



Semiannual CIP Status Report January 2020 – June 2020

Transportation & Environment Committee

October 5, 2020



San José-
Santa Clara
Regional
Wastewater
Facility

Program Overview: January – June 2020

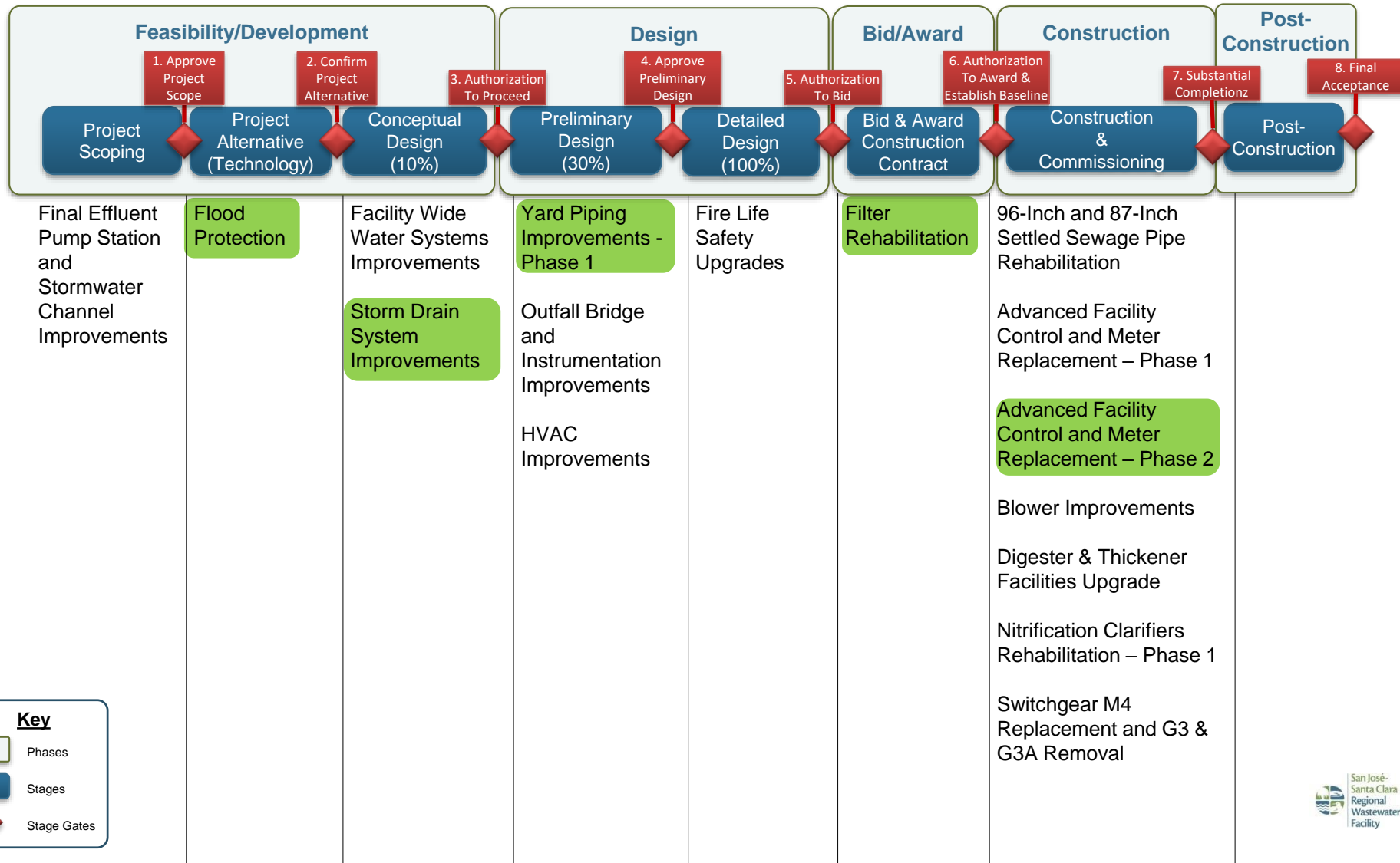
- \$1.4 billion, 10-year CIP (2014-2024)
- 2019-2020 Budget: \$528 million
- 19 active projects totaling ~\$930 million



