1, 2023, through December 31, 2023.

Very truly yours,

Vincent Falkowski, P.E.

Deputy Commissioner for Environmental Programs

c: NCDPW Hazen and Sawyer ARCADIS DEC

Kenneth Arnold Mark Hanson Peter Glus Paul Harding

Jane HoudekPaul SaurerGreg BazydolaBrian LeeChris VellaEric MillsMaryanne DioquinoJosh Lin

Tom Zakrzewski Ryan Waldron Andrew Fera Andrew Fleck Jennifer Pilewski

Mandy Yau Dena Putnick

DEC Agreement Q4 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 October 1, 2023, through December 31, 2023.

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

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1.0

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 October 1, 2023, through December 31, 2023 ("Reporting Quarter").

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11.0

Modification Request and Force Majeure Status

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

There are five (5) Conveyance Project milestones identified by the project team that will not be met per the current schedule. A modification request was submitted on December 7, 2023 to address them. The milestones are:

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

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		
BPEPS Construction End*	12/30/2023	12/7/2023	12/30/2024		
CC EPS Construction	12/30/2023	12/7/2023	12/30/2024		
End*					
Mechanical Completion*	12/30/2023	12/7/2023	12/30/2024		
Substantial Completion*	7/30/2024	12/7/2023	7/30/2025		
Final Acceptance*	11/30/2024	12/7/2023	11/30/2025		

^{*}Conveyance Project Milestone

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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.

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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	9/26/2024	83%
3 Sludge Dewatering Facilities	12/15/2018	5/21/2018 A	100%
4 Effluent Screening and Disinfection	8/22/2023	12/23/2022 A	100%
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.

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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 and controls.
- Continued installation of metal cladding for boiler structural beam fireproofing.
- Completed 10-day test of RSP No. 5.
- Started Demolition of wire and conduit and piping in the electrical/pump room for RSP No. 4.
- Continued wiring and terminations of equipment inside electrical/pump room.
- Finished testing of North 48" gate valve extensions in pump room.
- Started installation of South 48" gate valve extension.
- Continued installation of process equipment and instrumentation.
- Continued connecting to local control stations, control panels, and disconnects inside pump room.
- Finished installation of electrical conduit on pump room conduit rack system.
- Completed Air Compressor and VFD training.
- Continue work on miscellaneous metal incomplete items list for stair tower and catwalk.
- Continued submission of RFI's, MOPOs, and submittals.

Expected Progress Next Quarter:

- Continue miscellaneous metal incomplete items list for stair tower and catwalk.
- Continued installation of metal cladding for boiler structural beam fireproofing.
- Finish installation and testing of South 48" gate valve extensions in pump room.
- Finish demolition of RSP No 4 conduit and wiring.
- Demolish RSP No. 4 motor, pump, and rheostat.
- Realigned 30" discharge piping for new submersible pump.
- Layout, form and pour new RSP No. 4 concrete pedestals.
- Deliver and install new Vertical submersible Pump No. 4.
- Start installation of pump room conduit and wiring for RSP No. 4.
- Start installation of piping, valves, and support for RSP No. 4.
- Finish installation of radar level system conduit from scavenger waste to new electrical room.
- Continue scheduling spare parts, O&M, training for RSP system.
- Continue submission of RFI's, MOPOs, and Submittals.

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.

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3. Sludge Dewatering Facilities

This project has been completed and milestone certification accepted.

4. Effluent Screening and Disinfection

Progress This Quarter:

- Removed two new Isolation Butterfly Valves.
- Started to demo existing Isolation Butterfly Valve
- Scarified floor paint from Screening area floor.
- Installed wiring to the freezestat in the HVAC Unit (HV-60805) downstream of the hot water coil.
- Installed wiring to the airflow switch and temperature transmitter in the HVAC discharge ductwork.
- Continued submission of as-built drawings.

Expected Progress Next Quarter

- Correct flowmeter scaling in accordance with RFI-017 Magmeter Scaling.
- Conduct flowmeter training.
- Complete demo of existing Isolation Butterfly Valve.
- Repaint Screening area floor.
- Startup and test HVAC system.
- Program existing Chemical System Control Panel.
- Continue preparation and submission of as-built drawings.

Note: Current schedule for Effluent Screening has been behind schedule due to equipment delivery delays and non-performance of a manufacturer. DEC has been notified and updated quarterly. All screens are installed and operating but the delays are exclusively related to the isolation valves. Due to the non-performance of this vendor, the County is deleting the remaining isolation valves in this contract and installing stop logs to provide the channel isolation required for maintenance. Once this change is executed, substantial completion for this contract will be issued for December 23, 2022.

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.

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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

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

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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.

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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 Mainte-	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	3/1/2024
End 12-month performance period for updated BNR and Sidestream O&M plan.	4/30/2024	2/28/2025
Submit performance data and approvable Final BNR and Sidestream O&M Plan.	8/1/2024	7/1/2025

^{*} 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 was executed to alleviate the issues and allow for the performance period to begin. During the period of hydraulic limitation issues, the biology mass was reduced significantly and more time is required to re-establish it. A request to extend the beginning of the performance period to March 1, 2024 was submitted to DEC on November 29, 2023.

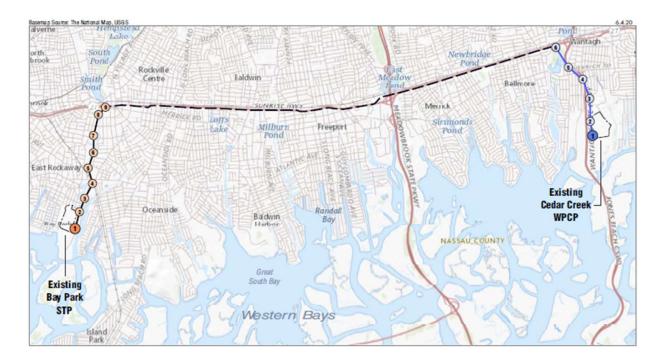
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VII.0

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.

