July 29, 2019

Director, Bureau of Water Compliance Attention: Edward Hampston New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3506

Agreement DEC Index No: CO 1-20170626-244

Bay Park Sewage Treatment Plant 2019 Q2 Quarterly Report

Dear Mr. Hampston:

We are submitting herewith our Quarterly Report for the period of April 1, 2019 through June 30, 2019.

Very truly yours,

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

c: NCDPW

Kenneth Arnold Edward Visone John Domenica Jane Houdek Hazen and Sawyer Mark Hanson Paul Saurer Eric Mills Tom Zakrzewski ARCADIS DEC Peter Glus Cath Greg Bazydola Katie Maryanne Dioquino Paul Brian

Cathy Haas Katie French Paul Harding Brian Lee Josh Lin

# DEC Agreement Q2 2019 Report



# TABLE OF CONTENTS

I.0 Executive Summary	
I.0 Modification Request and Force Majeure Status	4
II.0 Design Milestone Status	5
III.0 Construction Milestone Status	6
IV.0 Inter Municipal Agreement	14
V.0 Nitrogen Interim Limit Schedule of Compliance	
VI.0 Diversion Project	16
VII.0 Environmental Benefit Projects	17
VIII.0 Certification of Completed Activities	
IX.0 Community Relations	19
X.0 Attachments	20
XI.0 Glossary	

# 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 salt water 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 VI, Paragraphs A-C of the Agreement the DPW hereby submits to the New York State Department of Environmental Conservation (DEC) the Quarterly Report for the period of April 1, 2019 through June 30, 2019.

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

# 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.

Pursuant to Section VI, Paragraph A of the Agreement, "The County (for work not performed by the State or its contractor) 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 Agreement during the previous three-month period". The Agreement requires that this report provide:

- 1. A list of the County's or construction contracts necessary to fulfill the requirements of compliance milestones of this Agreement as such milestones are set forth in the Appendices. 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 Agreement;
- 3. Information regarding unresolved delays encountered or anticipated that may affect the future schedule for implementation of the County s obligations under this 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 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 April 1, 2019 through June 30, 2019 ("Reporting Quarter").

The key personnel change to report this quarter is the addition of John Domenica as DPW Project Manager.

# Modification Request and Force Majeure Status

The following table lists modification re	equests made by the C	County and DEC responses to date.
---	-----------------------	-----------------------------------

		Requests and F	er ee minjeure i		
Milestone	Agree- ment Date	Mod request letter date	Revised date requested	DEC Response Date	Modified Milestone Date <sup>1</sup>
Raw Sewage Pumping Facility NTP	12/3/2018	8/24/2018	5/15/2019	9/12/2018	5/15/2019
Raw Sewage Pumping Facility NTP	5/15/2019	5/3/2019	11/23/2019	7/1/2019	11/23/2019
Raw Sewage Pumping Facility CC	12/1/2020	8/24/2018	2/27/2022	9/12/2018	2/27/2022
Effluent Screening Facility NTP	8/21/2018	8/24/2018	2/21/2019	9/12/2018	2/21/2019
Effluent Screening Facility NTP	2/21/2019	5/3/2019	10/5/2019	7/1/2019	10/5/2019
Effluent Screening Facility CC	7/29/2020	8/24/2018	10/14/2021	9/12/2018	10/14/2021
Secondary Flood Protec- tion NTP	6/5/2018	8/24/2018	2/15/2019	9/12/2018	2/15/2019
Secondary Flood Protec- tion NTP	2/15/2019	5/3/2019	7/20/2019	7/1/2019	7/20/2019
Secondary Flood Protec- tion CC	7/26/2020	8/24/2018	8/15/2021	9/12/2018	8/15/2021
Stormwater Pump Stations CC	3/31/2018	8/24/2018	3/31/2019	9/12/2018	3/31/2019
3 Generator Operation	11/30/2018	8/24/2018	3/31/2019	9/12/2018	3/31/2019
3 Generator Operation	3/31/2019	1/10/2019 <sup>2</sup>	5/19/2019	2/22/2019	5/19/2019
3 Generator Operation		5/6/2019 <sup>2</sup>		7/1/2019	
Hot Water Piping System Design, NTP, CC	Multiple	8/24/2018	Removal from Agreement	9/12/2018	Project Removed
East Avenue Station NTP	8/19/2018	8/24/2018	4/15/2019	9/12/2018	4/15/2019
East Avenue Station NTP	4/15/2019	5/3/2019	11/23/2019	7/1/2019	11/23/2019
East Avenue Station CC	12/28/2019	8/24/2018	2/13/2021	9/12/2018	2/13/2021
Sidestream Deammonifi- cation NTP	6/12/2018	8/24/2018	3/25/2019	9/12/2018	3/25/2019
Sidestream Deammonifi- cation NTP	3/25/2019	5/3/2019	7/20/2019	7/1/2019	7/20/2019
Sidestream Deammonifi- cation CC	12/28/2019	8/24/2018	9/25/2021	9/12/2018	7/8/2021
Effluent Tide Pumping Facilities CC	5/28/2020	10/19/2018*	1/15/2021	12/20/2018	1/15/2021
Level 1 BNR CC		5/3/2019 <sup>2</sup>		7/1/2019	

<b>Table 1 – Modification</b>	<b>Requests and Force M</b>	aieure Notifications
i doite i mioumentention	requests and roree hi	a cui e i ounications

<sup>1. &</sup>lt;sup>1</sup> Bold denotes current date, italic superseded

<sup>2. &</sup>lt;sup>2</sup> Force Majeure

# Design Milestone Status

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

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 *

 Table 2 – Design Completion Milestones

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

# **Project Notes:**

All agreement design milestones have been completed and certifications accepted.

# 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.

Milestone	Agreement Date	Actual/ Forecast	
Raw Sewage Pumping Facility	11/23/2019	11/23/2019	
Effluent Screening and Disinfection	10/5/2019	10/5/2019	
Secondary Flood Protection	7/20/2019	10/5/2019	
East Avenue Ejector Station	11/23/2019	11/23/2019	
Sidestream Deammonification	7/20/2019	10/5/2019	

Table 3 – Construction NTP Milestones

Table 4 – Construction Completion Milestones			
Milestone	Agreement Date	Actual/ Forecast	% Complete
1 Barnes Avenue – Baldwin	12/31/2019	8/12/2019	98%
2 Raw Sewage Pumping Facility	2/27/2022	5/20/2022	0%
3 Sludge Dewatering Facilities	12/15/2018	10/12/2018 A	100%
4 Effluent Screening and Disinfection	10/14/2021	11/27/2021	0%
5 Effluent Tide Pumping Facilities	1/15/2021	5/4/2020	40%
6 Electrical Distribution Phase E1-E3	9/21/2019	1/23/2020	97%
7 Secondary Flood Protection	8/15/2021	8/28/2021	0%
8 Stormwater Pump Stations	3/31/2019	3/28/2019 A	100%
9 Upgrade To 3 Generator Operation	5/19/2019	8/26/2019	95%
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	2/13/2021	5/15/2021	0%
16 Level 1 BNR	4/8/2020	4/23/2020	50%
17 Sidestream Deammonification	7/8/2021	8/28/2021	0%

**Table 4 – Construction Completion Milestones** 

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

# **Project Notes:**

# **<u>1. Barnes Avenue – Baldwin</u>**

This project is nearing completion is anticipated to be at substantial completion in August 2019, ahead of the milestone date.

# Progress This Quarter:

Contract #S3P311-09S Hempstead Wastewater Force Main:

• Granted substantial completion May 19, 2019.

Contract #S3P311-09G Hempstead Wastewater Pumping Station:

• Installed groundwater dewatering system at for Weekes Park Connection.

# Expected Progress Next Quarter:

S3P311-09S

• Contract close out.

# S3P311-09G

- Installation of 12" Sanitary line at the HPS site from Weeks Park PS.
- Demobilization from the site.

# 2. Raw Sewage Pumping Facility

This project did not meet the original NTP milestone date of May 15, 2019. A milestone modification request was submitted by the County to extend the NTP date to 11/23/19 which was accepted by DEC.

# Progress This Quarter:

The County held the pre-award meeting with the low bid contractor and continued with the award process. The NTP is projected to be ahead of the modified milestone date of November 23, 2019.

# Expected Progress Next Quarter:

The County will be continuing with the award process with goal of a Q3 2019 NTP.

# 3. Sludge Dewatering Facilities

This project is nearing completion and is anticipated to achieve substantial completion in early Q3 2019. Substantial completion has been delayed by ongoing coordination with local agencies on the acceptance of the fire alarm system. All process equipment has been accepted for beneficial use and DEC has accepted the County's milestone certification for construction completion.

- Continued MCC testing.
- Continued demobilization.
- Continued general punch list work.

Expected Progress Next Quarter:

- Conveying system repairs.
- Door hardware installation.
- General punch list work items.

### 4. Effluent Screening and Disinfection

The County is continuing with the award process for the construction and construction management contracts. A milestone modification request was submitted by the County to extend the NTP date to 10/5/19 and was accepted by DEC.

Progress This Quarter:

Proposals for construction management services were received.

### Expected Progress Next Quarter

The County will continue with the award process for the construction and construction management contracts. The construction NTP date is currently forecasted to occur by the modified milestone date of October 5, 2019 based on receiving Nassau County Leg-islative approval on August 5, 2019.

### 5. Effluent Tide Pumping Facilities

The project is proceeding and is projected to be complete before the milestone date.