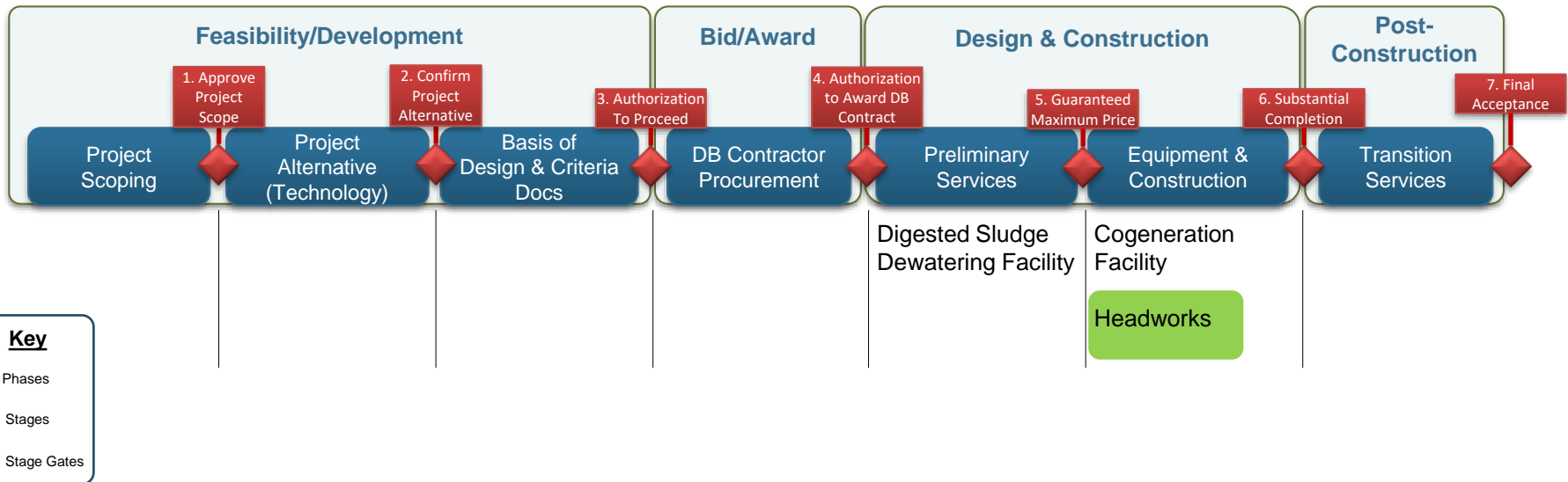
Significant Program Activities

- **Biosolids Disposition Market Assessment**
 - Finalized the biosolids procurement strategy and implementation plan in February 2020.
- **Construction Management Strategy**
 - Readiness assessment completed in fall 2019
 - Several recommendations implemented, including:
 - » *Updating processes and procedures*
 - » *Hiring consultant deputy principal construction manager*
 - » *Procuring third-party construction management and controls resources*
- **Recruitments**
 - 7 positions filled during this reporting period
 - 13 RWF CIP vacancies as of July 2020

Program Snapshot: Design-Bid-Build Projects



Program Snapshot: Progressive Design-Build



Four Projects in Feasibility/Development



Scoping

- Final Effluent Pump Station and Stormwater Channel Improvements

Project Alternatives

- Flood Protection

Conceptual Design

- Facility-Wide Water System Improvements
- Storm Drain System Improvements

Facility-Wide Water Systems Improvements: 3D Scanning of the Pipe Gallery at BNR2

Six Projects in Design



Preliminary Design

- Digested Sludge Dewatering Facility
- HVAC Improvements
- Outfall Bridge and Instrumentation Improvements
- Yard Piping Imp - Phase 1