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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 mile- stones in a Baseline Schedule for De- sign-Build Project Completion, includ- ing Mechanical Completion, Substan- tial 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.

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Table 7 – Conveyance Project Milestones

Table / – Conveyance Project Milestones					
Description of Work	No.	Agreement Date	<i>Projected </i> 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
*Certification submission pending
** Modification for time extension submitted 12/7/2024

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Progress This Quarter:

During 2023 Quarter No. 4, 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 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 and NDC-0036 BPEDPS Pump Level Monorail Trolley and Hoist were reviewed and approved. NDC-0037 Revised Spec 13570 Criteria Control was received for review.
- Reviewed and processed numerous construction submittals, including but not limited to, test reports for VFD #s 1-4, power connection cabinet shop test reports for VFD #s 1-4, 4.16kV switchgear test procedure checklist, roofing package, and plumbing drawings. Other submittals that were reviewed and processed were related to 5kV cable terminations, exterior structural steel high performance coatings, louver and its support system, lightning protection system, pump room level 4-ton monorail system, and electrical room level 0.5-ton monorail system.
- Installation of CMU walls at BPPS completed. Installation of steel truss support completed. Installation of concrete floor slope at wet well completed. Floor drains were completed in the interior structure. Continuing with forming/pouring/curing walls and Diversion Structure channel roof slabs. Continuing with installation of permanent slab support above Effluent Conduit at Pump Station foundation. Started installation of roof structure and parapets structure. Continuing with installation of waterproofing and furring for exterior siding low and high structure. Continuing with installation of storm piping down outside of building, 1st floor horizontal and riser drain piping.

Bay Park Microtunnel:

- NDC-0038 RFP-10 Additional Landscape Restoration was received for review.
- Reviewed and processed numerous construction submittals, related to BP5 and BP9 manhole riser and top slab elevations, flowcrete grout port repair procedure, flowcrete FRP spigot/coupling repair procedure, and piping from BP9 to Sunrise Highway.
- Restoration at BP2 was completed. Backfilling BP3 for BP3 to BP4 drive was completed. Micro-tunnel drive BP8 to BP7 was completed. Delivery of all micro-tunneling pipe was completed.

Sunrise Highway Sliplining:

NDC-033 UCD-012 CARV - Redesign Pit B, FF, M, S and NDC-0038 - RFP-10 Additional Landscape Restoration were received for review.

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- Reviewed and processed numerous construction submittals, including but not limited to, piping shop drawings from CC6 to Pit W and BP9 to Sunrise Highway, manhole steps, and product data of manhole platforms, grating, and ladder.
- Final restoration at Pits B, C, E, F, FF, G, GG, H, I, K, M, N, Q, R, S, T, U, and V completed.

Cedar Creek Microtunnel:

- NDC-0038 RFP-10 Additional Landscape Restoration was received for review.
- Reviewed and processed numerous construction submittals, related to CC6 manhole riser and top slab elevations, flowcrete grout port repair procedure, flowcrete FRP spigot/coupling repair procedure, piping shop drawings from CC6 to Pit W, and shop drawings of CC2 manhole platforms, grating, and ladder.
- Restoration of street/curbs at Sunrise Highway elevation for micro-tunnel Pit W to CC6 completed. Fabrication and delivery of all Cedar Creek piping was completed. Base slab at CC1 was poured. Installation of connecting pipe to Cedar Creek at drive CC2-CC1 was completed. Stripping/grouting of tunnel lines were completed at drive CC5-CC6.

<u>Cedar Creek Effluent Pump Station/Receiving Station:</u>

- RCFD DP-10B Design Narrative SCADA Tie-in was reviewed and approved. DPP-026 Discussion of Carbon Steel for CCRS Standpipe Tank, NDC-0035 RFP-006 Standpipe Modifications, and NDC-0037 Revised Spec 13570 Criteria Control were received for review.
- Reviewed and processed numerous construction submittals, including shop drawings and product data for SG-07 vent pipe, Cedar Creek Receiving Station Tank field painting construction work plan, Cedar Creek Receiving Tank bypass piping shop drawings, test reports for VFD #s 1-5, and power connection cabinet shop test reports for VFD #s 1-5. Other submittals that were reviewed and processed were related to 5kV cable terminations, steel pipe support frame, and lightning protection system.
- Installation and welding of Receiving Tank roof was completed. Installation of Receiving Tank overflow piping was completed. Pipe supports for Receiving Tank were installed.

Expected Progress Next Quarter:

Bay Park Effluent Diversion Pump Station:

- No more contractual design submissions for Bay Park Pump Station are anticipated.
- Continue with installation of utilities at BPPS and wet well. Continue and finish roof installation for Pump Station.

Bay Park Microtunnel:

- Revised submission of NDC-0038 RFP-10 Additional Landscape Restoration is anticipated.
- Continue and finish restoration work at BP3 and BP4. Continue with closure pipe bracing and installation and backfill at BP4. Setup hydrotest from BP1 to BP5. Continue with stripping/grouting tunnel lines and de-mobilizing micro-tunneling equipment for BP8 to BP7 drive.

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Sunrise Highway Sliplining:

- Revised submissions of NDC-033 UCD-012 CARV Redesign Pit B, FF, M, S and NDC-0038 RFP-10 Additional Landscape Restoration are anticipated.
- Continue with aqueduct and manhole inspection for pipe run form Pit M to Pit O. Complete Pit W restoration. Continue hydrostatic test from Pit A to Pit O.

