

July 22, 2022

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
2022 Q2 Quarterly Report

Dear Mr. Hampston:

We are submitting herewith our Quarterly Report for the period of April 1, 2022 through June 30, 2022.

Very truly yours,



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

c: NCDPW

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DEC Agreement Q2 2022 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 April 1, 2022 through June 30, 2022.

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

I.0

Executive Summary

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

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

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

Additional information is included to provide a comprehensive representation of the County's efforts towards achieving compliance with the Agreement. This Quarterly Report updates the status and progress of DPW's compliance with the milestones set forth in the Agreement during the period from April 1, 2022 through June 30, 2022 (“Reporting Quarter”).

II.0

Modification Request and Force Majeure Status

The following table lists modification requests made by the County and DEC responses to date. The previous outstanding milestone modification requests have all been addressed by the first Agreement Modification.

A second Agreement Modification is currently in preparation that will revise the Conveyance Project milestones noted in Table 1 as well as revise the Wet Weather/Flow Reduction milestones that were added to the Agreement via Appendix F previously.

The second Modification will also add a new project to Appendix A, the Hempstead Bay-Hassocks Restoration Project.

It is anticipated that this modification will be executed in Q3 of 2022.

Table 1 – Modification Requests and Force Majeure Notifications

Milestone	Agreement Date	Mod request letter date	Revised date requested	DEC Response Date	Modified Milestone Date¹
General Covid-19 FM	N/A	3/19/2020 ²	N/A	6/24/2021	N/A
Bay Park Microtunnel Shafts Complete	5/1/2022	4/1/2022	7/1/2022	-	-
Bay Park Microtunnel Design Complete	5/1/2022	4/1/2022	1/3/2022	-	-
Cedar Creek Microtunnel Shafts Complete	6/1/2022	4/1/2022	3/9/2022	-	-
WW/Flow Reduction	Various	N/A	Various	-	-
Hassocks Restoration	TBD	N/A	TBD	-	-

-
1. Bold denotes current date, italic superseded
 2. Force Majeure

III.0

Design Milestone Status

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

Table 2 – Design Completion Milestones

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

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

Project Notes:

All agreement design milestones have been completed and certifications accepted.

IV.0

Construction Milestone Status

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

Table 3 – Construction NTP Milestones

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

Table 4 – Construction Completion Milestones

Milestone	Agreement Date	Actual/Forecast	% Complete
1 Barnes Avenue – Baldwin	12/31/2019	10/4/2019 A	100%
2 Raw Sewage Pumping Facility	2/15/2024	5/7/2024	30%
3 Sludge Dewatering Facilities	12/15/2018	5/21/2018 A	100%
4 Effluent Screening and Disinfection	8/22/2023	2/9/2023	67%
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	5/2/2022	90%
16 Level 1 BNR	5/5/2020	4/30/2020 A	100%
17 Sidestream Deammonification	10/3/2022	9/20/2022	99%

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

Project Notes:

1. Barnes Avenue – Baldwin

This project has been completed and milestone certification accepted.

2. Raw Sewage Pumping Facility

Progress This Quarter:

- Finished Installation of interior CMU walls.
- Removed scaffolding around the perimeter of the electrical building.
- Started painting ceilings, walls, and columns inside the new MCC room.
- Installed roof equipment rails and extended equipment penetration stub-ups.
- Continued installation of electrical conduit for power feeds, controls, and lighting.
- Continued demolition of abandoned conduit in existing MCC and Pump Room.
- Continued installation of pump room lighting conduit and temporary SCADA control panel conduit.
- Installed roof flashing inside adjacent buildings demolished brick cavity and reinstalled brick.
- Moisture tested the concrete roof deck and started installation of roofing system.
- Finish installation of pump room catwalk and compressor platform.
- Excavated and installed roof drain connections into storm sewers.
- Demolished and removed existing sidewalk and breezeway wall for Northeast stair tower footings.
- Installed reinforcement bar, dowels, and concrete for Northeast stair tower footings.
- Continued submission of RFI's, submittals, and shop drawings subcontractors/vendors for approval.

Expected Progress Next Quarter:

- Finish relocation of fire standpipe in egress staircase (P-019).
- Finish relocation of fiber optic relocation (P-020).
- Continue painting and painting interior of new electrical MCC room.
- Install metal cap on roof parapet (+47.50).
- Continue installation of the roofing membrane system.
- Continue installation of pump room railings, misc. removable railings, and roof ladders.
- Start installation of Northeast Stair tower.
- Continue installation of roof drains and leaders.
- Continue electrical conduit rough-in for the new second story main power feed.
- Continue installation MCC electrical conduit for equipment power, controls, and lighting.
- Continue demolition of abandoned conduit no longer being used in MCC and Pump Room.
- Continued installation of pump room lighting conduit and temporary SCADA control panel conduit.

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

Note: Current schedule for Raw Sewage Pumps continues to slip 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.

3. Sludge Dewatering Facilities

This project has been completed and milestone certification accepted.

4. Effluent Screening and Disinfection

Progress This Quarter:

- Continue wiring the Screen Control Panels.
- Continue the installation of exhaust louver & motor actuated damper in Chemical Room.
- Receive delivery and start installation of the first Butterfly Valve.
- Receive delivery and start installation of the air handling unit.
- Grout Screening Channel Wall No. 3.
- Continue preparation and submission of administrative and technical submittals.

Expected Progress Next Quarter

- Start patching Screening Channel No. 3 in accordance with the recommendation of the PE inspection.
- Continue the installation of Effluent Screen No. 3.
- Start the installation of Spray Water Pump No. 3.
- Commence start-up & testing of Screen No. 3
- Start the installation of Effluent Screen No. 2.
- Continue the installation of effluent spray water piping in the Screening Room.
- Remove the 10-inch temporary blind flange and reconnect effluent spray water piping system.
- Continue preparation and submission of administrative and technical submittals.

Note: Project had experienced delays in the delivery of key equipment (such as the new screening equipment) related to COVID and supply chain issues. Through rephasing of the construction sequence the project schedule has been able to maintain the current Consent Agreement completion milestone date. In the event the project is further delayed due to this issue a Force Majeure notification will be presented to the DEC.

5. Effluent Tide Pumping Facilities

This project has been completed and milestone certification accepted.

6. Electrical Distribution System Phases E1-E3

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

7. Secondary Flood Protection

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

8. Stormwater Pump Stations

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

9. Upgrade to 3 Simultaneous Generator Operation

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

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

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

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

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

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

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

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

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

14. Lawrence and Sage Lake Pump Stations

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

15. East Avenue Ejector Station

Progress This Quarter:

- Performed load bank test on generator.
- Pressure tested the hydraulic lines.
- Painted domestic water, fuel lines, and floors.
- Completed grout injection repair of cracks in basement divider wall.
- Disinfected domestic water line.
- Continued installation of the fire alarm panel.
- Commenced startup of SCADA panel, floats, and ultrasonics.
- Completed startup of fans, grinder, gas detection system.
- Performed training of main sewage pumps, sump pumps, and gas detection system.

Expected Progress Next Quarter:

- Test and balance ventilation system.
- Apply brick coating.
- Complete installation of fire alarm panel.

- Install generator alarm relay in the SCADA panel.
- Complete SCADA panel startup.
- Perform 5-day test on all equipment.
- Substantial Completion.

16. Level 1 BNR

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

17. Sidestream Deammonification

Progress This Quarter:

- Substantial Completion granted on December 22, 2021.
- Continued submission of O&Ms, As-builts, Closeout submittals, and technical submittals.
- Continued FRP Cover installation and repair on the DA Tank and EQ Tanks.
- Started FRP Cover leakage testing.
- Continued I&C equipment and Control Panel operational testing.
- Continued Check-out/operation of WWW and HVAC equipment.
- Continued operation and ramp-up of the Sidestream system.