- Installed Conduits for New Air Conditioning Unit on the New Electrical Annex Building Roof.
- Installed Electrical Grounding in the First Floor Slab of the New Electrical Annex Building.
- Installed Electrical Conduit Rack for ATS and Power Panel Equipment.
- Performed lightning Protection at the New Electrical Annex Building.
- Pulled Wires for Lighting Fixtures in Electrical Room.
- Removed Existing Electrical Equipment & Conduit/Wire within EPF Building.
- Demolished CMU Wall in EPF Electrical Room.
- Core Drilled and Installed Conduits for EPF PLC.
- Continued with Interior Painting in the New Electrical Annex Building.
- Core Drilled and Installed Pull Box and Conduits in the existing EPF.
- Performed Miscellaneous Demolition in EPF for Equipment Support Beam Installation.
- Performed Roofing Installation Work at the new Electrical Annex Building.
- Continued to install Electrical Conduit within the New Electrical Annex Building.
- Performed Expansion/Control Joints work in the New Electrical Annex Building.
- Performed installation of Firestopping in the new Electrical Annex Building.
- Installed VFDs, Transformers, & ATS in the new Electrical Annex Building.
- Installed Automatic Transfer Switch FA and 2 Fused Disconnect.
- Installed Under Structure Metal Soffit System Annex Building.
- Started the Installation of New Window on the North Side of the EPF

Expected Progress Next Quarter

- Layout and Install Exterior Stairs and Railings at the new Electrical Annex Building.
- Install Linear Metal Ceilings in the New Electrical Annex Building.
- Perform Asbestos Removal and Demolition of the existing EPF Roof.
- Install Roof Drains at Existing EPF.
- Install Electrical Conduit Within Communication Room.
- Install Conduit Racks in Electrical Room.
- Install Lighting Fixtures in Communication Room.
- Install Backup Level Control Panel EFP BLVL CP.
- Install EFP PLC.
- Pull & Terminate Wire to Backup Level Control Panel EFP BLVL CP.
- Pull & Terminate Wire To 5kv Electrical Switchgear Equipment.
- Install Unit Heaters.
- Install Battery Bank and Cabinet Equipment in the Electrical Room.
- Install New Air Conditioner Units on the New Annex Building Roof.
- Continue Soffit System Installation in the New Electrical Annex Building.
- Install Structural Support for Control Panels.
- Install Effluent Water Pump No. 1.
- Install Effluent Water Pump No. 1 Discharge Valve & Piping.

# 6. Electrical Distribution System Phases E1-E3

Phases E1 and E2 were completed 10/19/2016 and 9/29/2017, respectively. The transition from the old main substation to the new has taken more time than anticipated due to complexity of the task and criticality of the system to maintain plant operations, issues related to the functionality of existing breakers, and a lack of contractor performance. The project is currently projecting beyond the milestone. The County's consultants continue to work with the contractor in an effort to improve upon the plan and reduce activity duration.

- Completed sunshade installation on the North side of the building, MSS.
- Completed Fans and Unit Heater Startup, MSS.
- Performed Elevator Startup and Inspection, MSS.
- Continued Installation of Curtain Wall Systems, MSS.
- Started Installation of Flood Doors and Hardware, MSS.
- Completed Commissioning of EMCS, MSS.
- Continued HVAC Control Work and Testing.
- Completed Generator Load Bank Testing.
- Completed installation of Duct Banks for Site Lighting.
- Continuing Curbing and Sidewalk Restoration following Site Lighting.
- Continued Asphalt Paving and Patching.
- Started First Seven MOPOs.
- Continued Pulling Wire for Site Lighting.

• Continued Installation of Communications Conduits in the Tunnel and Operations Building

# Expected Progress Next Quarter:

- Complete Installation of the Canopy and Punch List Items.
- Complete Installation of Curtain Wall Systems.
- Complete Installation of Flood Doors and Associated Hardware.
- Complete HVAC Controls and Building Automation.
- Complete Site Lighting wiring in NW & SW quadrants.
- Start Generator Migration MOPOs.
- Continue Site Restoration, Sidewalks, Curbing and throughout Plant.
- Generator Fire Suppression System Inspection.
- Complete Fire Alarm System Installation and Testing.
- Complete Installation of Phones and Network Equipment.

# 7. Secondary Flood Protection

The County is continuing with the award process for the construction and construction management contracts. A milestone modification request was submitted by the County to extend the NTP date to 7/20/19 and was accepted by DEC.

### Progress This Quarter:

The County is progressing the award and NTP. The modified NTP date of 7/20/19 was predicated on receiving Nassau County Legislature approval of the contracts on May 20, 2019. There have been delays due to the implementation of new compliance procedures which has delayed the approval of the contracts past the May 20<sup>th</sup> date.

### Expected Progress Next Quarter:

The County will continue with the award process for the construction and construction management contracts. The forecast construction NTP date is dependent on receiving Nassau County Legislature approval on August 5, 2019.

# 8. Stormwater Pump Stations

The work has been delayed by contractor performance issues and is currently projected to be substantially complete July 29, 2019, beyond the agreement milestone date of March 31, 2019. However, the pump stations achieved full storm water pumping functionality on March 28, 2019 and the DEC accepted the County's certification of completion April 19, 2019.

- Completed South MCC Lightning Protection.
- Installed South MCC Building Flood Lights.
- Placed Concrete Valve Supports in the South Pump Station Valve Chamber.
- Installed the Roof Coping for the South MCC Building.
- Installed Ladder Safety Rails at the South Valve Chamber.

- Completed Pavement for South Pump Station Restoration.
- Completed Pavement for Miscellaneous Improvement #5.
- Completed Miscellaneous Stormwater Improvement No. 7 Structures and Piping Installations.
- Completed Testing for the South MCC Building Grounding Loop.
- Replaced North MCC Sump Pump Breakers.
- Completed Operational Testing of The North Pump Station.
- Completed Operational Testing of the South Pump Station.
- Installed the Refrigerant Piping for the North and South Air Conditioner Systems.
- Pulled and Terminated Control Wiring for the North and South Air Conditioner Systems.
- Completed Start-up and Testing of Air Conditioner Systems in the North and South MCC Buildings.

# Expected Progress Next Quarter:

- Install Signage and Equipment Tags.
- Test Flood Doors.
- Continue site restoration & paving.
- Complete Exterior Lighting
- Install Deck Spray Foam Insulation
- Demolish Existing and Install New Piping and Structures for Misc. Improvement No. 6

# 9. Upgrade to 3 Simultaneous Generator Operation

The project is currently projected to be substantially complete by August 19, 2019, beyond the current milestone date. Issues have occurred with connected service air infrastructure that was not part of the project scope. The County is working with the contractor to expedite the completion of the project though a Force Majeure notification was submitted regarding this issue. Per discussions with DEC, the County will provide monthly updates on this project.

Progress This Quarter:

- Started and ran Natural Gas Compressor No. 2 for 2-weeks.
- Start-up ECL heat exchanger.
- Installed new Natural Gas Compressor No. 1.
- Start-up and Tested Natural Gas Compressor No. 1.
- Demolished Existing Natural Gas Compressor No. 5.
- Installed new Natural Gas Compressor No. 5.
- Completed installation of all Starting Air Compressors.
- Installed Service Air Compressor No. 1
- Troubleshoot Service Air Compressor Control Panel.

# Expected Progress Next Quarter:

- Continue installation of Natural Gas Compressors.
- Continue installation of Service Air Compressors.

# 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.

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

The County has accepted all pump stations for beneficial use and milestone certification was submitted on February 28, 2019, ahead of the July 4, 2019 milestone date.

### Progress This Quarter:

- Progressed Punch List Work (gas detection and lighting spare parts turned over, completed post construction photographs, completed Bayview Ave. PS FO Tank Leak Level field test).
- Granted substantial completion on May 13, 2019.

### Expected Progress Next Quarter:

• Final punch list work and contract close out.

### 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**

The construction and construction management services contracts were advertised on March 8, 2019. Bids and proposals were received in April, 2019, and the County is proceeding with the award process. The milestone date for NTP to 4/15/2019 was not met. A milestone modification request was submitted by the County and accepted by DEC. The County anticipates an NTP prior to the modified date of November 23, 2019.

### 16. Level 1 BNR

The project is currently projected to finish two weeks behind the milestone date. As noted in the Q1 209 report, Aeration Tanks No. 1, 2 and 3 all have been found to have frozen drain gates and water is infiltrating into AT No.3 through the bottom slab expansion joints. A Force Majeure notification was issued to DEC regarding this issue on May 3, 2019. The lessons learned in the work in AT No. 3 will be applied if necessary in the final two tanks in order to maintain the current schedule.

### Progress This Quarter:

• Completed Installation of the Mixer, Baffle Walls, and Diffusers in Aeration Tank No. 3.

- Completed Installation of 12" SWAS Pipe in Pass No. 3A.
- Completed Testing and Placed Aeration Tank No. 3 In Service.
- Completed Replacement of the Sluice Gate in Underdrain Manhole for Aeration Tank No. 2.
- Started Replacement of the sluice gate in Underdrain Manhole for Aeration Tank No. 1.
- Started the Structural Repair Work in RAS Box No. 9 and No.10.
- Continue Installation of the MCC and Power Panels in Aeration Building No. 2.
- Continue Installation of the Instrumentation in all Five Aeration Tanks.

# Expected Progress Next Quarter:

- Continue Installation of the MCC and Sub-Panels in Aeration Building No. 2.
- Continue Installation of Instrumentation in All Five Aeration Tanks.
- Continue the structural repair work in RAS Box No. 9 and No. 10.
- Remove Aeration Tank No. 2 from Service and Clean.
- Remove the existing diffuser equipment from Aeration Tank No. 2.
- Perform Structural repair work in Aeration Tank No. 2.

# **17. Sidestream Deammonification**

The County is continuing with the award process for the construction and construction management contracts. A milestone modification request was submitted by the County to extend the NTP date to 7/20/19 and was accepted by DEC.

# Progress This Quarter:

The County is progressing the award and NTP. The modified NTP date of 7/20/19 was predicated on receiving Nassau County Legislature approval of the contracts on May 20, 2019. There have been delays due to the implementation of new compliance procedures which has delayed the approval of the contracts past the May 20<sup>th</sup> date.

# Expected Progress Next Quarter:

The County will continue with the award process for the construction and construction management contracts. The forecast construction NTP date is dependent on receiving Nassau County Legislature approval on August 5, 2019.

# Inter Municipal Agreement

Paragraph V.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 Bay Park WWTP.

The IMA was approved by the County Legislative Committees and the full legislature. The City of Long Beach Council will approve the agreement in the next Quarter.

# Nitrogen Interim Limit Schedule of Compliance

The milestones for the Interim Nitrogen Limits are listed in the following table.