Cedar Creek Microtunnel:

- Revised submission of NDC-0038 RFP-10 Additional Landscape Restoration is anticipated.
- Continue excavation/installation of pile SOE for open cut and excavation from shaft CC1 to outfall and install steel plates from CC1 to foundation pad. Set up CC hydrotest. Continue installation of riser pipe at CC6.

<u>Cedar Creek Effluent Pump Station/Receiving Station:</u>

- Revised submission of DPP-026 Discussion of Carbon Steel for CCRS Standpipe Tank and NDC-0035 - RFP-006 Standpipe Modifications are anticipated. Submission of RFCD DP-11 Rehabilitation of the Cedar Creek Outfall Clean-out Chamber and Cap is also anticipated.
- Continue with installation of 72" pipe from CC1 to outfall connection. Continue with installation of wet tap saddle and 72" knife gate valve. Perform wet tap on existing 84" outfall. Continue with pump removal/replacement and installation of conduits for Pump Station at Cedar Creek Plant. Finish painting the overflow pipe of Receiving Tank.

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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
Tl itiz	Inflow and Infiltration (I/I) Reduction Plan he County shall use the results of the I/I Study to identify and priorze cost-effective I/I reduction projects using a data-driven cost/bent approach consistent with best industry practices.	

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 by issuing an RFP in Q1, 2024.

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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. It has become apparent that the permit was not sent to the appropriate party at USACE and the County will be hiring a new consultant to carry this task out.

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Certification of Completed Activities

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

Table 9 – Completed Activities

Milestone	Date	Certification	Certification
Minestone	Completed	Submitted	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

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Milestone	Date	Certification	Certification
	Completed	Submitted	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	11/1/2023
Submit I/I Study Work Plans	3/30/2023	3/30/2023	10/12/2023

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XI.0

Community Relations

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

Meetings with local elected officials and first responders took place on October 31 and November 28, 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
Monthly Meeting with First Responders and Elected Officials	October 31November 28

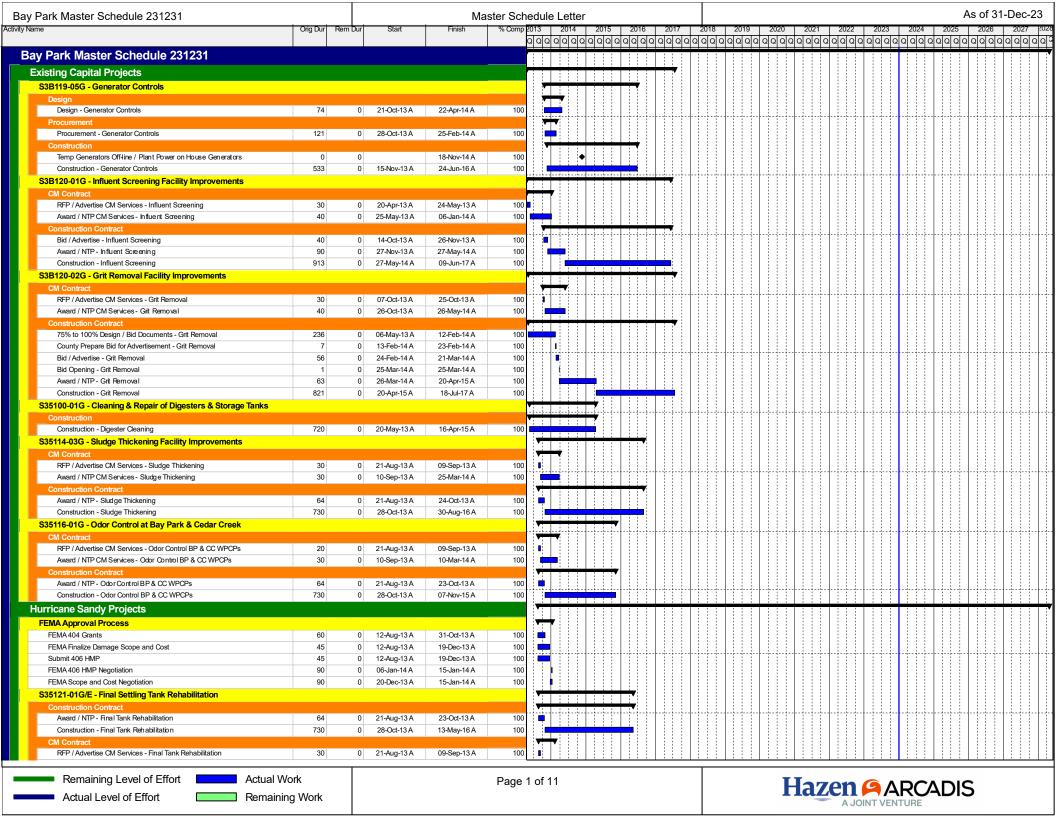
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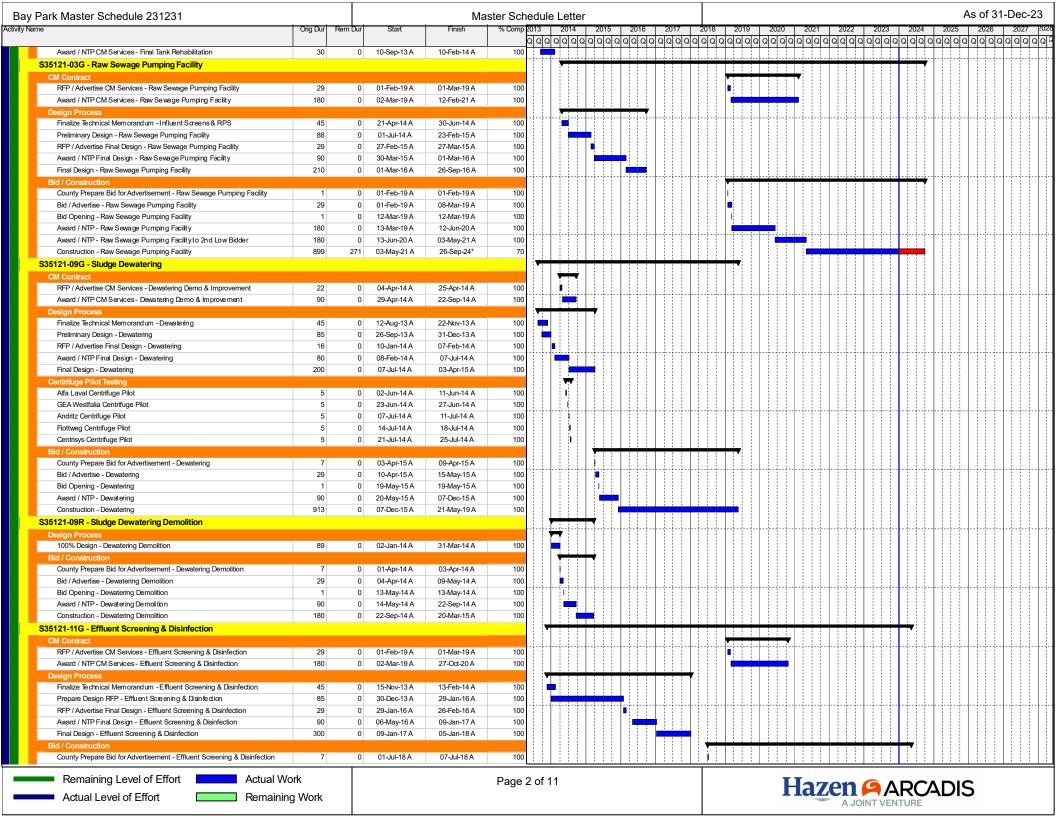
XII.0