Expected Progress Next Quarter:

- Continue submission of O&Ms, As-builts, Closeout submittals, and technical submittals.
- Continue site lighting work.
- Continue HVAC punch list work.
- Continue FRP Cover installation/repairs on the DA Tank and EQ Tanks. Continue cover system testing.
- Continue I&C equipment and Control Panel operational testing/OAD Testing.
- Continue Check-out/troubleshooting of WWW and HVAC equipment.
- Start 10-day operational test of the North Tanks Sidestream System.
- Continue monitoring, ramp-up, and maintaining operation of the Sidestream Centrate treatment process.
- Continue general punch list and work-to-complete items.

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 Bay Park WWTP.

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 is currently being written that will detail the transactional details of payments.

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

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

The milestones in Table 5 were revised in this reporting quarter according to the modified Agreement.

The revised BNR O&M Plan was submitted to DEC on the June 1, 2022 milestone. Comments were received from DEC and upon resolution the plan was accepted June 29, 2022. Testing is ongoing and the 6-month startup and optimization period is to be initiated near the end of Q3 2022 in advance of the November 1, 2022 milestone date.

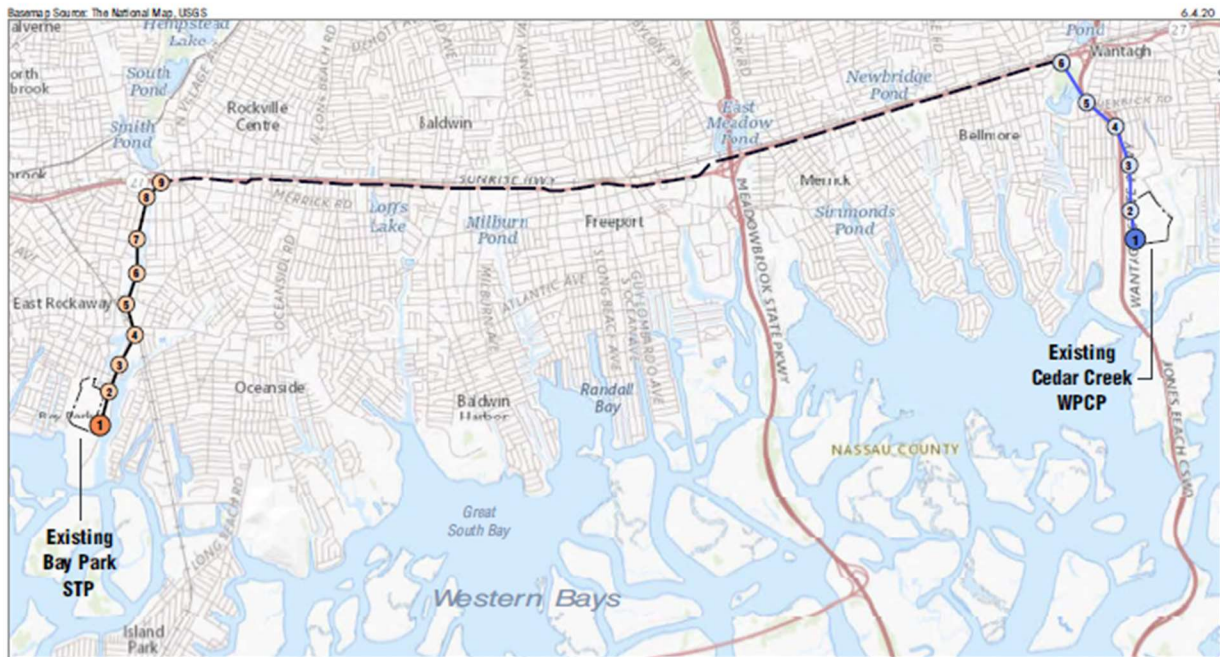
Performance data demonstrates compliance with the revised nitrogen limit that went into effect July 1, 2022.

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 to Cedar Creek WPCP would remove between 75 to 90 percent of the nitrogen currently discharged into the Western Bays.



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

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

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

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

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

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

Table 6 – Initial Conveyance Project Milestones

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

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

Table 7 – Conveyance Project Milestones

Description of Work	No.	Agreement Date	Projected / Actual	Milestone Submitted	Milestone Accepted
Notice to Proceed	1	3/4/2021	3/4/2021	3/9/2021	3/9/2021
BPM Construction Start	2.1	10/1/2021	5/1/2021	5/12/2021	5/12/2021
BPM Design Start	2.2	4/1/2021	4/15/2021	4/16/2021	4/19/2021
BPM Shafts Complete	2.3	5/1/2022	1/3/2023		
BPM Design Complete	2.4	5/1/2022	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		
CCM Design Start	3.2	7/1/2021	6/29/2021	6/29/2021	7/2/2021
CCM Shafts Complete	3.3	6/1/2022	3/9/2023		
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		
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		
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		
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

Three design completion milestones and one construction start milestone were met in this reporting quarter as noted in the preceding table.

As noted in Section II of this report, three milestones dates are to be revised as a part of the upcoming Agreement Modification.

Progress This Quarter:

During 2022 Quarter No. 2, there was continued progress to advance the overall project objectives, which included the finalization of Work Plans, engineering planning, and data collection/investigation (geotechnical and topographic surveys) in an effort to advance the design development and permitting of design packages. A total of twenty-two (22) design packages at various levels of design for Bay Park Pump Station, Bay Park Microtunnel, Sunrise Highway Sliplining, Cedar Creek Microtunnel, and Cedar Creek Outfall infrastructure/facilities were received. Three (3) design packages were formally approved as RFCD documents: DP-08A - Pump Early Works Design Narrative, DP-17A – Specification 01641 and DP-18B Pit W left Turn Lane Closure MPT Plans. Construction activities are listed by location below.

The Project's administrative goals in the form of reporting, meetings, document control, schedule management, quality assurance, and oversight activities continued. Construction activities such as shaft excavation and build-out, secant pile and CSM panel installation, jet grouting operations, utility relocations, SWPPP implementation, and other civil preparatory work were recorded relevant to RFCDs. Summarized below are particulars on design, submittals, and construction progress by reach/location over the period.

Bay Park Effluent Diversion Pump Station:

- Received and performed detailed quality and compliance reviews for numerous packages at varying levels of design, including: Resubmission of DP-07 - Bay Park Near Surface Structures; Final BPEDPS Seismic Site Class Memo submittal and Final RFCD DP-08A – Pump Early Works Design Narrative. RFCD documents received and reviewed this quarter were DP-07 and DP-08A.
- Reviewed and processed numerous construction submittals/work plans for various aspects of the Bay Park Pump Station relative to pumps, conduit permanent repair plan, pump test procedures and FEA analysis, and flowtite laminate repair procedure.
- Wet Well Shaft (BP-1) – completed waterproofing smoothing layer and lining wall, continued excavating and loading out infiltrated material from micro tunneling break in and previous sink hole, Cap Beam ongoing. BPEDPS Diversion Structure – completed excavation, continued installing formwork and waterstops for diversion structure and overflow chamber base slab, bracing ongoing.

Bay Park Microtunnel:

- Received and performed detailed quality and compliance reviews for numerous packages at varying levels of design including: DP-16 - Bay Park Microtunnel Drives 3-9 & Shafts 2-9 Permanent Works; MT Drives 3-9 Seismic Site Class Memo. The one (1) RFCD document received and review this quarter was DP-16.

- Reviewed and processed numerous work plans and construction submittals, including but not limited to, SWPPPs and Disposal Facility Applications.
- Shaft BP-2 – completed tunnel run from BP-2 to BP-1, stripped/grouted tunnel lines from BP-2 to BP-1. Shaft BP-2 – replaced MTBM seal, chem grout to stop inflow of material and set up microtunneling equipment for run from BP-2 to BP-3, dewatering and cleaning of bottom of shaft BP-2. Shaft BP-4 – completed post grout verification and initiated excavation, developed inflow problems on jet grouted columns around shaft perimeter. Shaft BP-5 – completed post grout verification, continue shaft excavation. Shaft BP-7 – Installed CSM piles, mobilized Jet Grout test columns, performed post grout verification. Shaft BP-8 – no major activities, continue to backfill and compact spoils pit. Shaft BP-9 – Installed Vibration and Geotechnical Instrumentation, installed CSM piles, mobilized Jet Grout test columns, performed post grout verification and install steel sheeting.