Description of Work for Nitrogen Removal Project	<b>Completion Date</b>
Submit an approvable BNR Operation and Maintenance (O&M) Plan	1/8/2020
Begin operation of the 6-month start-up period	6/1/2020
Begin the 12-month performance period	1/1/2021
End 12-month performance period	1/1/2022
Submit performance data	4/1/2022

These milestones will be reviewed as the Sidestream Deammonification and Level 1 BNR projects progress through the construction phase. Per the discussion at the 2019 Q1 meeting, separate milestones will be established for the two projects due to Level 1 BNR finishing prior to Sidestream Deammonification.

# Diversion Project

The milestones for the Diversion Project are listed in the following table:

Table 0 – Diversion Troject winestones		
<b>Description of Work</b>	<b>Completion Date</b>	
Slip lining of aqueduct along Sunrise Highway	November 2019	
Diversion Project Report	January 2018	
Design Start	TBD	
DesignCompletion	TBD	
Impact Report	TBD	
Notice to Proceed to Construction	TBD	
Construction Completion and Commence Diversion of Influent Wastewater from Bay Park WWTP to Cedar Creek WWTP	June 2024	

Table 6 – Diversion	<b>Project Milestones</b>
---------------------	---------------------------

# Progress This Quarter:

The preliminary designer has started work and submitted the Draft Design Criteria Package on June 7, 2019. This is the second milestone of their contract. It was reviewed and comments returned to the designer.

# Expected Progress Next Quarter:

Design workshops will be held and the designer will proceed towards the production of the Final Design Criteria Package to be submitted in October, 2019.

# Project Milestones:

NYSDEC is considering adjusting the milestones to better align with the current project delivery methodology which is utilizing Design-Build project delivery.

# Environmental Benefit Projects

A designer has been selected and the County is currently in the process of finalizing a design agreement under which the Kayak Dock design task will be assigned. This process includes encumbrance of all necessary funds outlined in the EBP Plan.

# Certification of Completed Activities

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

Milestone	Date	Certification	Certification
	Completed	Submitted	Accepted
Effluent Screening and Disinfection - De-	1/5/2018	7/5/2018	9/13/2018
sign Completion			
East Avenue Ejector Station - Design	3/2/2018	7/5/2018	9/13/2018
Completion			
Cedar Dr, Roosevelt et al PS - Construc-	1/12/2018	7/5/2018	11/27/2018
tion Completion			
Wantagh, Newbridge et al PS - Construc-	2/12/2018	7/5/2018	11/27/2018
tion Completion			
Sage Lake and Lawrence PS – Construc-	8/13/2018	8/24/2018	11/27/2018
tion Completion			
Ocean Ave, Mill Road et al PS – Construc-	8/17/2018	9/19/2018	11/27/2018
tion Completion			
Sludge Dewatering Facilities – Construc-	10/12/2018	10/24/2018	1/4/2019
tion Completion			
Inwood, Doughty et al PS – Construction	2/19/2019	2/28/2019	pending
Completion			
Stormwater Pump Stations – Construction	3/28/2019	4/3/2019	4/19/2019
Completion			

Table 7 –	Complete	d Activities
	Complete	ACHVILLS

# Community Relations

A meeting was held April 3, 2019 and meeting minutes are attached herein.

# x.0 Attachments

- 1. Program Master Schedule
- 2. Community Meeting Minutes

# 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 Improve- ments	S35121-03G
Sludge dewatering facilities	Sludge Dewatering Facilities Improvements	S35121-09G
Effluent Screening and disinfec- tion	Effluent Screening and Disinfection Facility Improvements	\$35121-11G
Effluent tide pumping facilities	Effluent Pumping Facility Improvements	S35121-12G
Electrical Distribution Phase E1- E3	Phase E3 Main Substation and Electrical Distribution	\$35121-14F
Secondary Flood Protection	Secondary Flood Protection and Hardening of Critical Facilities	\$35121-16G
Stormwater Pump Stations	Flood Protection Phase I – Stormwater Pumping Stations	S35121-18G
Upgrade to 3 Generator Opera- tion	Engine Generator Facility Auxiliary Im- provements	S35121-16A
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 Re- pairs	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
Vincent fallsound.	7/29/2019
Signature	Date Signed

Bay Park Master Schedule 190630			М	aster Schedul	е			_								-			As	of 30	)-Jun-	19
Activity Name	Orig Dur	Rem Dur	Start	Finish	% Comp		2014 QQQC	201	_	2016 0 0 0	20 <sup>.</sup>		2018 2000	_	019 01010	202		2021	2022	_		2024 0 0 0
Bay Park Master Schedule 190630									-													
Existing Capital Projects	<u> </u>											•										
S3B119-05G - Generator Controls						-																
Design							_															
Design - Generator Controls	74	0	21-Oct-13 A	22-Apr-14 A	100																	
Procurement		Ű	Erouron	22701111	100										· · · ·			+-+-+	+-+-+			+-+-+
Procurement - Generator Controls	121	0	28-Oct-13 A	25-Feb-14 A	100																	
Construction						V																
Temp Generators Off-line / Plant Power on House Generators	0	0		18-Nov-14 A	100		•															
Construction - Generator Controls	533	0	15-Nov-13 A	24-Jun-16 A	100																	
S3B120-01G - Influent Screening Facility Improvements																						
CM Contract							<b>7</b>															
RFP / Advertise CM Services - Influent Screening	30	0	20-Apr-13 A	24-May-13 A	100																	
Award / NTP CMServices - hfluent Screening	40	0	25-May-13 A	06-Jan-14 A	100	<u> </u>																
Construction Contract						-			-		-											
Bid / Advertise - Influent Screening	40	0	14-Oct-13 A	26-Nov-13 A	100																	111
Award / NTP - Influent Screening	90	0	27-Nov-13 A	27-May-14 A	100	1																
Construction - Influent Screening	913	0	27-May-14 A	09-Jun-17 A	100																	
S3B120-02G - Grit Removal Facility Improvements						•						•										
CM Contract						-																
RFP / Advertise CM Services - Grit Removal	30	0	07-Oct-13 A	25-Oct-13 A	100	1																
Award / NTP CM Services - Grit Rem oval	40	0	26-Oct-13 A	26-May-14 A	100								111									
Construction Contract						-						V										
75% to 100% Design / Bid Documents - Grit Removal	236	0	06-May-13 A	12-Feb-14 A	100																	
County Prepare Bid for Advertisement - Grit Removal	7	0	13-Feb-14 A	23-Feb-14 A	100																	
Bid / Advertise - Grit Removal	56	0	24-Feb-14 A	21-Mar-14 A	100		B															
Bid Opening - Grit Removal	1	0	25-Mar-14 A	25-Mar-14 A	100		(															
Award / NTP - Grit Removal	63	0	26-Mar-14 A	20-Apr-15 A	100																	
Construction - Grit Removal	821	0	20-Apr-15 A	18-Jul-17 A	100																	
S35100-01G - Cleaning & Repair of Digesters & Storage Tanks						-		<b>-</b>														
Construction						-																1-44
Construction - Digester Cleaning	720	0	20-May-13 A	16-Apr-15 A	100																	
S35114-03G - Sludge Thickening Facility Improvements						-																
CM Contract						-																
RFP / Advertise CM Services - Sludge Thickening	30	0	21-Aug-13 A	09-Sep-13 A	100																	
Award / NTP CMServices - Sludge Thickening	30	0	10-Sep-13 A	25-Mar-14 A	100			111					++++		1			***	111			111
Construction Contract						-																
Award / NTP - Sludge Thickening	64	0	21-Aug-13 A	24-Oct-13 A	100																	
Construction - Sludge Thickening	730	0	28-Oct-13 A	30-Aug-16 A	100																	
S35116-01G - Odor Control at Bay Park & Cedar Creek						-			-													
CM Contract						-																
RFP / Advertise CM Services - Odor Control BP & CC WPCPs	20	0	21-Aug-13 A	09-Sep-13 A	100																	
Award / NTP CMServices - Odor Control BP & CC WPCPs	30	0	10-Sep-13 A	10-Mar-14 A	100																	
Construction Contract						-																
Award / NTP - Odor Control BP & CC WPCPs	64	0	21-Aug-13 A	23-Oct-13 A	100																	
Construction - Odor Control BP & CC WPCPs	730	0	28-Oct-13 A	07-Nov-15 A	100																h	h =
Hurricane Sandy Projects				·		-			1													<del></del>
FEMA Approval Process						-																
FEMA 404 Grants	60	0	12-Aug-13 A	31-Oct-13 A	100																	
FEMA 404 Grants FEMA Finalize Damage Scope and Cost	45	0	12-Aug-13 A 12-Aug-13 A	19-Dec-13 A	100																	
Submit 406 HMP	45	0	12-Aug-13 A 12-Aug-13 A	19-Dec-13 A	100				- <del>-</del>										·			+-+
FEMA 406 HMP Negotiation	45 90	0	06-Jan-14 A	15-Jan-14 A	100																	
	90	U	00-Jail-14 A	10-Jdll-14 A	100		•		i								<u> </u>					<u> </u>
Remaining Level of Effort       Actual Work         Actual Level of Effort       Remaining Work				Page 1 of 11								H	laz						DIS	5		