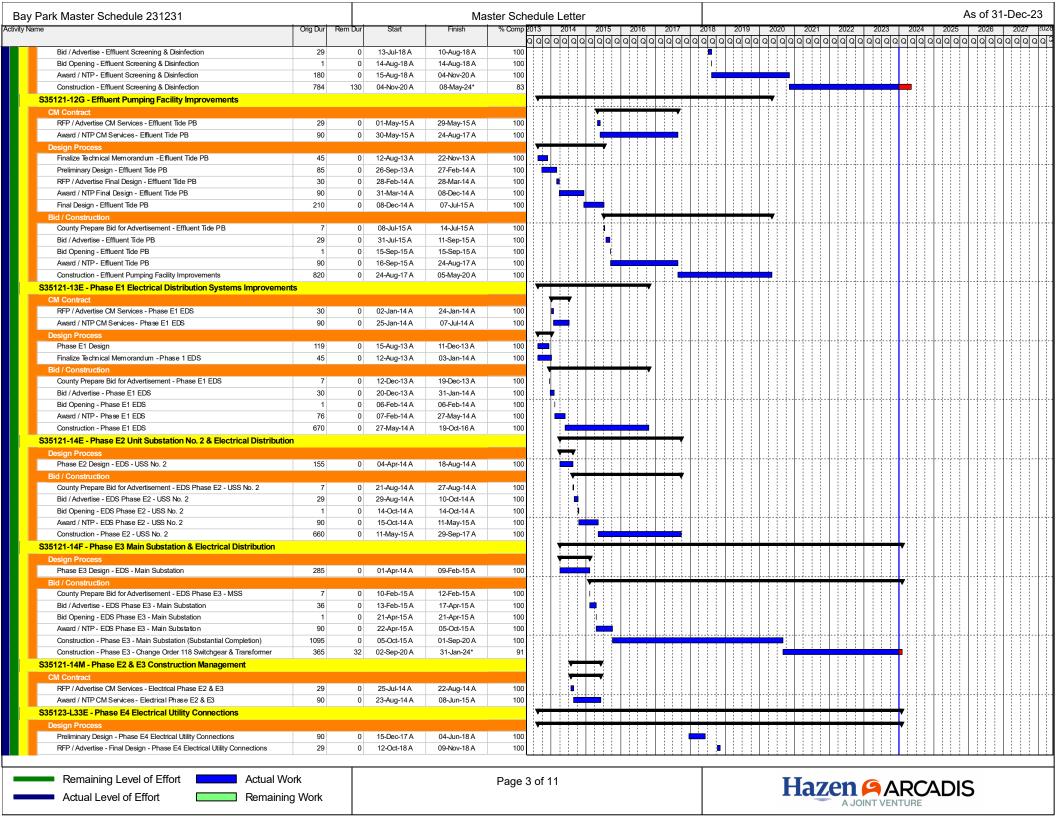
Attachments

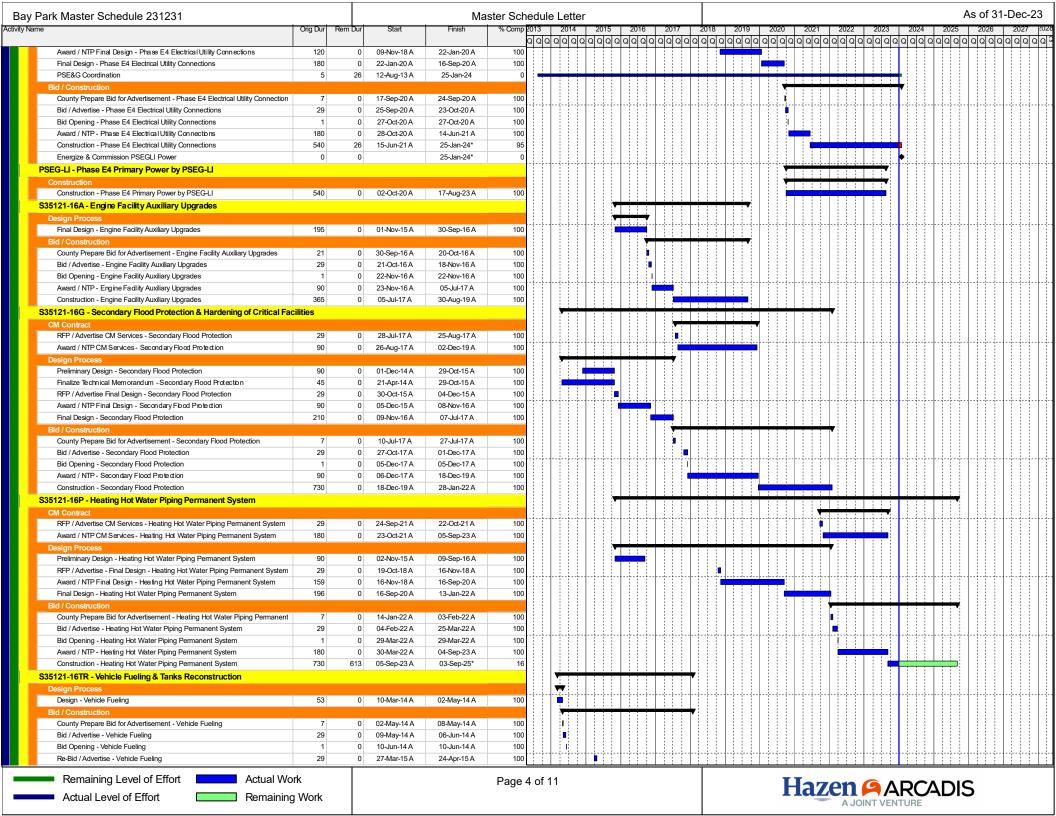
1. Program Master Schedule