Sunrise Highway Sliplining:

- Received and performed detailed quality and compliance reviews for numerous packages at varying levels of design, including: DP-19A: Pits UV MPT Plans; DP-19: Slipline and Pits A, N, U, and V; DP-17A: Specification Section 01641; DP-18B - Work Pit W Left Lane and Left Turn Lane Closure MP; DP-22: Slipline and Work Pits B, C, D, E, and F; DP-20 – Sunrise Highway Slipline and Work Pits I, K, L, M; DP-21 – Sunrise Highway Slipline and Work Pits FF, G, GG and H; and DP-18: Slipline R, S, T, and W and Work Pit W. Received and reviewed four (4) RFCD documents including DP-17A, DP-18B, DP-19A and DP-18.
- Reviewed and processed numerous work plans and construction submittals, including but not limited to, SWPPPs and Disposal Facility Applications.
- Finalized Sliplining from Work Pit S to Work Pit O. Completed joint tests from Work Pit P to Work Pit O. Completed excavation of Work Pit T, U, and V. Installed jacking equipment, jack pipe and joint tests from Work Pit P through Work Pit Q towards Work Pit R. Build bulkhead at East side of Work Pit O and East and West side of Work Pit Q, and temporary bulkhead at East and West side of Work Pit P. Utility relocation, test pit at Work Pit L, M, and N. Set up MPT at Work Pit T. Installed SOE at Work Pit T. WBC continue to drive sheets for Pit D SOE.

Cedar Creek Microtunnel:

- Received and performed detailed quality and compliance reviews for numerous packages at varying levels of design, including: DP-14 - Cedar Creek Microtunnel Drives 2-1, 2-3, 4-3, 4-5, and 5-6; and MT Seismic Site Class Memo. The one (1) RFCD document received and reviewed was DP-14.
- Reviewed and processed numerous work plans and construction submittals, including but not limited to, SWPPPs and Disposal Facility Applications, pumps, pump test procedures and FEA analysis, Asbestos Abatement Plan (AAP) and Lead Abatement Plan (LAP) for Cedar Creek Pump Station, electrical submittals.
- CC-1 - Completed shaft excavation. CC-2 – Completed excavation and poured lining wall. CC-3 - Completed excavation. CC-4 - Finalized installation of CSM panels, finalized Jet Grouting, performed post grout verification. CC-5 – completed jet grout-

ing and post grout verification. CC-6 - completed jet grouting and post grout verification. Completed installation of Vibration and Geotechnical Instrumentation at CC-4 and CC-5. Initiated instrument installation at CC-6.

Cedar Creek Effluent Pump Station/Receiving Station:

- Received and performed detailed quality and compliance reviews for numerous packages at varying levels of design, including: DP-08B – CCRS Minipile Foundations; DP-9B: Cedar Creek PS 1 – SG-7 Modifications; DP-09: Cedar Creek PS 1 – Pump Station Upgrades; DP-09A - CCPS HVAC Modifications and DP-10 - Cedar Creek Receiving Station and Wet Tap. Received and reviewed four (4) RFCD documents including DP-09, DP-08B, DP-09A and DP-10.
- Completed minipiles for standpipe and open cut trench, poured concrete deadman slab for pipe towards MH-1.

Expected Progress Next Quarter:

Bay Park Effluent Diversion Pump Station:

- Anticipate receipt of packages at varying levels of design, including: DP-07 - Bay Park Near Surface Structures (final resubmission); RFCD for DP-08 - Bay Park Pump Station Building; and DP-08B - Bay Park Minipile Foundations. Anticipate receipt of two (2) RFCD documents including DP-07 and Final RFCD for DP-08B.
- Wet Well Shaft (BP-1) - continue internal wall work. BPEDPS Diversion Structure – work on base slab and pour walls. Build out piping and base slab in Shaft BP-1.

Bay Park Microtunnel:

- Anticipate formal approval on (1) RFCD: DP-16. No more RFCD packages anticipated for this Bay Park Microtunnel.
- Anticipate MTBM runs Shaft BP-2 to Shaft BP-3 and Shaft BP-3 to Shaft BP-4. Shaft BP-3 – prepare for MTBM arrival. Shaft BP-4 – complete excavation and prepare for MTBM arrival. Shaft BP-5 – Excavate shaft. Shaft BP-7 – post grout verification and shaft excavation. Shaft BP-8 – Excavate shaft. BP-9 – post grout verification and shaft excavation/Pit A SOE.

Sunrise Highway Sliplining:

- Anticipate receipt of packages at varying levels of design, including: DP-19 RFCD, DP-22 90%, DP-20 RFCD, DP-21 RFCD and DP-26 Pits B to N Utility Protection and Relocation RFCD resubmission. Total of four (4) RFCD documents expected to receive next period.
- Complete Sliplining from Work Pit S to Work Pit V, and from Work Pit P to Work Pit R; initiate excavation at Work Pit W and prepare for Sliplining.

Cedar Creek Microtunnel:

- No more design submissions for Cedar Creek Microtunnel. Anticipate formal approval on (1) RFCD: DP-14.
- Prepare for MTBM launch and begin MTBM drives at CC-1, CC-2, and CC-3, followed by CC-4, CC-5 and CC-6

Cedar Creek Effluent Pump Station/Receiving Station:

- Anticipate receipt of three (3) revised RFCD packages, including: DP-09, DP-09A, DP-10. Other submittals include DP-09B - Slide Gate & Tide Gate Modifications, DP-11A – CC Outfall Cleanout Chamber Preliminary Study, and Discharge Header Report.
- CC Receiving Station – begin HVAC Modification and Hazardous Materials Mitigation efforts, begin modifications to existing pump stations.

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	6/01/2022 Upon DEC Approval
2. CMOM Program – Submit Operating Plan for Bay Park Conveyance System	60% Design + 6 Months
3. Preliminary Engineering Report To be included in the 60% Design Report	
4. Modified SPDES Application Request	10/1/2024
5. Inflow and Infiltration (I/I) Study Work Plan a. If required after item 2 obligations are complete, submit I/I study work plans for Bay Park STP and Cedar Creek WPCP b. Submit Report of I/I study findings	60% Design + 6 Months Within 9 months of work plan approval or per approved schedule

The County's consultant has submitted the draft CMOM plans for review in this reporting quarter and comments returned. The milestones for this section are part of the Agreement Modification in process and the revised milestone dates proposed by the County have been accepted by DEC for incorporation into the Modification. The final CMOM and I&I plans are to be submitted in September of this year.

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.

X.0

Certification of Completed Activities

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

Table 9 – Completed Activities

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

XI.0

Community Relations

From April through June 2022, the State, County, and Design Builder continued in their efforts to disseminate and field community concerns via various community engagement initiatives.

On May 17 and May 24, the Project hosted MWDBE-SDVOB opportunity sessions via Microsoft Teams to share information regarding potential opportunities for certified businesses to partake in relevant contracts.

On May 19 from 6 – 7:30pm, the State, County, and Design-Builder held a fifth general public information session (since the Project's Notice-to-Proceed) over Zoom to update communities on the Project's construction progress, reinforce its mission, and to answer any questions from participants. Discussion topics that affect the public included tree removal, as well as noise and vibration monitoring.