Park Master Schedule 190630				aster Schedul			0011		-	 	6917		10	0000		000 :			30-Ju	
me	Orig Dur	Rem Dur	Start	Finish	% Comp	2013 Q Q Q Q	2014 Q Q Q	2015 Q Q Q	201 Q Q Q	 2017 2000	2018 2 Q Q Q	_	019 QQ	2020 Q Q Q	_	2021 Q Q Q	202 2 Q Q	22 Q Q Q	2023	
FEMA Scope and Cost Negotiation	90	0	20-Dec-13 A	15-Jan-14 A	100	÷ : •													+++	t
S35121-01G/E - Final Settling Tank Rehabilitation						-														
Construction Contract						-														
Award / NTP - Final Tank Rehabilitation	64	0	21-Aug-13 A	23-Oct-13 A	100					 					i tri					
Construction - Final Tank Rehabilitation	730	0	28-Oct-13 A	13-May-16 A	100															
CM Contract		-				-														
RFP / Advertise CM Services - Final Tank Rehabilitation	30	0	21-Aug-13 A	09-Sep-13 A	100															
Award / NTP CMServices - Final Tank Rehabilitation	30	0	10-Sep-13 A	10-Feb-14 A	100															
S35121-03G - Raw Sewage Pumping Facility	50	0	10-06p-13 A	10-1 CD-14 A	100		<u></u>			 					<u></u>	<u></u>			÷-+-+	
CM Contract		0	01 5 1 10 1	04.04 40.4	100															
RFP / Advertise CM Services - Raw Sewage Pumping Facility	29	0		01-Mar-19 A	100															
Award / NTP CMServices - Raw Sewage Pumping Facility	180	146	02-Mar-19 A	23-Nov-19	19								;							
Design Process										 					<u></u>				1.1.1	
Finalize Technical Memorandum - Influent Screens & RPS	45	0	•	30-Jun-14 A	100															
Preliminary Design - Raw Sewage Pumping Facility	88	0	01-Jul-14 A	23-Feb-15 A	100															
RFP / Advertise Final Design - Raw Sewage Pumping Facility	29	0	27-Feb-15 A	27-Mar-15 A	100			• •												
Award / NTP Final Design - Raw Sewage Pumping Facility	90	0	30-Mar-15 A	01-Mar-16 A	100															
Final Design - Raw Sewage Pumping Facility	210	0	01-Mar-16 A	26-Sep-16 A	100															
Bid / Construction															÷÷,	_				
County Prepare Bid for Advertisement - Raw Sewage Pumping Facility	1	0	01-Feb-19 A	01-Feb-19 A	100															
Bid / Advertise - Raw Sewage Pumping Facility	29	0	01-Feb-19 A	08-Mar-19 A	100															
Bid Opening - Raw Sewage Pumping Facility	1	0	12-Mar-19 A	12-Mar-19 A	100															
Award / NTP - Raw Sewage Pumping Facility	180	146	13-Mar-19 A	23-Nov-19	19							📛	i.							
Construction - Raw Sewage Pumping Facility	910	910	23-Nov-19	20-May-22*	0					 									1	
S35121-09G - Sludge Dewatering				· ·		-				 			<b>-</b>							
CM Contract																				
RFP / Advertise CM Services - Dewatering Demo & Improvement	22	0	04-Apr-14 A	25-Apr-14 A	100															
Award / NTP CMServices - Dewatering Demo & Improvement	90	0		22-Sep-14 A	100															
Design Process	50	0	207011477	22 00p 14/1	100					 	·	<b> </b>			<u>}-</u>		+-+-+			
Finalize Technical Memorandum - Dewatering	45	0	12-Aug-13 A	22-Nov-13 A	100															
Preliminary Design - Dewatering	85	0	26-Sep-13 A	31-Dec-13 A	100															
	16	0		07-Feb-14 A	100															
RFP / Advertise Final Design - Dewatering		-	10-Jan-14 A																	
Award / NTP Final Design - Dewatering	80	0	08-Feb-14 A	07-Jul-14 A	100					 	· · · · · · · · · · · · · · · · · · ·									
Final Design - Dewatering	200	0	07-Jul-14 A	03-Apr-15 A	100															
Centrifuge Pilot Testing			00 1 111		100															
Alfa Laval Centrifuge Pilot	5	0		11-Jun-14 A	100															
GEA Westfalia Centrifuge Pilot	5	0	23-Jun-14 A	27-Jun-14 A	100										1			1		
Andritz Centrifuge Pilot	5	0	07-Jul-14 A	11-Jul-14 A	100					 									ļ	
Flottweg Centrifuge Pilot	5	0	14-Jul-14 A	18-Jul-14 A	100															
Centrisys Centrifuge Pilot	5	0	21-Jul-14 A	25-Jul-14 A	100		1													
Bid / Construction																				
County Prepare Bid for Advertisement - Dewatering	7	0	03-Apr-15 A	09-Apr-15 A	100															
Bid / Advertise - Dewatering	29	0	10-Apr-15 A	15-May-15 A	100															
Bid Opening - Dewatering	1	0	19-May-15 A	19-May-15 A	100															-1-
Award / NTP - Dewatering	90	0	20-May-15 A	07-Dec-15 A	100			📫												
Construction - Dewatering	913	31	07-Dec-15 A	31-Jul-19*	97					 			<b> </b>							
S35121-09R - Sludge Dewatering Demolition								<b></b>												
Design Process						-														
100% Design - Dewatering Demolition	89	0	02-Jan-14 A	31-Mar-14 A	100		4			 										
Bid / Construction	50	Ű																		
County Prepare Bid for Advertisement - Dewatering Demolition	7	0	01-Apr-14 A	03-Apr-14 A	100															
Bid / Advertise - Dewatering Demolition	29	0	01-Apr-14 A 04-Apr-14 A	03-Api-14 A 09-May-14 A	100															
	29	0	13-May-14 A		100		<b>.</b>													
Bid Opening - Dewatering Demolition Award / NTP - Dewatering Demolition			-	13-May-14 A						 			<b>  </b>				+		+ + +	
Awaru / NTP - Dewatering Demonton	90	0	14-May-14 A	22-Sep-14 A	100	: :				: : :				1 1				:	: : :	
Remaining Level of Effort Actual Work				-							_									
	1			Dogo 2 of 11						- <b>T</b>	1			-	_		-	$\sim$		
				Page 2 of 11							<b>Ia</b> z	701	า 🕻	Δ	ıD،	$\nabla \Lambda$		5		

k Master Schedule 190630		Der: D		aster Schedule		012	2014	2045		16	2047	00.1	<u> </u>	2040	0.00	20	000	_		of 30	
	Orig Dur	Rem Dur	Start	Finish	% Comp 2	013 2 Q Q Q	2014 Q Q Q	2015 Q Q Q	_	016 QQ	2017 QQQQ	2018 2 Q Q Q		2019	20: Q Q Q		2021 Q Q Q	_	2022 QQC	202 2 Q Q	
Construction - Dewatering Demolition	180	0	22-Sep-14 A	20-Mar-15 A	100																ł
5121-11G - Effluent Screening & Disinfection																	<del></del>	-			į
CM Contract													-		,						ł
RFP / Advertise CM Services - Effluent Screening & Disinfection	29	0	01-Feb-19 A	01-Mar-19 A	100																į
Award / NTP CMServices - Effluent Screening & Disinfection	180	97	02-Mar-19 A	05-Oct-19	46													1-1-1			Ť
Design Process						-						•									Ì
Finalize Technical Memorandum - Effluent Screening & Disinfection	45	0	15-Nov-13 A	13-Feb-14 A	100																Ì
Prepare Design RFP - Effluent Screening & Disinfection	85	0	30-Dec-13 A	29-Jan-16 A	100																i
RFP / Advertise Final Design - Effluent Screening & Disinfection	29	0	29-Jan-16 A	26-Feb-16 A	100																Ì
Award / NTP Final Design - Effluent Screening & Disinfection	90	0	29-Jan-16 A 06-May-16 A	09-Jan-17 A	100								4	÷							ł
		0	,	05-Jan-18 A	100				-												į
Final Design - Effluent Screening & Disinfection	300	U	09-Jan-17 A	05-Jan-18 A	100							1   _									į
Bid / Construction	7	0	04 14 40 4	07.1.140.4	400								-								į
County Prepare Bid for Advertisement - Effluent Screening & Disinfection	7	0	01-Jul-18 A	07-Jul-18 A	100																ł
Bid / Advertise - Effluent Screening & Disinfection	29	0	13-Jul-18 A	10-Aug-18 A	100					-				÷			·				ļ
Bid Opening - Effluent Screening & Disinfection	1	0	14-Aug-18 A	14-Aug-18 A	100																1
Award / NTP - Effluent Screening & Disinfection	180	97	15-Aug-18 A	05-Oct-19	46								:	: :		1					i
Construction - Effluent Screening & Disinfection	785	785	05-Oct-19	27-Nov-21*	0													-			
5121-12G - Effluent Pumping Facility Improvements																					
CM Contract																					
RFP / Advertise CM Services - Effluent Tide PB	29	0	01-May-15 A	29-May-15 A	100																
Award / NTP CM Services - Effluent Tide PB	90	0	30-May-15 A	24-Aug-17 A	100																
Design Process						-															į
Finalize Technical Memoran dum - Effluent Tide PB	45	0	12-Aug-13 A	22-Nov-13 A	100											÷					1
Preliminary Design - Effluent Tide PB	85	0	26-Sep-13 A	27-Feb-14 A	100																-
RFP / Advertise Final Design - Effluent Tide PB	30	0	28-Feb-14 A	28-Mar-14 A	100					1-1-1			1	† † †				1-1-1			Ť
Award / NTP Final Design - Effluent Tide PB	90	0	31-Mar-14 A	08-Dec-14 A	100									1							ł
Final Design - Effluent Tide PB	210	0		07-Jul-15 A	100																i
Bid / Construction		-									1 1 1		1	1 1		-					ļ
County Prepare Bid for Advertisement - Effluent Tide PB	7	0	08-Jul-15 A	14-Jul-15 A	100			1													i
Bid / Advertise - Effluent Tide PB	29	0		11-Sep-15 A	100	· • - • - • - • - • - • - • - • • • • •							· • • • • • • • • • • • • • • • • • • •	÷							÷
Bid Opening - Effluent Tide PB	1	0	15-Sep-15 A	15-Sep-15 A	100																i
Award / NTP - Effluent Tide PB	90	0	16-Sep-15 A	24-Aug-17 A	100																Ì
	820	309	24-Aug-17 A	04-May-20*	62																i
Construction - Effluent Pumping Facility Improvements	820	309	24-Aug-17 A	04-Iviay-20	02																Ì
5121-13E - Phase E1 Electrical Distribution Systems Improvements																	<b>  </b>				÷
CM Contract					100																ł
RFP / Advertise CM Services - Phase E1 EDS	30	0	02-Jan-14 A	24-Jan-14 A	100																-
Award / NTP CM Services - Phase E1 EDS	90	0	25-Jan-14 A	07-Jul-14 A	100									1							i
Design Process																					į
Phase E1 Design	119	0	15-Aug-13 A	11-Dec-13 A	100					ii.,			.i	1				1			
Finalize Technical Memoran dum - Phase 1 EDS	45	0	12-Aug-13 A	03-Jan-14 A	100																1
Bid / Construction																					
County Prepare Bid for Advertisement - Phase E1 EDS	7	0	12-Dec-13 A	19-Dec-13 A	100	1															
Bid / Advertise - Phase E1 EDS	30	0	20-Dec-13 A	31-Jan-14 A	100	÷ • •															
Bid Opening - Phase E1 EDS	1	0	06-Feb-14 A	06-Feb-14 A	100																ł
Award / NTP - Phase E1 EDS	76	0	07-Feb-14 A	27-May-14 A	100																
Construction - Phase E1 EDS	670	0	27-May-14 A	19-Oct-16 A	100																
5121-14E - Phase E2 Unit Substation No. 2 & Electrical Distribution						· · ·	<del>,    </del>				+++										
Design Process																					į
Phase E2 Design - EDS - USS No. 2	155	0	04-Apr-14 A	18-Aug-14 A	100																
Bid / Construction	.30	Ū								ii		+	· • • • •	÷-			rt÷÷	ţ-+-÷			1
County Prepare Bid for Advertisement - EDS Phase E2 - USS No. 2	7	0	21-Aug-14 A	27-Aug-14 A	100					III											1
Bid / Advertise - EDS Phase E2 - USS No. 2	29	0		10-Oct-14 A	100											÷					
			29-Aug-14 A																		1
Bid Opening - EDS Phase E2 - USS No. 2	1	0	14-Oct-14 A	14-Oct-14 A	100																
Award / NTP - EDS Phase E2 - USS No. 2	90	0	15-Oct-14 A	11-May-15 A	100	1							1	:		Ì		<u>:   i</u>	1		i
Remaining Level of Effort Actual Work				Page 3 of 11							Т	T			6						
				ayesuil								<b>la</b>	70	n	(9)	ΛĒ	JC	ΛΓ	NC.		