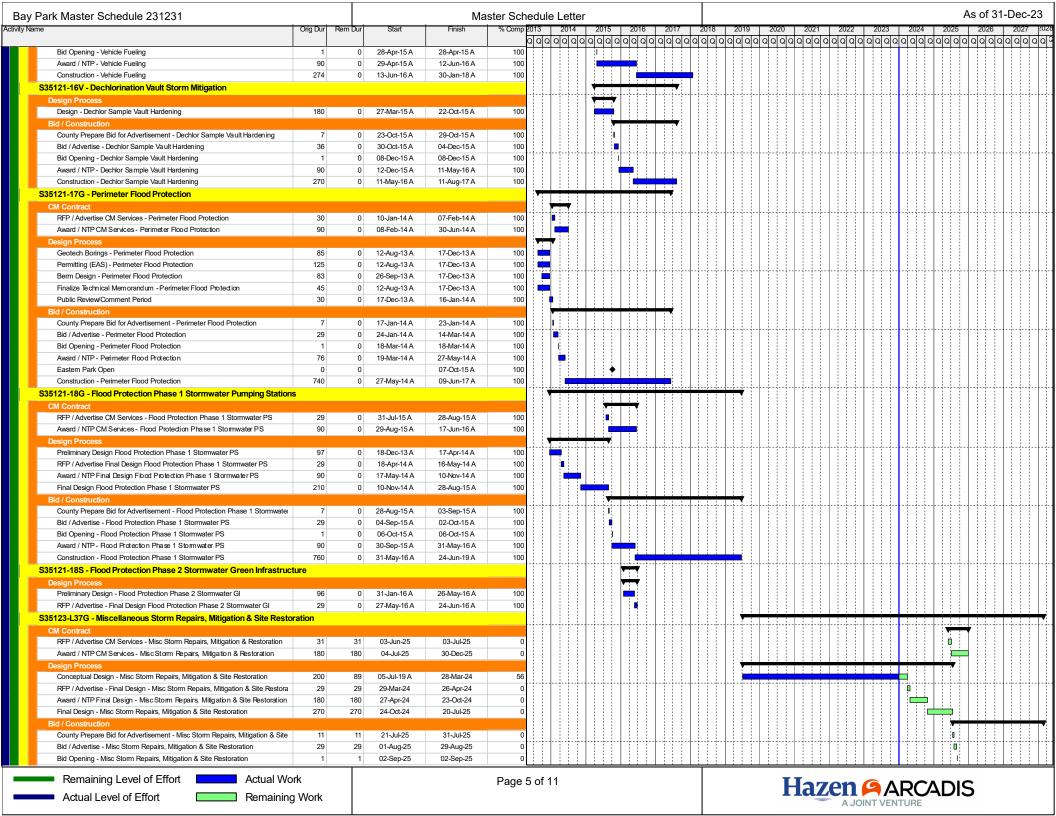
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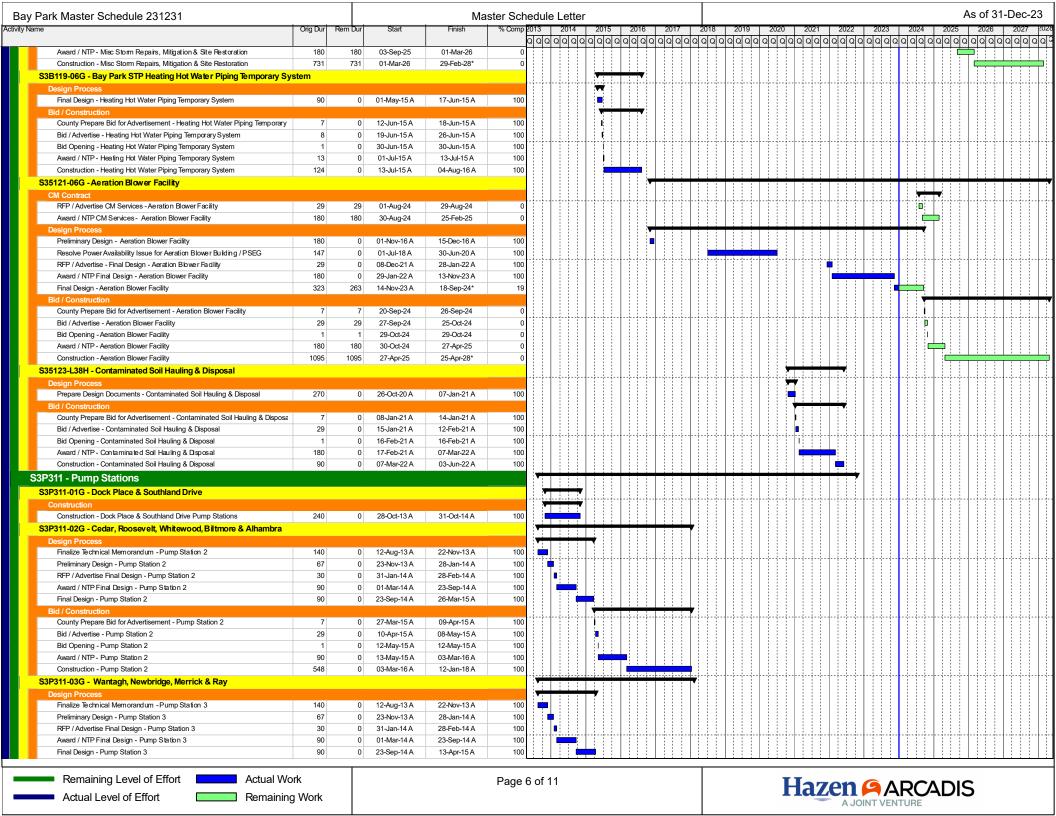