On May 27, the Project owners published a press release to announce successful completion of the Project's first microtunneling operation and to report on sliplining progress to-date. The press release can be found at this link: <https://www.dec.ny.gov/press/125464.html>

On June 7 at 7:30pm, the State, County, and Design-Builder attended Operation SPLASH's monthly meeting to provide construction updates and answer any questions from the group. The presentation was an opportunity for the Project Team to engage with one of the Project's biggest supporters, following a successful presentation to the same group last year.

Meetings with local elected officials and first responders took place on April 26, May 31, and June 28, where government officials and fire marshals were debriefed 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. WBC answered questions regarding noise and vibration monitoring at Sunrise Highway Pits.

Stakeholder meetings which included chambers of commerce, local civic associations, and homeowners' associations also took place during Q2: on April 27 and June 29. During these meetings, local stakeholders were invited to listen in on the Project's updates and raise any concerns directly to the Project team.

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. A summary of the outreach activities is given in the table below.

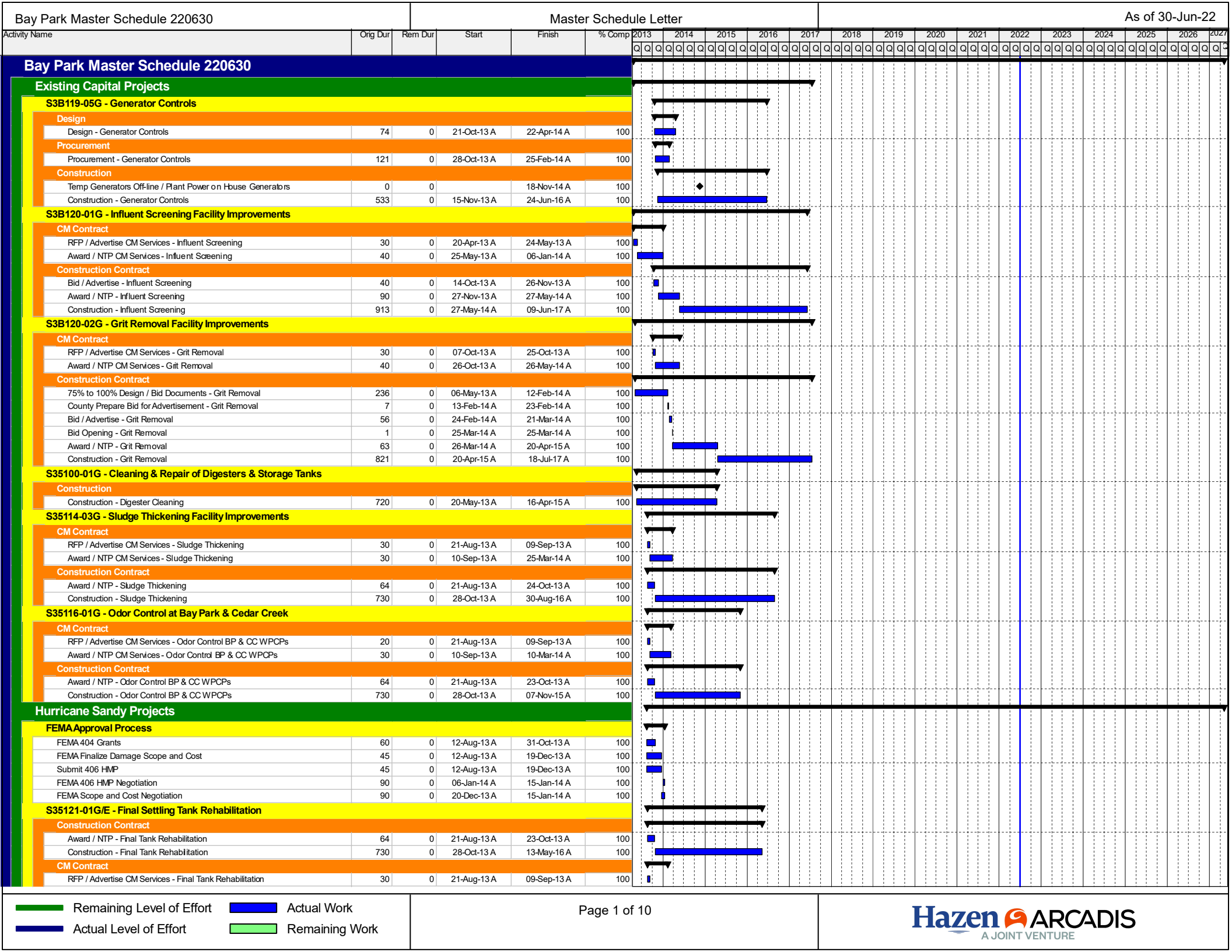
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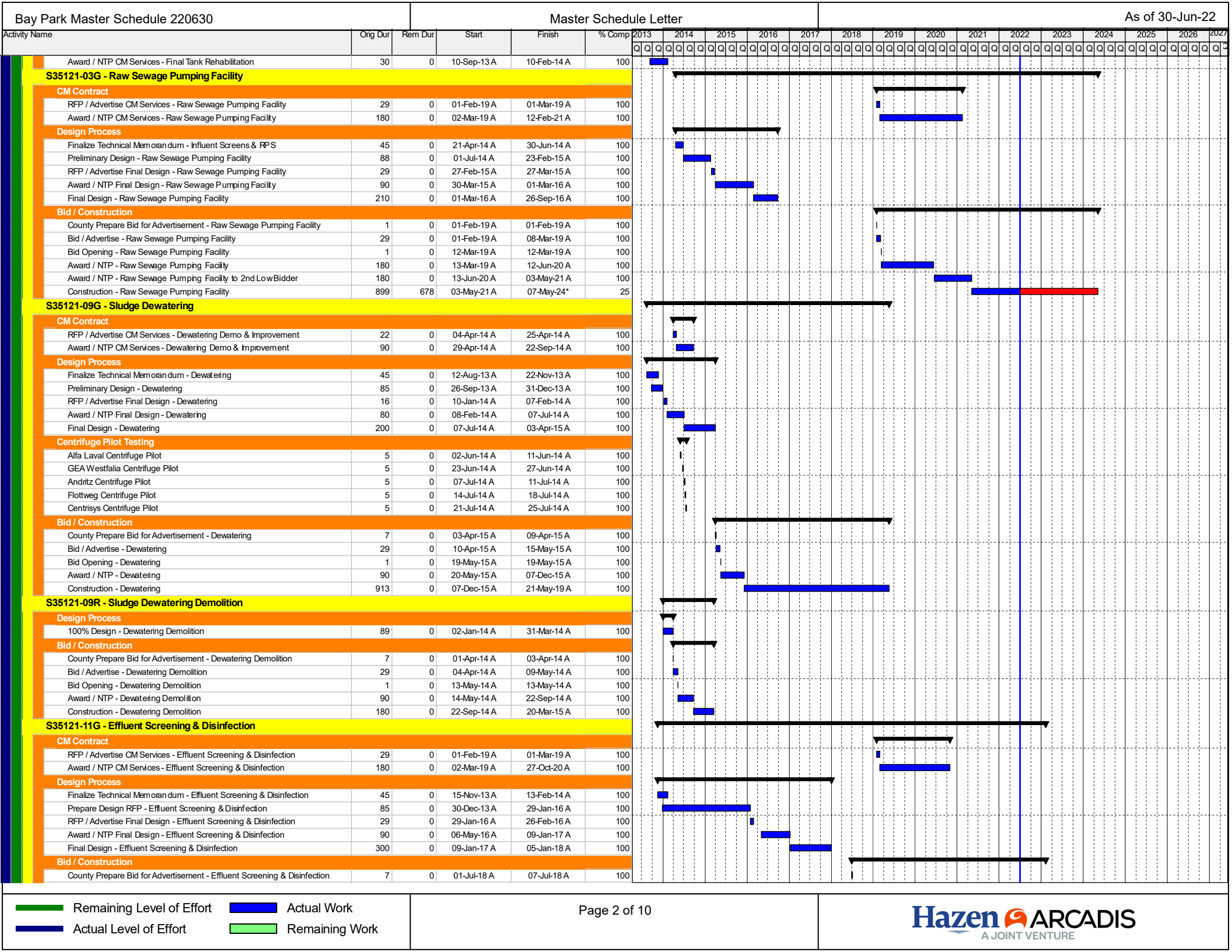
Item/ Description	Dates
Quarterly Public Information Session	May 19
Operation SPLASH Presentation	June 7
First Microtunneling Drive Complete and Sliplining Progress Press Release	May 27
Project MWDBE-SDVOB opportunity sessions	May 17 May 24
Monthly Meeting with First Responders and Elected Officials	April 26 May 31 June 28
Monthly Meeting with Stakeholders, i.e. Chambers of Commerce, Civics, and Homeowners' Associations	April 27 June 29