Park Master Schedule 190630				aster Schedule		 								_			of 30	_
lame	Orig Dur	Rem Dur	Start	Finish	% Comp	2014 QQQ	2015 QQQ	2016 Q Q Q Q	2017 Q Q Q Q Q	201		019 2000	2020 Q Q Q		2021 Q Q Q	2022 Q Q Q	202 Q Q Q	
Construction - Phase E2 - USS No. 2	660	0	11-May-15 A	29-Sep-17 A	100			+ + + +										
S35121-14F - Phase E3 Main Substation & Electrical Distribution																		
Design Process							<b>v</b>											. 1
Phase E3 Design - EDS - Main Substation	285	0	01-Apr-14 A	09-Feb-15 A	100													
Bid / Construction		-					-											
County Prepare Bid for Advertisement - EDS Phase E3 - MSS	7	0	10-Feb-15 A	12-Feb-15 A	100	 	1											
Bid / Advertise - EDS Phase E3 - Main Substation	36	0	13-Feb-15 A	17-Apr-15 A	100													
Bid Opening - EDS Phase E3 - Main Substation	1	0	21-Apr-15 A	21-Apr-15 A	100		7.11											
Award / NTP - EDS Phase E3 - Main Substation	90	0	22-Apr-15 A	05-Oct-15 A	100													
Construction - Phase E3 - Main Substation	1095	207	05-Oct-15 A	23-Jan-20*	81													, 1
S35121-14M - Phase E2 & E3 Construction Management						 												
CM Contract																		
RFP / Advertise CM Services - Electrical Phase E2 & E3	29	0	25-Jul-14 A	22-Aug-14 A	100													
Award / NTP CMServices - Electrical Phase E2 & E3	29	0	23-Jul- 14 A 23-Aug-14 A	08-Jun-15 A	100													
	90	0	23-Aug-14 A	00-Juli-13 A	100													
S35123-L33E - Phase E4 Electrical Utility Connections						 												
CM Contract		05	40.14	00.4 00										<b>T</b>				
RFP / Advertise CM Services - Phase E4 Electrical Utility Connections	29	29	12-Mar-20	09-Apr-20	0								0					
Award / NTP CM Services - Phase E4 Electrical Utility Connections	180	180	10-Apr-20	06-Oct-20	0													
Design Process																		
Preliminary Design - Phase E4 Electrical Utility Connections	90	0	15-Dec-17 A	04-Jun-18 A	100	 												; _ ļ.
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	124	09-Nov-18 A	01-Nov-19	0							-						1
Final Design - Phase E4 Electrical Utility Connections	180	180	02-Nov-19	29-Apr-20	0													
PSE&G Coordination	5	1072	12-Aug-13 A	06-Jun-22	0								: :					
Bid / Construction						 												;
County Prepare Bid for Advertisement - Phase E4 Electrical Utility Connections	7	7	30-Apr-20	06-May-20	0								1					
Bid / Advertise - Phase E4 Electrical Utility Connections	29	29	08-May-20	05-Jun-20	0								٥					
Bid Opening - Phase E4 Electrical Utility Connections	1	1	09-Jun-20	09-Jun-20	0													
Award / NTP - Phase E4 Electrical Utility Connections	180	180	10-Jun-20	06-Dec-20	0													. 1
Construction - Phase E4 Electrical Utility Connections	548	548	06-Dec-20	06-Jun-22*	0													
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 Aux I iary Upgrad es	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				1									
Award / NTP - Engine Facility Auxiliary Upgrades	90	0	23-Nov-16 A	05-Jul-17 A	100													
Construction - Engine Facility Auxiliary Upgrades	365	57	05-Jul-17 A	26-Aug-19*	84													
S35121-16G - Secondary Flood Protection & Hardening of Critical Facil	ities					<b>v</b>	-								-			
CM Contract						 i						•		i la	11			
RFP / Advertise CM Services - Secondary Flood Protection	29	0	28-Jul-17 A	25-Aug-17 A	100													
Award / NTP CMServices - Secondary Flood Protection	90	20	26-Aug-17 A	20-Jul-19	78					1 1 1	;   ;							
Design Process						-	-											
Preliminary Design - Secondary Flood Protection	90	0	01-Dec-14 A	29-Oct-15 A	100													, 1
Finalize Technical Memorandum - Secondary Flood Protection	45	0	21-Apr-14 A	29-Oct-15 A	100	 i					· • • • • • •			*				
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				1									
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	 			+++++++++++++++++++++++++++++++++++++++		+-+-+			<u>+-</u>	-+			·{
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	61	05-Dec-17 A	30-Aug-19	32													
	90	01	UU-DEU-IT A	50-hug-18	52						: 1 :							
Remaining Level of Effort Actual Work							ſ		_	-			_	_	_			
6				Page 4 of 11						-la'	<b>7e</b> 1	n (	<u>a</u> A		C۵	DIS		
Actual Level of Effort Remaining Wo	dz						- 1			-			· · ·	TUR	~		,	

Bay Park I	Master Schedule 190630			M	aster Schedu	le												A	s of 30	)-Jun	-19
activity Name		Orig Dur	Rem Dur	Start	Finish	% Comp 2		2014 Q Q Q C	201	5 20 Q Q Q C	016 0 0 0 0	2017 QQQQ	2018 0 0 0		019 00000	2020 0000	2021 Q Q Q Q	202 0 0 0 0			2024 2000
	Construction - Secondary Flood Protection	730	730	30-Aug-19	28-Aug-21*	0															
	21-16P - Heating Hot Water Piping Permanent System				-					-	44	4		4							
	Contract																,				
	RFP / Advertise CM Services - Heating Hot Water Piping Permanent System	29	29	10-Mar-20	07-Apr-20	0															
	Award / NTP CMServices - Heating Hot Water Piping Permanent System	190	190	08-Apr-20	14-Oct-20	0															
	sign Process									-					┿┿	-					
	Preliminary Design - Heating Hot Water Piping Permanent System	90	0	02-Nov-15 A	09-Sep-16 A	100				4 <b>∤</b> ⊱- ↓	<u> </u>	+		+							
	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	73	16-Nov-18 A	11-Sep-19	54															
	inal Design - Heating Hot Water Piping Permanent System	210	210	11-Sep-19	07-Apr-20	0									Ti-	-					
	/ Construction	-	-															_			
	County Prepare Bid for Advertisement - Hot/Chilled Water System Upgrades	7	7	08-Apr-20	14-Apr-20	0								<u></u>		111					
	Bid / Advertise - Heating Hot Water Piping Permanent System	29	29	17-Apr-20	15-May-20	0										0					
	Bid Opening - Heating Hot Water Piping Permanent System	1	1	19-May-20	19-May-20	0															
	Award / NTP - Heating Hot Water Piping Permanent System	180	180	20-May-20	15-Nov-20	0															
	Construction - Heating Hot Water Piping Permanent System	730	730	15-Nov-20	14-Nov-22*	0													<u>-</u>   !		
	21-16TR - Vehicle Fueling & Tanks Reconstruction	100	100	101107 20	141107 22		· [ ]	· <u></u>											- <u>i</u>		
	_							*													
	sign Process Design - Vehicle Fueling	52	0	10 Mar 14 A	02 May 14 A	100		- i i i													
		53	0	10-Mar-14 A	02-May-14 A	100															
	/ Construction	7	0	00 14:44 4	08-May-14 A	400				-											
	County Prepare Bid for Advertisement - Vehicle Fueling	7	0	02-May-14 A	,	100															
	Bid / Advertise - Vehide 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					: :										
S3512	21-16V - Dechlorination Vault Storm Mitigation																				
	sign Process		- 1																		
	Design - Dechlor Sample Vault Hardening	180	0	27-Mar-15 A	22-Oct-15 A	100				-											
	/ Construction	_	-																	ļ	
	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					44	4									
S3512	21-17G - Perimeter Flood Protection																				
CM	Contract						1														
F	RFP / Advertise CM Services - Perimeter Flood Protection	30	0	10-Jan-14 A	07-Feb-14 A	100															
F F	Award / NTP CMServices - Perimeter Flood Protection	90	0	08-Feb-14 A	30-Jun-14 A	100															
Des	sign Process							7													
(	Geotech Borings - Perimeter Flood Protection	85	0	12-Aug-13 A	17-Dec-13 A	100	. 🛑														
F	Permitting (EAS) - Perimeter Flood Protection	125	0	12-Aug-13 A	17-Dec-13 A	100															
E	Berm Design - Perimeter Flood Protection	83	0	26-Sep-13 A	17-Dec-13 A	100	i 🍋														
F	inalize Technical Memorandum - Perimeter Flood Protection	45	0	12-Aug-13 A	17-Dec-13 A	100															
F	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															
E	Bid / Advertise - Perimeter Flood Protection	29	0	24-Jan-14 A	14-Mar-14 A	100															
E	Bid Opening - Perimeter Flood Protection	1	0	18-Mar-14 A	18-Mar-14 A	100															
A A	ward / NTP - Perimeter Flood Protection	76	0	19-Mar-14 A	27-May-14 A	100															
E	Eastern Park Open	0	0		07-Oct-15 A	100				•	1	1111									
	Construction - Perimeter Flood Protection	740	0	27-May-14 A	09-Jun-17 A	100					: :										
					1										<u> </u>					<u> </u>	
	Remaining Level of Effort Actual Work				Page 5 of 11							т	Te					-	~		
	0												1 <b>a</b> '	<u>ze</u> t	16	A	RC/	۱D۱!	5		
	Actual Level of Effort Remaining Work													A	JOIN	T VEN	TURE				
		1																			