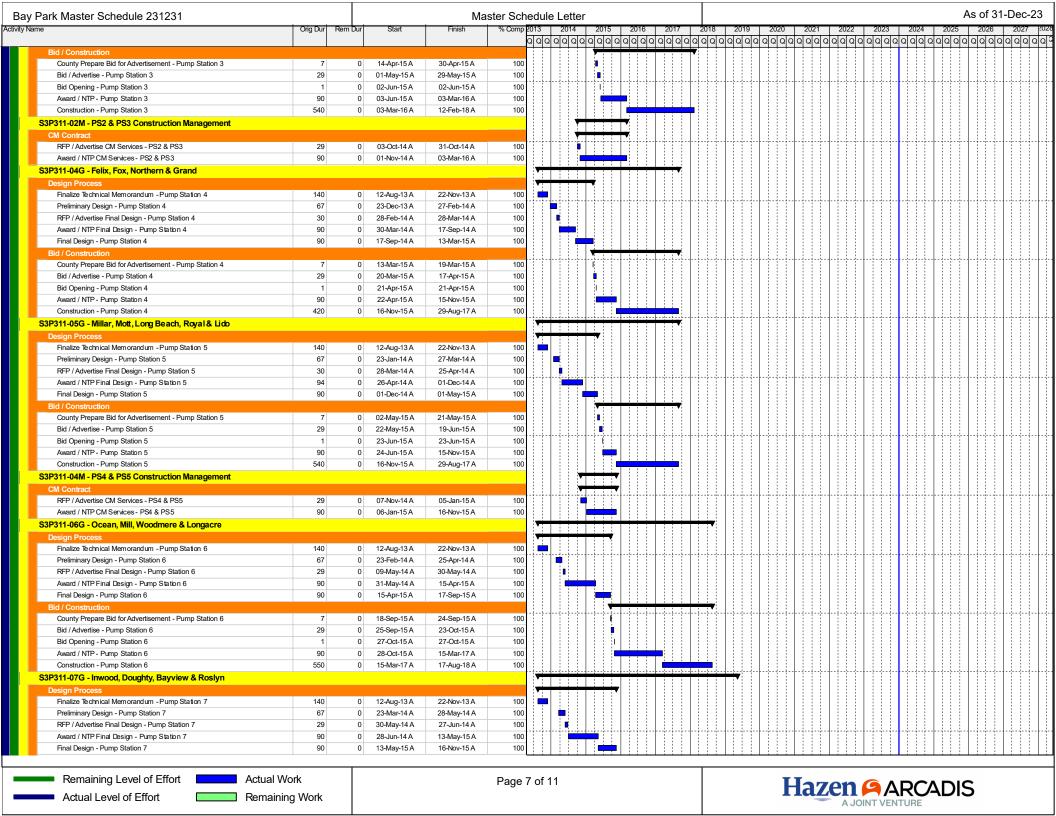


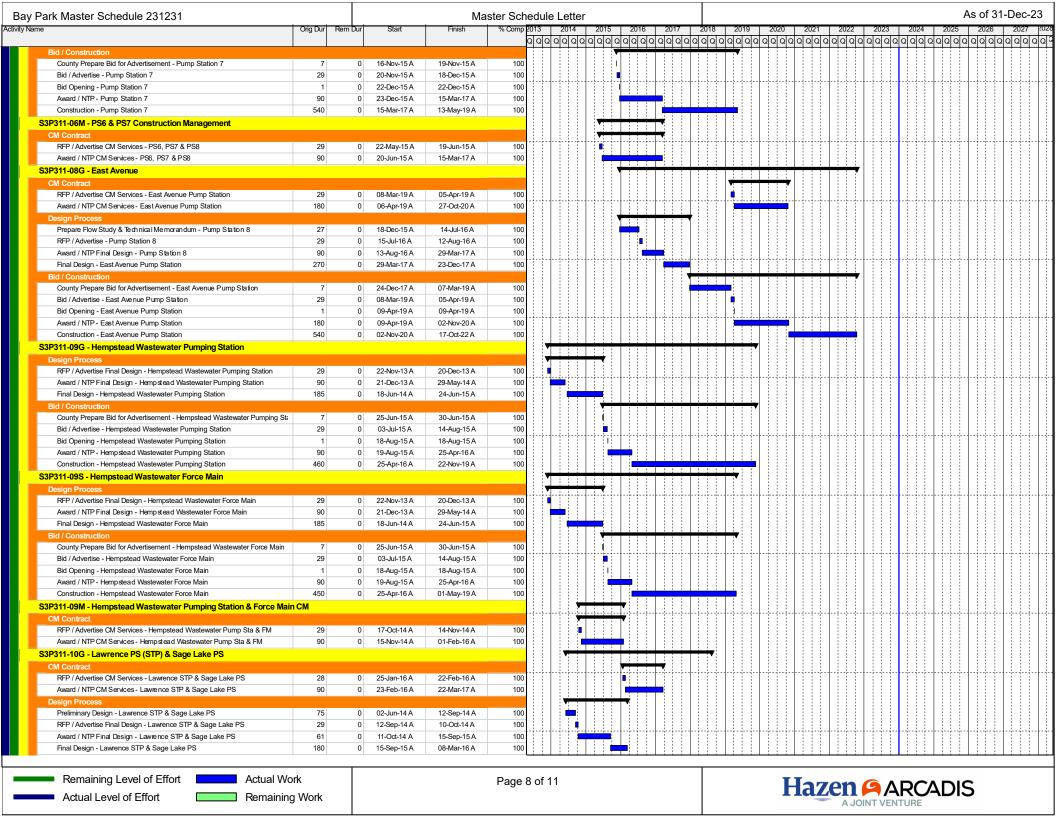


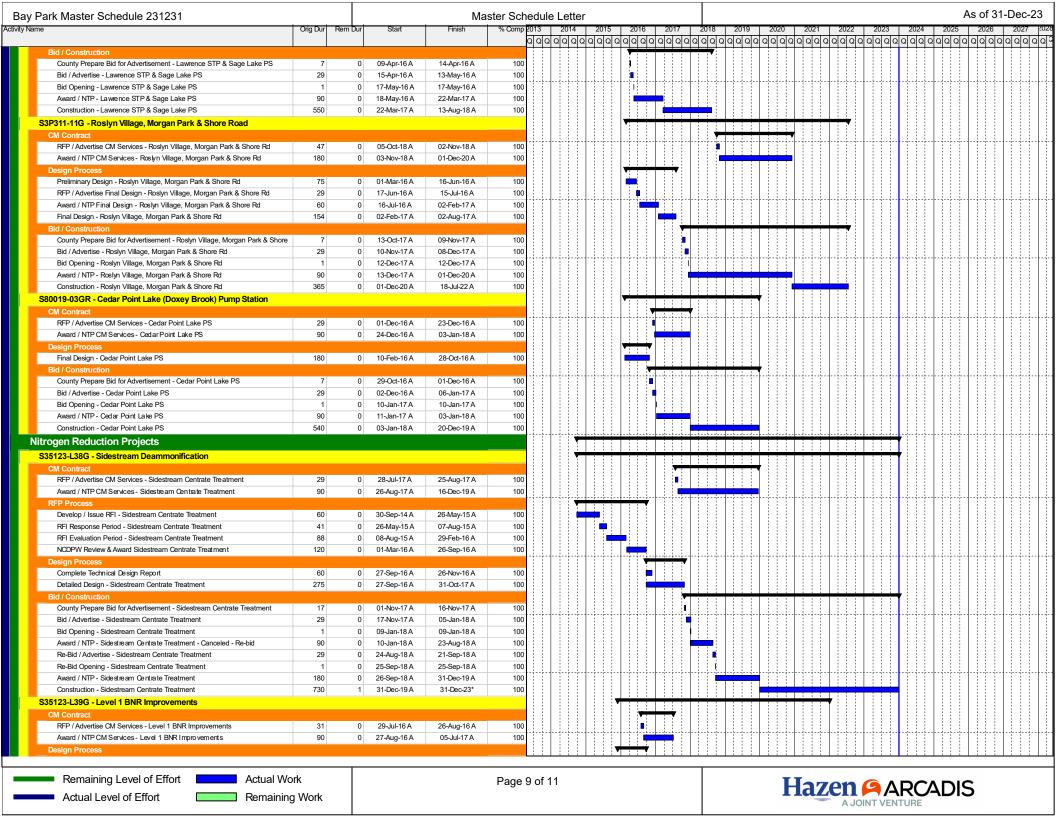


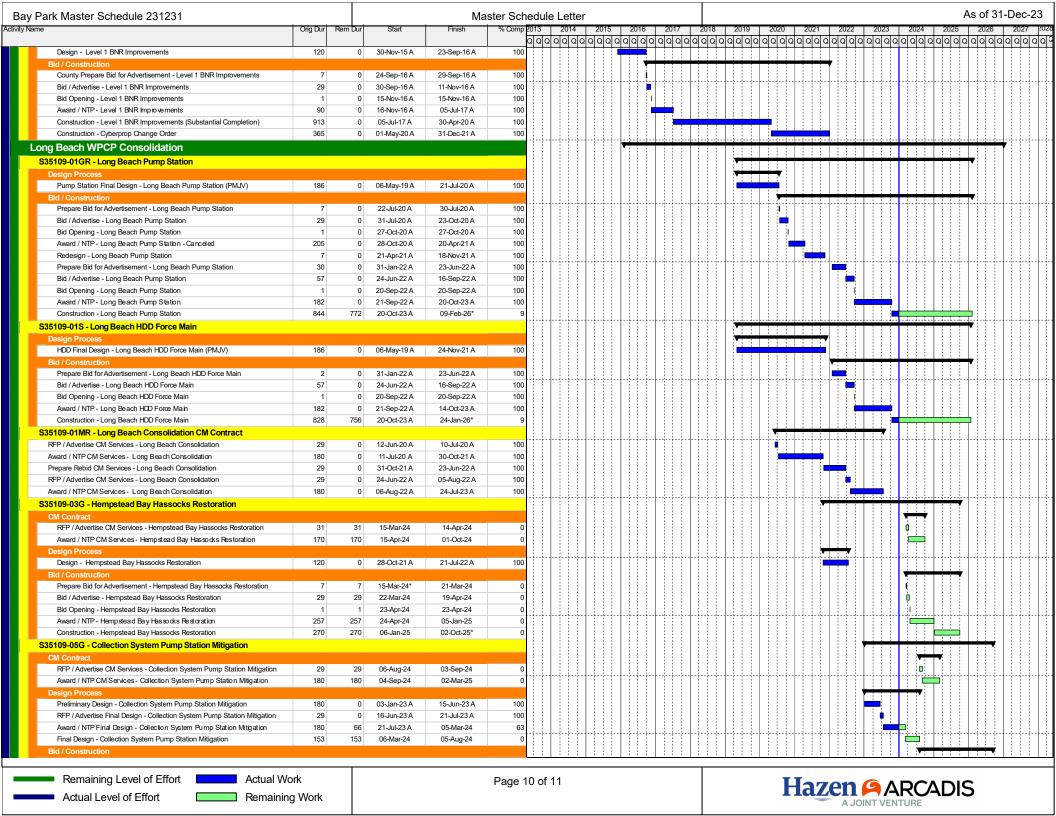


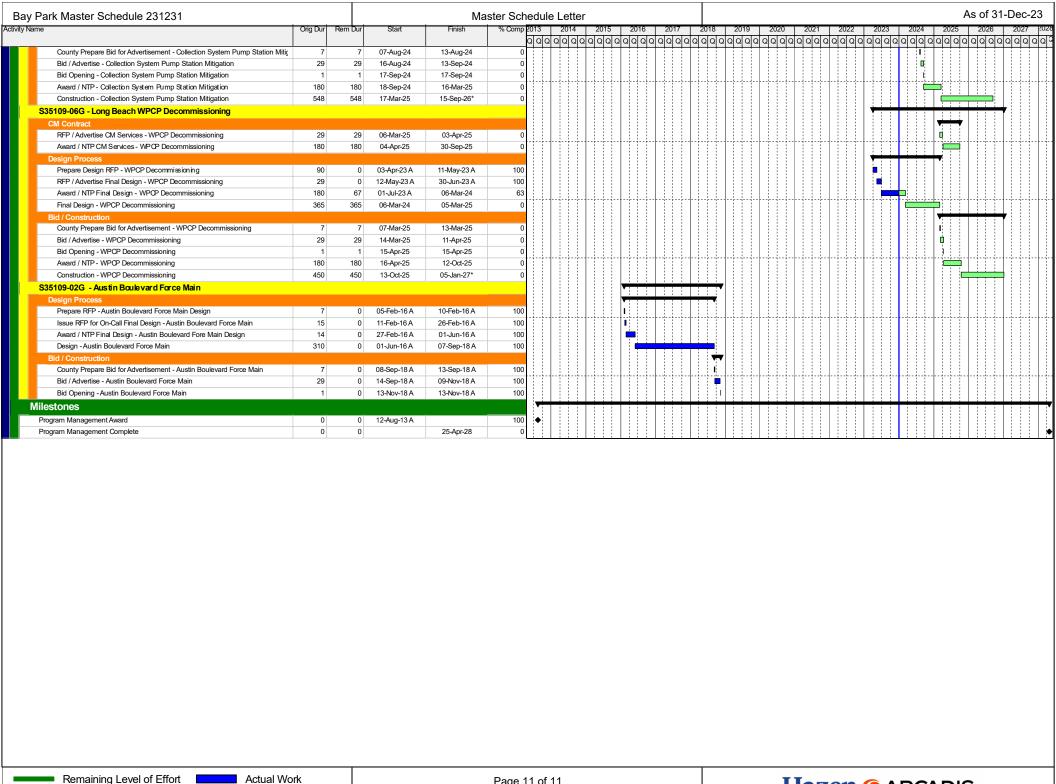














Actual Level of Effort

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 Opera-	Engine Generator Facility Auxiliary Im-	S35121-16A
tion	provements	
Hot water piping system	Permanent HW/CW Piping System	S35121-16P
Cedar Dr, Roosevelt et al PS	Cedar Drive, Roosevelt, Whitewood, Bilt- more 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

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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
Vincent Falkoush.	1/26/2024
Signature	Date Signed

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