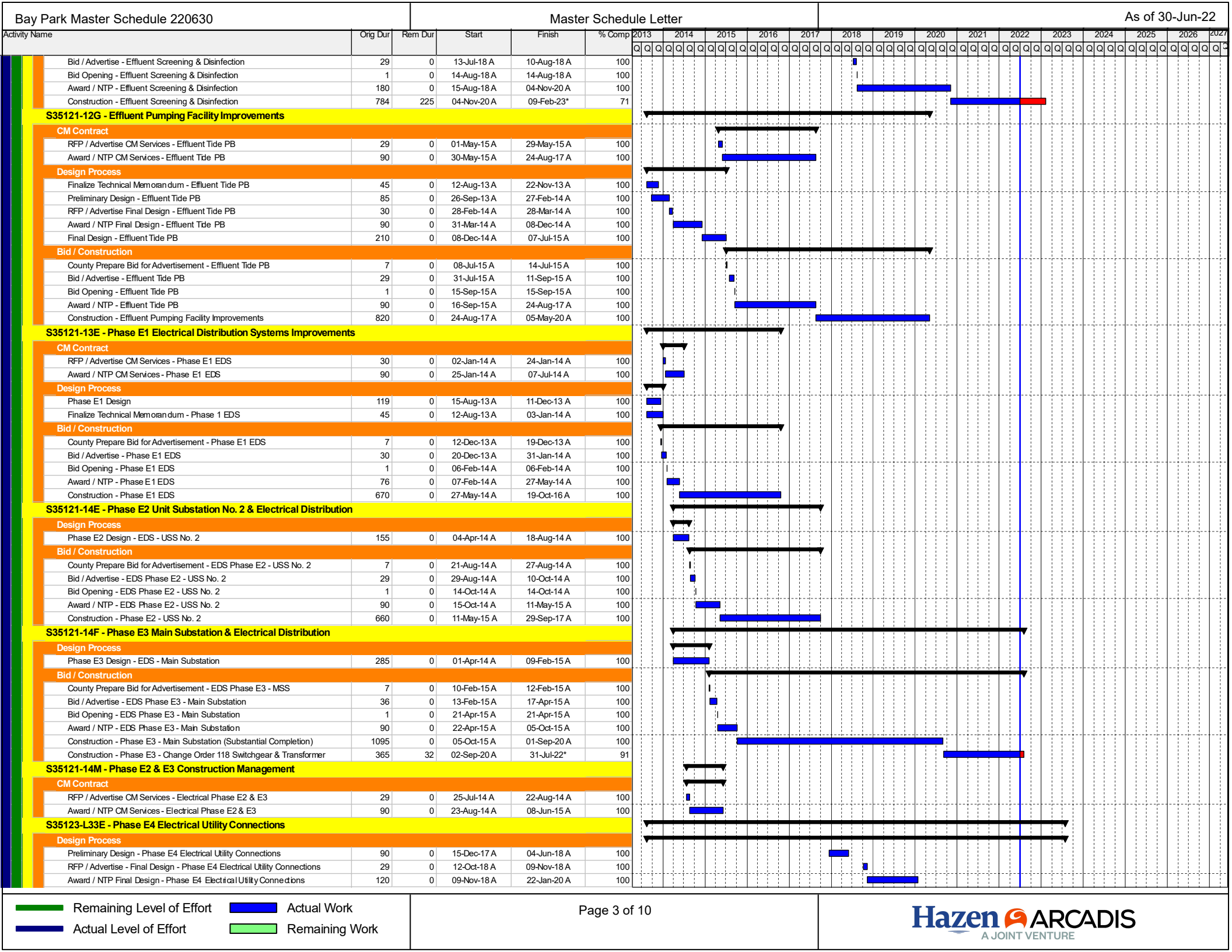
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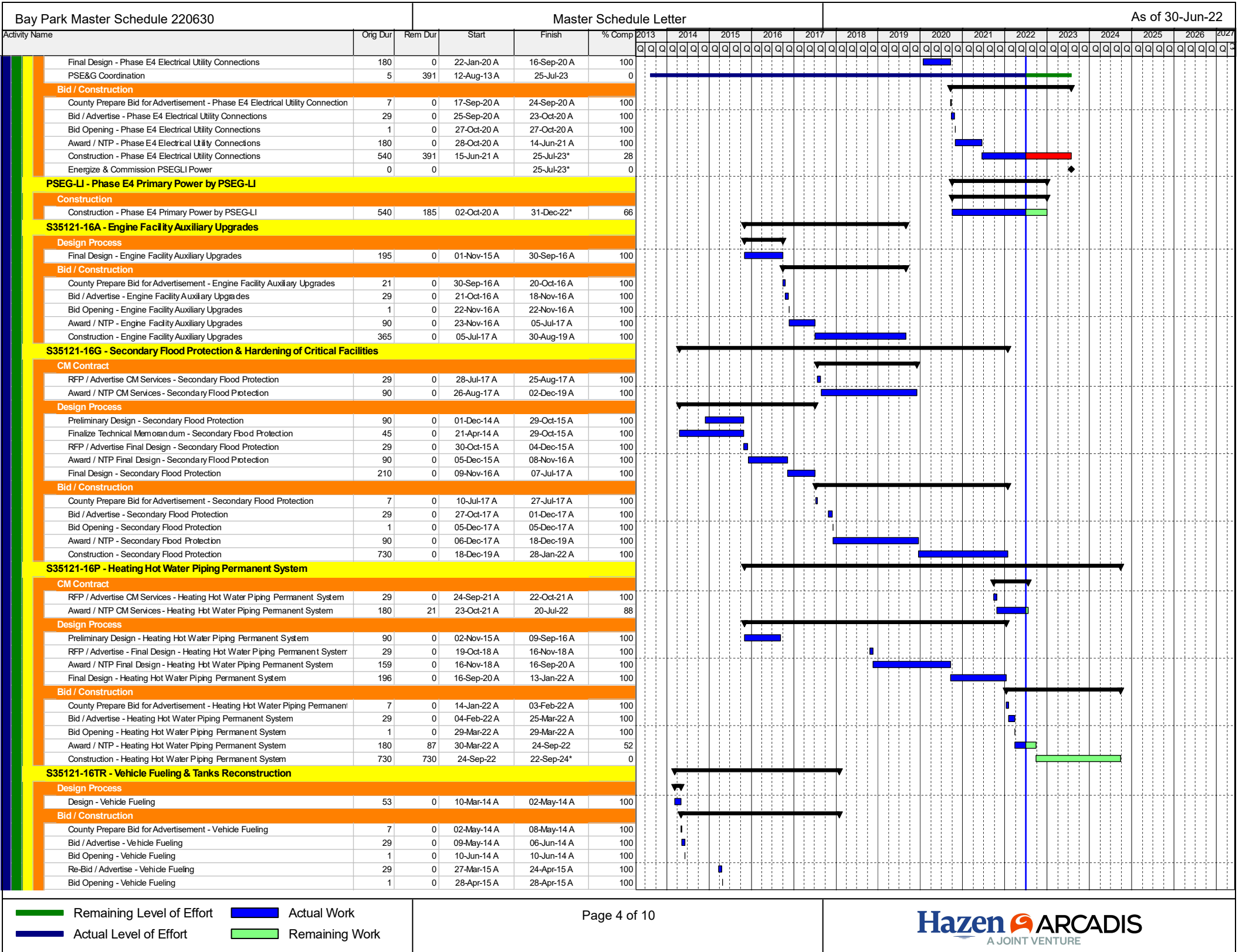
Attachments