ark Master Schedule 190630			М	aster Schedul	е																As of	530-J	Jun-
le	Orig Dur	Rem Dur	Start	Finish	% Comp		2014	_	2015	20		2017	20'	_	201	_	2020	_	2021	+	)22	2023	
S35121-18G - Flood Protection Phase 1 Stormwater Pumping Stations							alala	QQ	QQU	JQQ	QQ	QQQ	QQQ	QQ	QQ	QQ	QQQ	QQ	QQC	2QQ	QQ	QQQ	QQ
· · ·																							
CM Contract RFP / Advertise CM Services - Flood Protection Phase 1 Stormwater PS	00	0	04 1445 4	00 4.47 45 4	400																		
	29	0	31-Jul-15 A	28-Aug-15 A	100						<u></u>												
Award / NTP CMServices - 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									-							1							
County Prepare Bid for Advertisement - Flood Protection Phase 1 Stormwater PS	7	0	28-Aug-15 A	03-Sep-15 A	100				1														
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				1														
Award / NTP - Flood Protection Phase 1 Stormwater PS	90	0	30-Sep-15 A	31-May-16 A	100						ii										1		
Construction - Flood Protection Phase 1 Stormwater PS	760	29	31-May-16 A	29-Jul-19*	96						: :	1 1 1		:	-								
S35121-18S - Flood Protection Phase 2 Stormwater Green Infrastructure											7												
CM Contract																							
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 Gl	29	0	27-May-16 A	24-Jun-16 A	100																		
Bid / Construction																							
S35123-L37 - Miscellaneous Storm Repairs, Mitigation & Site Restoration															1	1							
CM Contract																		+	-				
RFP / Advertise CM Services - Misc Storm Repairs, Mitigation & Restoration	29	29	03-Dec-20	31-Dec-20	0						ii										1		
Award / NTP CM Services - Misc Storm Repairs, Mitigation & Restoration	180	180	01-Jan-21	29-Jun-21	0																		
Design Process																-		-					
Conceptual Design - Misc Storm Repairs, Mitigation & Site Restoration	90	90	05-Jul-19*	02-Oct-19	0											i l							
RFP / Advertise - Final Design - Misc Storm Repairs, Mitigation & Site Restoration	29	29	03-Oct-19	31-Oct-19	0											'n							
Award / NTP Final Design - Misc Storm Repairs, Mitgation & Site Restoration	180	180	01-Nov-19	28-Apr-20	0									·		-1-1	<u></u>						
Final Design - Misc Storm Repairs, Mitigation & Site Restoration	270	270	28-Apr-20	22-Jan-21	0																		
	210	210	20740120	22 0011 21	Ū																		
Bid / Construction	7	7	22-Jan-21	28-Jan-21	0													- L					
County Prepare Bid for Advertisement - Misc Storm Repairs, Mitigation & Site Restore	29	29		26-Feb-21	0																		
Bid / Advertise - Misc Storm Repairs, Mitigation & Site Restoration			29-Jan-21		0																		
Bid Opening - Misc Storm Repairs, Mitigation & Site Restoration	1	1	02-Mar-21	02-Mar-21	0																		
Award / NTP - Misc Storm Repairs, Mitigation & Site Restoration	180	180	03-Mar-21	29-Aug-21	0														<u> </u>				
Construction - Misc Storm Repairs, Mitigation & Site Restoration	731	731	29-Aug-21	29-Aug-23*	0																: :		
S3B119-06G - Bay Park STP Heating Hot Water Piping Temporary System																							
Design Process Final Design - Heating Hot Water Piping Temporary System	90	0	01-May-15 A	17-Jun-15 A	100																		
Bid / Construction			,						<del>.</del>														
County Prepare Bid for Advertisement - Heating Hot Water Piping Temporary System	7	0	12-Jun-15 A	18-Jun-15 A	100																		
Bid / Advertise - Heating Hot Water Piping Temporary System	. 8	0	19-Jun-15 A	26-Jun-15 A	100														1				
Bid Opening - Heating Hot Water Piping Temporary System	1	0	30-Jun-15 A	30-Jun-15 A	100																		
		-																					
Award / NTP - Heating Hot Water Piping Temporary System	13	0	01-Jul-15 A	13-Jul-15 A	100																		
Construction - Heating Hot Water Piping Temporary System	124	0	13-Jul-15 A	04-Aug-16 A	100				_														
S35121-06G - Aeration Blower Facility														-									
CM Contract																							
RFP / Advertise CM Services - Aeration Blower Facility	29	29	31-Dec-20	28-Jan-21	0											i.					L		
Award / NTP CMServices - Aeration Blower Facility	180	180	29-Jan-21	27-Jul-21	0	11					11								<b>-</b>				
Design Process											-					1		-7					
Preliminary Design - Aeration Blower Facility	180	0	01-Nov-16 A	15-Dec-16 A	100																		
Resolve Power Availability Issue for Aeration Blower Building	147	147	01-Jul-18 A	24-Nov-19	0									; ;	<b></b>	÷.							
RFP / Advertise - Final Design - Aeration Blower Facility	29	29	25-Nov-19	23-Dec-19	0																		
Award / NTP Final Design - Aeration Blower Facility	180	180	24-Dec-19	20-Jun-20	0																		
Pomaining Lovel of Effort				D																			
Remaining Level of Effort Actual Work				Page 6 of 11								1	Ha	7	Pn		Δ	P					
	1																			\L			

				aster Schedu				_			_	_					_			of 3		_
lame	Orig Dur	Rem Dur	Start	Finish	% Comp		2014	_	015 QQQ	2016 Q Q Q	201 Q Q Q		018 0 Q Q	20 <sup>-</sup>	_	2020	20 2 Q Q		2022 2 Q Q	_	)23 QQQ	2 Q
Final Design - Aeration Blower Facility	240	240	21-Jun-20	15-Feb-21	0											: 🖿	<b>•</b> :					H
Bid / Construction																	-					H
County Prepare Bid for Advertisement - Aeration Blower Facility	7	7	18-Feb-21	24-Feb-21	0																	
Bid / Advertise - Aeration Blower Facility	29	29	26-Feb-21	26-Mar-21	0																	
Bid Opening - Aeration Blower Facility	1	1	30-Mar-21	30-Mar-21	0											1 1						
Award / NTP - Aeration Blower Facility	180	180	31-Mar-21	26-Sep-21	0												1					
Construction - Aeration Blower Facility	1095	1095	26-Sep-21	24-Sep-24*	0													: 📥			: :	H
S3P311 - Pump Stations						-			i i				1 1	i	1	<u></u>						
S3P311-01G - Dock Place & Southland Drive						-		<b>v</b>														
Construction									11				÷-1	h		111					1-1	
Construction - Dock Place & Southland Drive Pump Stations	240	0	28-Oct-13 A	31-Oct-14 A	100																	
S3P311-02G - Cedar, Roosevelt, Whitewood, Biltmore & Alhambra						-			: :			<b></b>										
Design Process						_																
Finalize Technical Memorandum - Pump Station 2	140	0	12-Aug-13 A	22-Nov-13 A	100																	
Preliminary Design - Pump Station 2	67	0	23-Nov-13 A	28-Jan-14 A	100		<b>.</b>									+-+-+					+	
RFP / Advertise Final Design - Pump Station 2	30	0	31-Jan-14 A	28-Feb-14 A	100																	
		0																				1
Award / NTP Final Design - Pump Station 2	90		01-Mar-14 A	23-Sep-14 A	100																	1
Final Design - Pump Station 2	90	0	23-Sep-14 A	26-Mar-15 A	100																	1
Bid / Construction		0	07.14 45.4	00.4 45.4	400																	<b> </b>
County Prepare Bid for Advertisement - Pump Station 2	7	0	27-Mar-15 A	09-Apr-15 A	100																	1
Bid / Advertise - Pump Station 2	29	0	10-Apr-15 A	08-May-15 A	100																	1
Bid Opening - Pump Station 2	1	0	12-May-15 A	12-May-15 A	100																	1
Award / NTP - Pump Station 2	90	0	13-May-15 A	03-Mar-16 A	100				1 1													1
Construction - Pump Station 2	548	0	03-Mar-16 A	12-Jan-18 A	100																	1
S3P311-03G - Wantagh, Newbridge, Merrick & Ray						•																1
Design Process						V		-														1
Finalize Technical Memoran dum - Pump Station 3	140	0	12-Aug-13 A	22-Nov-13 A	100	. 📫																1
Preliminary Design - Pump Station 3	67	0	23-Nov-13 A	28-Jan-14 A	100																	1
RFP / Advertise Final Design - Pump Station 3	30	0	31-Jan-14 A	28-Feb-14 A	100																	1
Award / NTP Final Design - Pump Station 3	90	0	01-Mar-14 A	23-Sep-14 A	100															1		1
Final Design - Pump Station 3	90	0	23-Sep-14 A	13-Apr-15 A	100																	1
Bid / Construction								-														1
County Prepare Bid for Advertisement - Pump Station 3	7	0	14-Apr-15 A	30-Apr-15 A	100																	1
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								1									1
Award / NTP - Pump Station 3	90	0	03-Jun-15 A	03-Mar-16 A	100																	1
Construction - Pump Station 3	540	0	03-Mar-16 A	12-Feb-18 A	100																	1
S3P311-02M - PS2 & PS3 Construction Management							•			-												1
CM Contract										-												1
RFP / Advertise CM Services - PS2 & PS3	29	0	03-Oct-14 A	31-Oct-14 A	100				+-+				+-+	+		1-1-1	-					1
Award / NTP CMServices - PS2 & PS3	90	0	01-Nov-14 A	03-Mar-16 A	100				: :													1
S3P311-04G - Felix, Fox, Northern & Grand		-				-			: :			<b>•</b>										1
Design Process Finalize Technical Memorandum - Pump Station 4	140	0	12-Aug-13 A	22-Nov-13 A	100																	1
Preliminary Design - Pump Station 4	67	0	23-Dec-13 A	22-N0V-13 A 27-Feb-14 A	100		<u> </u>							+					+		+-+	f
		0		27-Feb-14 A 28-Mar-14 A																		1
RFP / Advertise Final Design - Pump Station 4	30	0	28-Feb-14 A 30-Mar-14 A		100																	1
Award / NTP Final Design - Pump Station 4 Final Design - Pump Station 4	90	0	30-war-14 A 17-Sep-14 A	17-Sep-14 A 13-Mar-15 A	100																	1
	90	U	17-Sep-14 A	13-IVIAI-15 A	100																	1
Bid / Construction County Prepare Bid for Advertisement - Pump Station 4		0	13-Mar-15 A	10 Mar 15 A	100							•	+	+				+			+-+	<b> </b>
	7	0		19-Mar-15 A	100																	1
Bid / Advertise - Pump Station 4	29	0	20-Mar-15 A	17-Apr-15 A	100																	1
Bid Opening - Pump Station 4	1	0	21-Apr-15 A	21-Apr-15 A	100				1													1
Award / NTP - Pump Station 4	90	0	22-Apr-15 A	15-Nov-15 A	100																	L
Remaining Level of Effort     Actual Work     Actual Level of Effort     Common Remaining W	, ,			Page 7 of 11								Ha	7	er		À	RC			5		

Bay Park Master Schedule 190630			М	aster Schedu	le			_			_						-	As	of 30-	-Jun-19
ctivity Name	Orig Dur	Rem Dur	Start	Finish	% Comp		2014	2018		2016	2017	2018		2019		2020	2021	2022 Q Q Q Q	202	
Construction - Pump Station 4	420	0	16-Nov-15 A	29-Aug-17 A	100		~~~~		1					1~1~1		~~~	~~~~	~~~~	~~~	
S3P311-05G - Millar, Mott, Long Beach, Royal & Lido						-			4				1							
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 Final Design - Pump Station 5	94	0	26-Apr-14 A	01-Dec-14 A	100		{						1	†- <b> </b>	•					
Final Design - Pump Station 5	90	0	01-Dec-14 A	01-May-15 A	100															
Bid / Construction	00		01 200 1111	or may rore	100				1											
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				<u> </u>											
Construction - Pump Station 5	540	0	16-Nov-15 A	29-Aug-17 A	100															
	540	0	10-110V-13 A	29-Aug-17 A	100															
S3P311-04M - PS4 & PS5 Construction Management																				
CM Contract									<b>.</b>											
RFP / Advertise CM Services - PS4 & PS5	29	0	07-Nov-14 A	05-Jan-15 A	100															
Award / NTP CMServices - 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	. 💼							<u>.</u>	L						
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 Final 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															
Bid / Construction												-								
County Prepare Bid for Advertisement - Pump Station 6	7	0	18-Sep-15 A	24-Sep-15 A	100				(				1							
Bid / Advertise - Pump Station 6	29	0	25-Sep-15 A	23-Oct-15 A	100															
Bid Opening - Pump Station 6	1	0	27-Oct-15 A	27-Oct-15 A	100				1											
Award / NTP - Pump Station 6	90	0	28-Oct-15 A	15-Mar-17 A	100															
Construction - Pump Station 6	550	0	15-Mar-17 A	17-Aug-18 A	100															
S3P311-07G - Inwood, Doughty, Bayview & Roslyn									4				4	₩ 1						
Design Process						-			-											
Finalize Technical Memorandum - Pump Station 7	140	0	12-Aug-13 A	22-Nov-13 A	100															
Preliminary Design - Pump Station 7	67	0	23-Mar-14 A	28-May-14 A	100	17														
RFP / Advertise Final Design - Pump Station 7	29	0	30-May-14 A	27-Jun-14 A	100															
Award / NTP Final Design - Pump Station 7	90	0	28-Jun-14 A	13-May-15 A	100								÷	++						
Final Design - Pump Station 7	90	0	13-May-15 A	16-Nov-15 A	100															
Bid / Construction	30	0	13-1May-13-A	10-140 V-13 A	100						1 1 1		:							
County Prepare Bid for Advertisement - Pump Station 7	7	0	16-Nov-15 A	19-Nov-15 A	100															
Bid / Advertise - Pump Station 7	29	0	20-Nov-15 A	18-Dec-15 A	100															
Bid Opening - Pump Station 7	1	0	22-Dec-15 A	22-Dec-15 A	100				÷-				÷	÷						
Award / NTP - Pump Station 7	90	0	22-Dec-15 A 23-Dec-15 A	15-Mar-17 A	100															
	540	0	25-Dec-15 A 15-Mar-17 A	13-May-19 A	100								;							
Construction - Pump Station 7	540	U	15-IVIAI-17 A	13-IVIAIy-19 A	100								:							
S3P311-06M - PS6 & PS7 Construction Management																				
CM Contract													<u> </u>							
RFP / Advertise CM Services - PS6, PS7 & PS8	29	0	22-May-15 A	19-Jun-15 A	100						L									
Award / NTP CM Services - PS6, PS7 & PS8	90	0	20-Jun-15 A	15-Mar-17 A	100				::											
S3P311-08G - East Avenue																				
CM Contract															-					
RFP / Advertise CM Services - East Avenue Pump Station	29	0	08-Mar-19 A	05-Apr-19 A	100	. <u> </u>														
Award / NTP CMServices - East Avenue Pump Station	180	146	06-Apr-19 A	23-Nov-19	19														1.1	
Design Process									+			-								
Prepare Flow Study & Technical Memorandum - Pump Station 8	27	0	18-Dec-15 A	14-Jul-16 A	100				i 📫											
Remaining Level of Effort Actual Work Actual Level of Effort Remaining Work				Page 8 of 11	L		<u> </u>				]	Haz	Ze					ADIS	5	

Bay Park Master Schedule 190630			М	aster Schedul		_								_									As of	30-Ju	ın-19
ctivity Name	Orig Dur	Rem Dur	Start	Finish	% Comp 2	013 2 Q Q Q	20' 000		201		2016 Q Q Q	_	2017 Q Q	_	2018 QQQ	+	)19 QQC		2020 2 2 0 0		2021 2 Q Q	202		2023 2020	2024
RFP / Advertise - Pump Station 8	29	0	15-Jul-16 A	12-Aug-16 A	100																				
Award / NTP Final Design - Pump Station 8	90	0	13-Aug-16 A	29-Mar-17 A	100																				
Final Design - East Avenue Pump Station	270	0	29-Mar-17 A	23-Dec-17 A	100						+														
Bid / Construction			-											++					-	┿	7				
County Prepare Bid for Advertisement - East Avenue Pump Station	7	0	24-Dec-17 A	07-Mar-19 A	100									:	: :										
Bid / Advertise - East Avenue Pump Station	29	0	08-Mar-19 A	05-Apr-19 A	100																				
Bid Opening - East Avenue Pump Station	1	0	09-Apr-19 A	09-Apr-19 A	100																				
Award / NTP - East Avenue Pump Station	180	146	09-Apr-19 A	23-Nov-19	19																				
Construction - East Avenue Pump Station	540	540	23-Nov-19	15-May-21*	0													1	: :	<u></u>					
S3P311-09G - Hempstead Wastewater Pumping Station				,		-			+ +	-	+ +	-				-	<b>-</b>								
Design Process							: :																		
RFP / Advertise Final Design - Hempstead Wastewater Pumping Station	29	0	22-Nov-13 A	20-Dec-13 A	100				11																
Award / NTP Final Design - Hempstead Wastewater Pumping Station	90	0	21-Dec-13 A	29-May-14 A	100	·					+	<u>+</u>			-+-+-										
Final Design - Hempstead Wastewater Pumping Station	185	0	18-Jun-14 A	23-Way-14 A 24-Jun-15 A	100																				
	105	0	10-Juli-14 A	24-Juli-13 A	100							-													
Bid / Construction County Prepare Bid for Advertisement - Hempstead Wastewater Pumping Station	7	0	25-Jun-15 A	30-Jun-15 A	100																				
	29	0			100																				
Bid / Advertise - Hempstead Wastewater Pumping Station		-	03-Jul-15 A	14-Aug-15 A								÷													
Bid Opening - Hempstead Wastewater Pumping Station	1	0	18-Aug-15 A	18-Aug-15 A	100																				
Award / NTP - Hempstead Wastewater Pumping Station	90	0	19-Aug-15 A	25-Apr-16 A	100					;															
Construction - Hempstead Wastewater Pumping Station	460	43	25-Apr-16 A	12-Aug-19*	91					1					1 1										
S3P311-09S - Hempstead Wastewater Force Main										-		-													
Design Process												¦													
RFP / Advertise Final Design - Hempstead Wastewater Force Main	29	0	22-Nov-13 A	20-Dec-13 A	100																				
Award / NTP Final Design - Hempstead Wastewater Force Main	90	0	21-Dec-13 A	29-May-14 A	100	<b>-</b>																			
Final Design - Hempstead Wastewater Force Main	185	0	18-Jun-14 A	24-Jun-15 A	100			-	<u> </u>																
Bid / Construction									•	1															
County Prepare Bid for Advertisement - Hempstead Wastewater Force Main	7	0	25-Jun-15 A	30-Jun-15 A	100				1																
Bid / Advertise - Hempstead Wastewater Force Main	29	0	03-Jul-15 A	14-Aug-15 A	100																			1	
Bid Opening - Hempstead Wastewater Force Main	1	0	18-Aug-15 A	18-Aug-15 A	100					Ľ															
Award / NTP - Hempstead Wastewater Force Main	90	0	19-Aug-15 A	25-Apr-16 A	100					<u> </u>															
Construction - Hempstead Wastewater Force Main	450	0	25-Apr-16 A	01-May-19 A	100										<u>.</u>										
S3P311-09M - Hempstead Wastewater Pumping Station & Force Main CM								- <del></del>		+															
CM Contract										· · · · ·	111	<u>+</u>													
RFP / Advertise CM Services - Hempstead Wastewater Pump Sta & FM	29	0	17-Oct-14 A	14-Nov-14 A	100																				
Award / NTP CMServices - Hempstead Wastewater Pump Sta & FM	90	0	15-Nov-14 A	01-Feb-16 A	100				1 1	:															
S3P311-10G - Lawrence PS (STP) & Sage Lake PS										1	+ +				-										
CM Contract											1 1	:													
RFP / Advertise CM Services - Lawrence STP & Sage Lake PS	28	0	25-Jan-16 A	22-Feb-16 A	100	· · · · · · · ·					÷-i			· · · · · · · ·		+									
Award / NTP CMServices - Lawrence STP & Sage Lake PS	90	0	23-Feb-16 A	22-Mar-17 A	100					1.5	; ;	;													
Design Process	50	5	20100-107		100																				
Preliminary Design - Lawrence STP & Sage Lake PS	75	0	02-Jun-14 A	12-Sep-14 A	100			Ī		1															
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	29 61	0	12-Sep-14 A 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																				
	100	0	13-3ep-13 A	00-IMai-10 A	100							1													
Bid / Construction		0	00 Apr 16 4	14 Apr 16 A	100							1													
County Prepare Bid for Advertisement - Lawrence STP & Sage Lake PS	1	0	09-Apr-16 A	14-Apr-16 A	100						1														
Bid / Advertise - Lawrence STP & Sage Lake PS	29	0	15-Apr-16 A	13-May-16 A	100	·						<u>∔</u>				·						·			
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												ļ													
RFP / Advertise CM Services - Roslyn Village, Morgan Park & Shore Rd	47	0	05-Oct-18 A	02-Nov-18 A	100			1		1					1				11						
Award / NTP CMServices - Rostyn Village, Morgan Park & Shore Rd	180	61	03-Nov-18 A	30-Aug-19	66																				
Remaining Level of Effort Actual Work				Page 9 of 11		<u> </u>							]	Ha	az	et	1	9	A	R	2	DI	S	<u> </u>	
Actual Level of Effort Remaining Work															-					TURI					