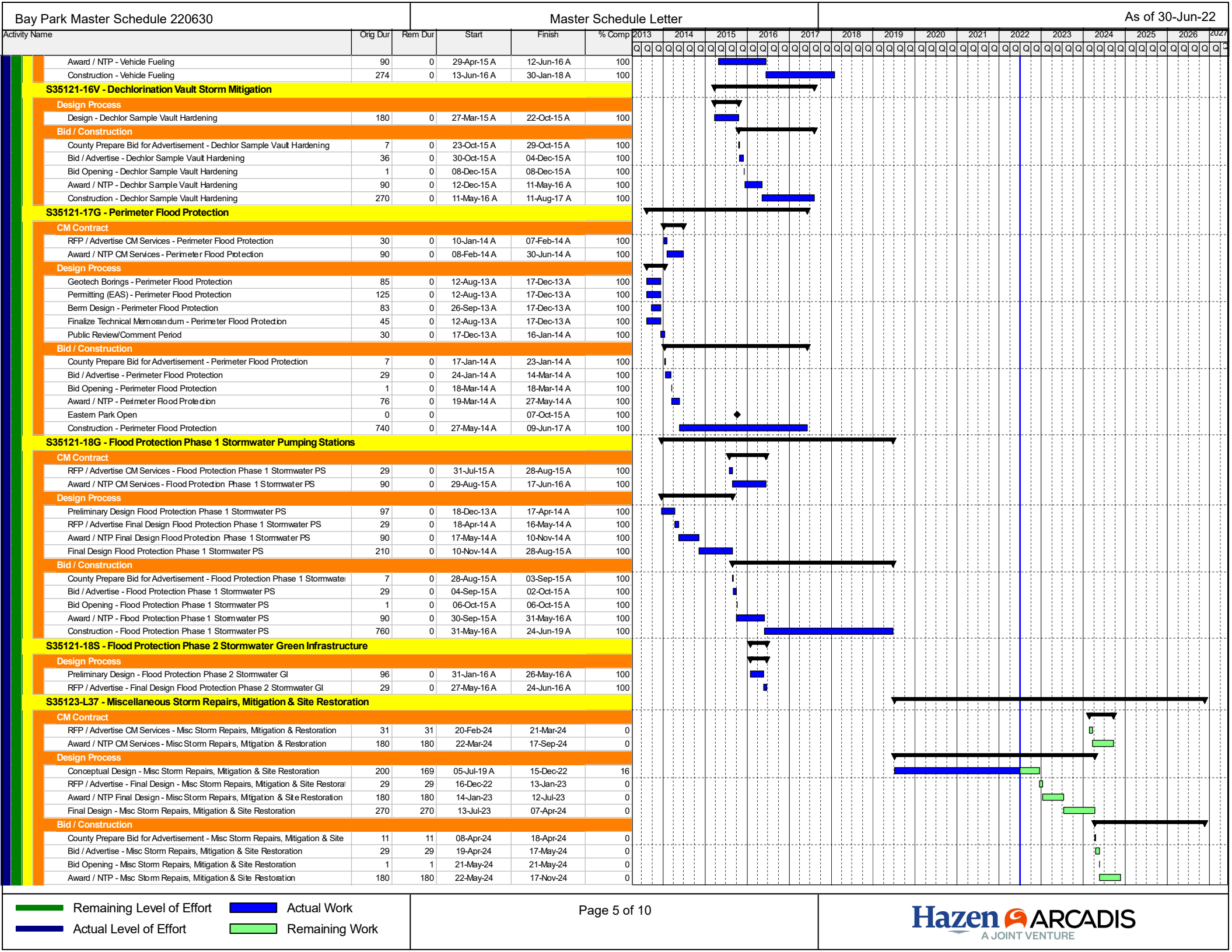
1. Program Master Schedule

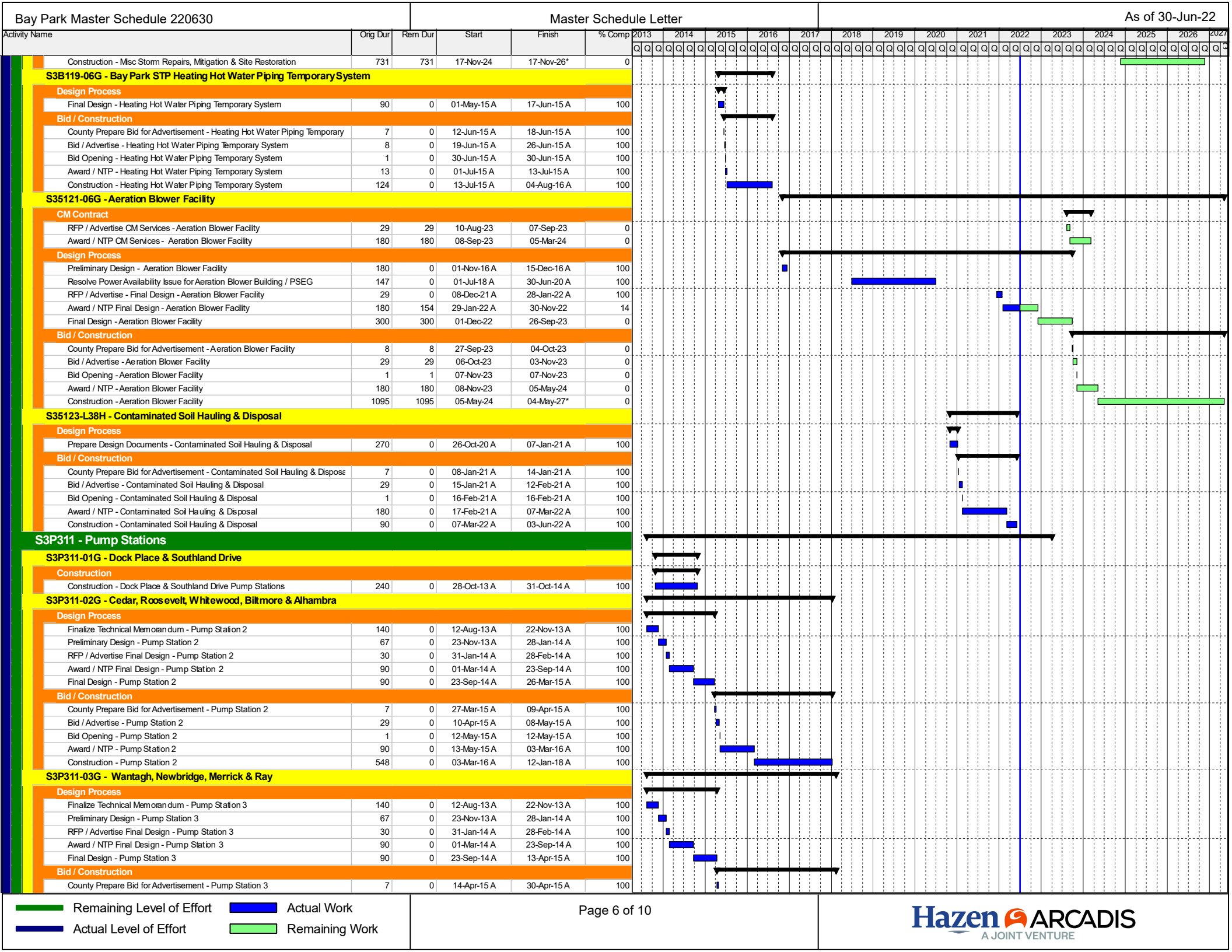


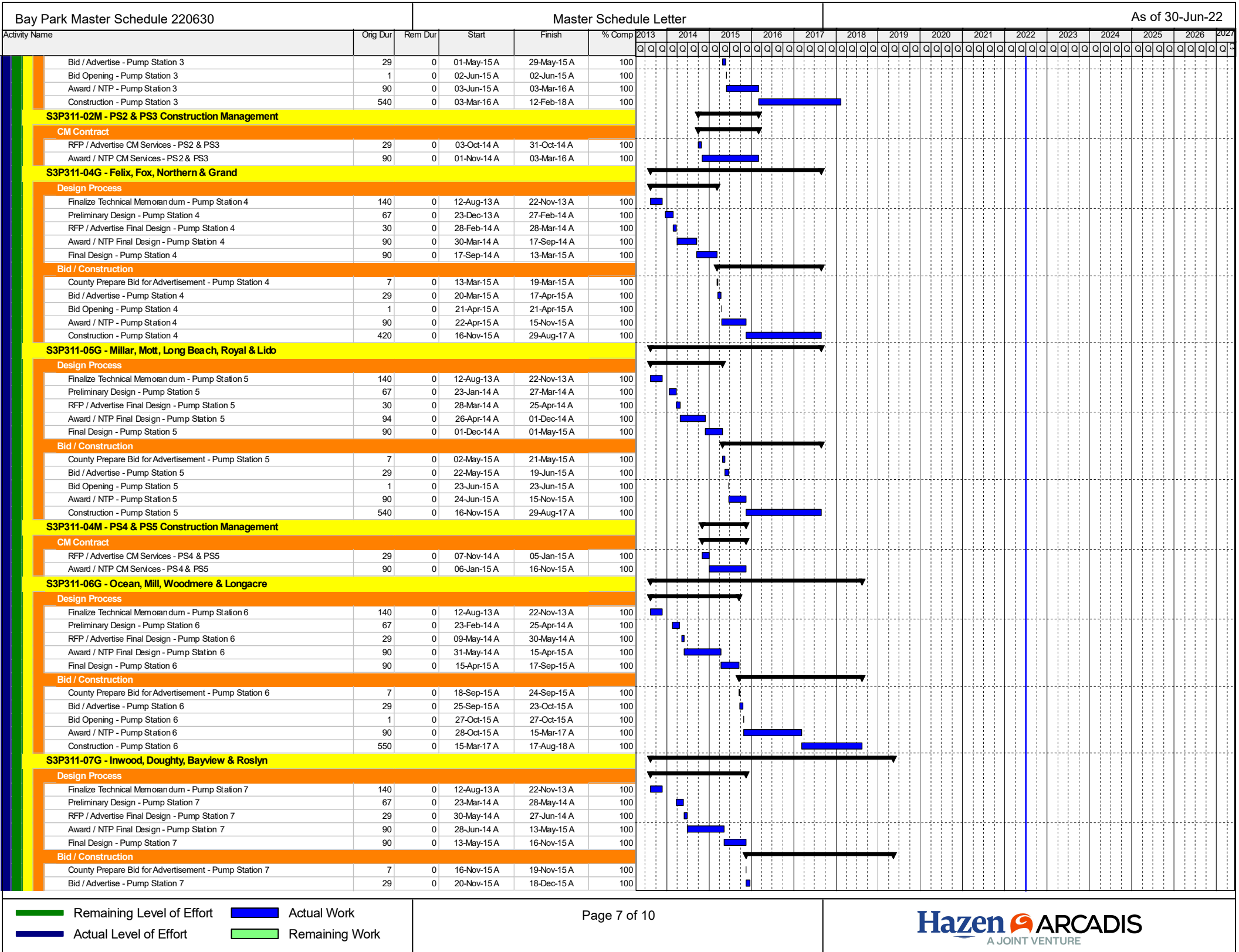


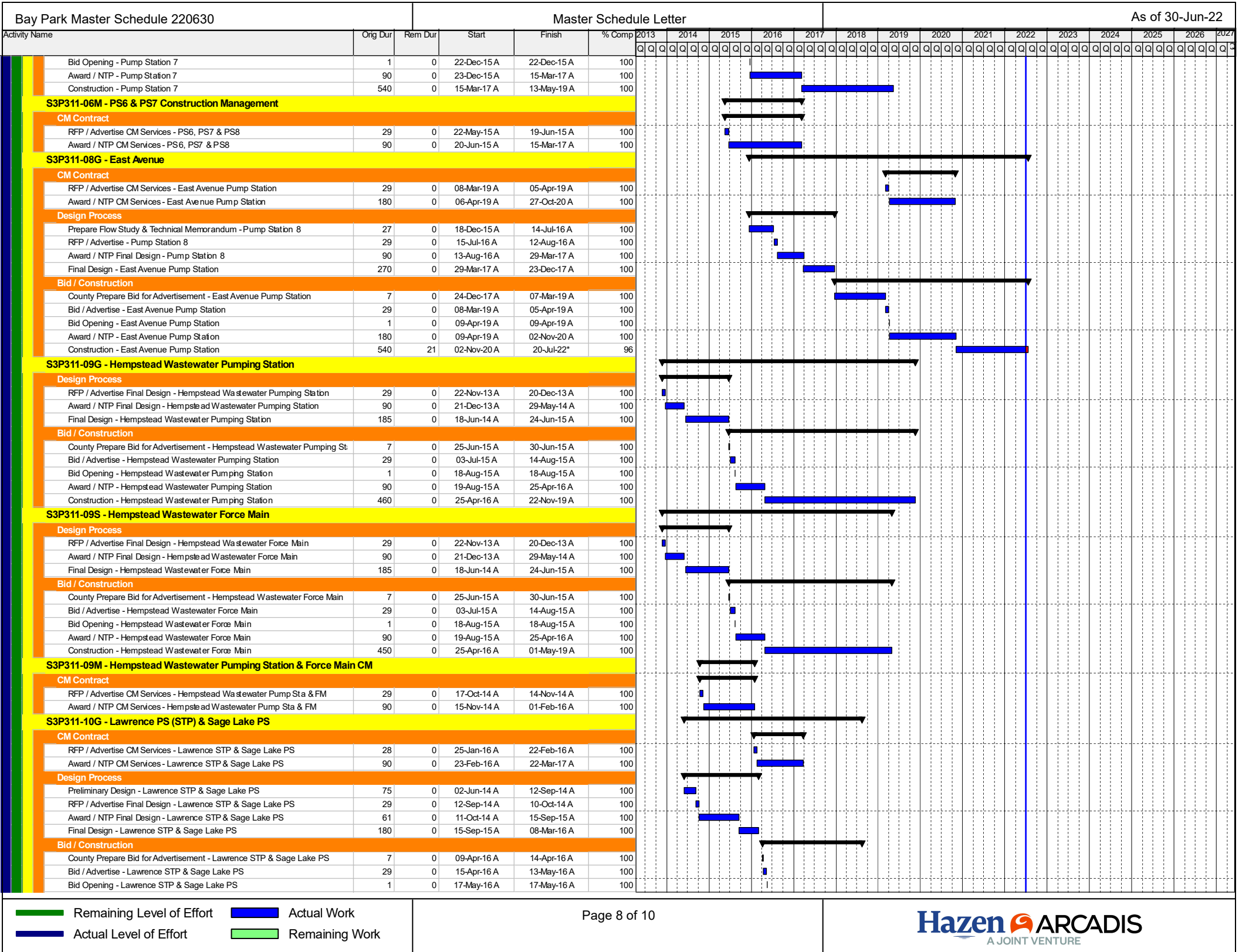