Park Master Schedule 190630	Master Schedule								As of 30-Jun-19												
ity Name		Rem Dur	Start	Finish	% Comp		2014 2014	201: 2 Q Q Q		2016 Q Q Q	2017 Q Q Q Q	2018 2 Q Q Q		2019 QQC	202 2 Q Q Q	-	2021 2020	_	)22 QQQ	2023	_
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 Rd	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															1-1-1	
Award / NTP - Roslyn Village, Morgan Park & Shore Rd	90	61	13-Dec-17 A	30-Aug-19	32																
Construction - Roslyn Village, Morgan Park & Shore Rd	365	365	31-Aug-19	29-Aug-20*	0										1 1						
	0000	000	o i / kug i o	207 kig 20	Ŭ									-							
S80019-03GR - Cedar Point Lake (Doxey Brook) Pump Station										_											
CM Contract	1			1		4						<b>.</b>									
RFP / Advertise CM Services - Cedar Point Lake PS	29	0	01-Dec-16 A	23-Dec-16 A	100																
Award / NTP CMServices - 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							4.4.4								<b>Y</b>			_	<u>i</u>		
County Prepare Bid for Advertisement - Cedar Point Lake PS	7	0	29-Oct-16 A	01-Dec-16 A	100		111										111				
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 - Ceda r Point Lake PS	90	0	11-Jan-17 A	03-Jan-18 A	100																
Construction - Cedar Point Lake PS	540	180	03-Jan-18 A	27-Dec-19*	67									-							
Nitrogen Reduction Projects							•														
S35123-L38G - Sidestream Deammonification							+		1												
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	61	26-Aug-17 A	30-Aug-19	32																
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																
NCDPW Review & Award Sidestream Centrate Treatment	120	0	01-Mar-16 A	26-Sep-16 A	100																
Design Process	120	Ű	of filler for t	20 000 1077	100	· · · · · · · · · ·	·		· · · · · · · ·						• • • • • •	· • • •	++++				
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																
Bid / Construction	2.0	Ű	21 000 1011	or our mit	100																
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		·														
	29	0	09-Jan-18 A	09-Jan-18 A	100		111					7 : : :					111				
Bid Opening - Sidestream Centrate Treatment Award / NTP - Sidestream Centrate Treatment - Canceled - Re-bid	90	0			100																
			10-Jan-18 A	23-Aug-18 A			111														
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	·	4-4-4			└- <u> </u> <del> </del>		·   -   -   -	<u></u>	<u></u>	. <b>.</b>						
Award / NTP - Sidestream Centrate Treatment	180	61	26-Sep-18 A	30-Aug-19	66																
Construction - Sidestream Centrate Treatment	730	730	30-Aug-19	28-Aug-21*	0											;					
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 CMServices - Level 1 BNR Improvements	90	0	27-Aug-16 A	05-Jul-17 A	100																1
Design Process	· · · · · · · · · · · · · · · · · · ·								-												
Design - Level 1 BNR Improvements	120	0	30-Nov-15 A	23-Sep-16 A	100				1												
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	· • • • • • • • •	++++		· • • • • • • • • • • • • • • • • • • •							+++	++++		†	++	
Remaining Level of Effort     Actual Work     Actual Level of Effort     Common Remaining Work			-	Page 10 of 11		<u> </u>	<u> i</u>	<u> </u>			I	Haz							IS	<u> </u>	<u> </u>

Bay Park Master Schedule 190630	Master Schedule									As of 30-Jun-19												
Activity Name	Orig Dur	Rem Dur	Start	Finish	% Comp		2014	2015		2016		017	2018		019	2020		2021	202		2023	2024
						QQC			Q	QQQ	QQC	QQ	QQQ	QQO	QQQ	QQC		QQC	QQQ	QQQ	QQQ	QQ(
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	913	298	05-Jul-17 A	23-Apr-20*	67									1	:							
Long Beach WPCP Diversion										·												
S35109-01G - Long Beach Pump Station																				-		
Design Process																7						
Pump Station Design - Long Beach Pump Station (PMJV)	186	184	06-May-19 A	31-Dec-19	1																	
Bid / Construction																				-		
County Prepare Bid for Advertisement - Long Beach Pump Station	7	7	03-Jan-20	09-Jan-20	0																	
Bid / Advertise - Long Beach Pump Station	29	29	10-Jan-20	07-Feb-20	0											0	T					
Bid Opening - Long Beach Pump Station	1	1	11-Feb-20	11-Feb-20	0																	
Award / NTP - Long Beach Pump Station	145	145	12-Feb-20	05-Jul-20	0				-							<u> </u>						
Construction - Long Beach Pump Station	909	909	06-Jul-20	31-Dec-22*	0												: -			-		
S35109-01S - Long Beach HDD Force Main																						
Design Process																7						
HDD Design - Long Beach HDD Force Main (PMJV)	186	234	06-May-19 A	19-Feb-20	0																	
Bid / Construction																V						
County Prepare Bid for Advertisement - Long Beach HDD Force Main	7	7	20-Feb-20	26-Feb-20	0											I,						
Bid / Advertise - Long Beach HDD Force Main	29	29	28-Feb-20	27-Mar-20	0											D,						
Bid Opening - Long Beach HDD Force Main	1	1	31-Mar-20	31-Mar-20	0																	
Award / NTP - Long Beach HDD Force Main	174	174	01-Apr-20	21-Sep-20	0																	
Construction - Long Beach HDD Force Main	831	831	22-Sep-20	31-Dec-22*	0				-								<b>—</b>		1 : :	-		
S35109-01M - Long Beach Diversion CM Contract																						
RFP / Advertise CM Services - Long Beach Diversion	29	29	13-Dec-19	10-Jan-20	0				<u>.</u>						1							
Award / NTP CM Services - Long Beach Diversion	96	96	11-Jan-20	15-Apr-20	0																	
S35109-02G - Austin Boulevard Force Main														•								
CM Contract									i.													
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				-	I												
Award / NTP Final Design - Austin Boulevard Fore Main Design	14	0	27-Feb-16 A	01-Jun-16 A	100																	
Final Design - Austin Boulevard Force Main	310	0	01-Jun-16 A	07-Sep-18 A	100					-												
Bid / Construction									í.					▼								
County Prepare Bid for Advertisement - Austin Boulevard Force Main	7	0	08-Sep-18 A	13-Sep-18 A	100												1					
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				1					1								
Milestones									-													
Program Management Award	0	0	12-Aug-13 A		100	۲																
Program Management Complete	0	0		24-Sep-24	0				÷.													

Remaining Level of Effort

Actual Work

Remaining Work



Actual Level of Effort



# Action Items from April 3, 2019 Meeting

T4		C4-4
Item	Description and Responsibility	Status
Planting Plan	Rich Arnedos will be checking with parks and County about plantings in areas the community brought up outside the plantings plan presented.	
PSEG-LI	County will have an update to share at next meeting.	
Plant Name Change	County and JV will follow up with communication channels about using the name "South Shore Water Reclamation Facility".	During a meeting, 5/7/19, Tom King from DEC stated that based on his conversations internally within DEC, changing the name of the plant can be done in the next SPDES update and submission. There is a line for requesting plant name changed.
Generator Odor Complaints	JV and Suez will address the generator odor (gasoline and smoke) complaints before the next community meeting.	
Odors	JV and Suez will coordinate on communication of odor complaints.	
<b>Diversion Plan</b>	JV informed community about separate meetings regarding the Bay Park to Cedar Creek Diversion project.	
Drainage	County will have update ready of the plans to repave the road.	