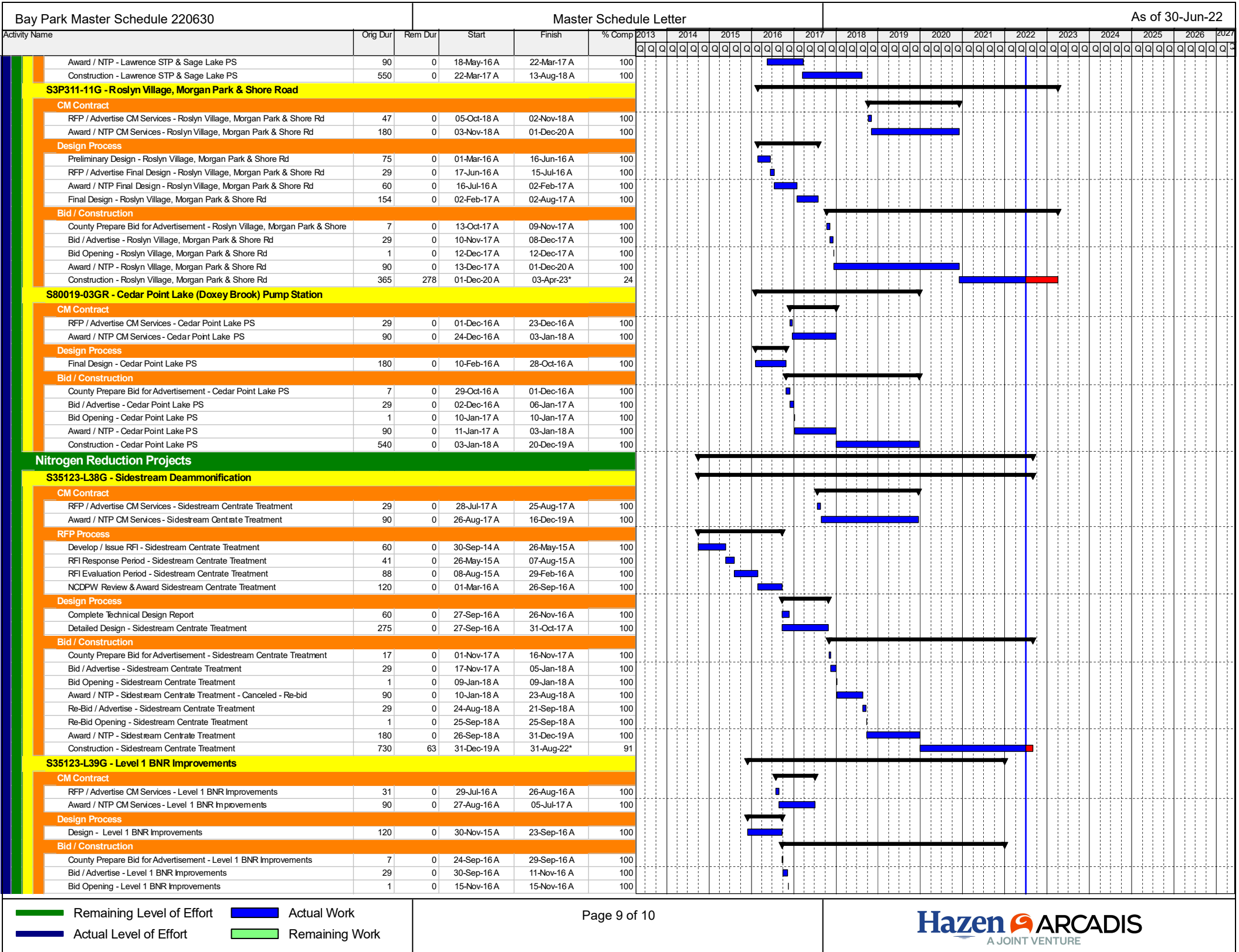


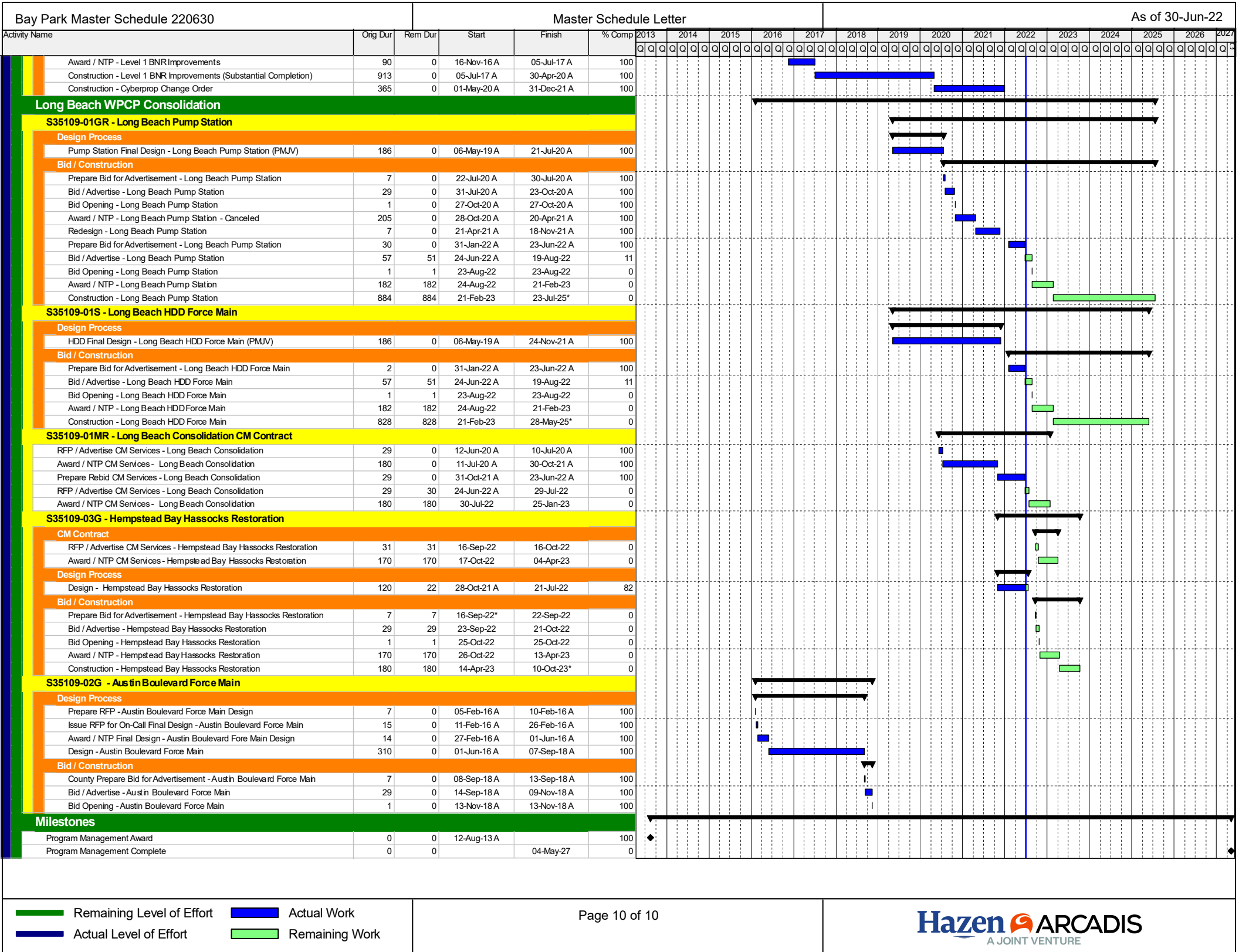
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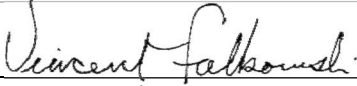


XIII.0

Project Glossary

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

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

Vincent Falkowski, PE, PMP, CCM		Deputy Commissioner
Permittee (Per CRF 122.22)		Title
		7/22/2022
Signature		Date Signed