Detailed Design

- Fire Life Safety Upgrades

Bid & Award

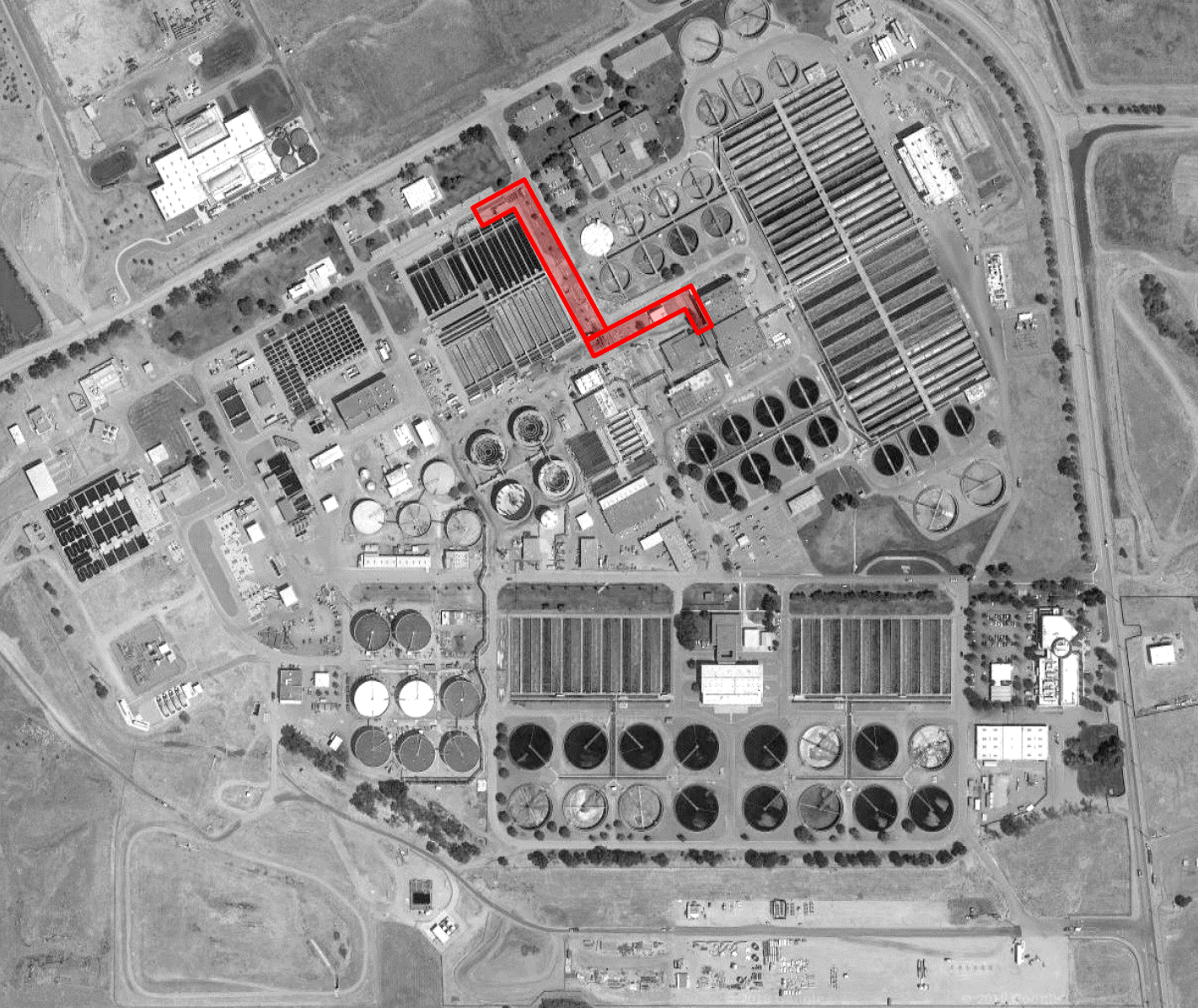
- Filter Rehabilitation

Yard Piping Improvements - Phase 1: Condition Assessment Using a Remotely Operated Vehicle (ROV) configured with Camera, Sonar, and Profiler



Nine (9) Projects In Construction

Total Construction Value: \$485M



96-inch and 87-inch Settled Sewage Pipes Rehabilitation Project

Construction Value: \$5.5M | Estimated Beneficial Use: Winter 2020

Construction Highlights – 96-inch and 87-inch Pipes Replacement



Contractor Clearing Sludge from the 87-inch X 136-inch Pipe, and Conducting Pipe Inspection Using a Remotely Operated Vehicle (ROV)

An aerial photograph of a wastewater treatment plant. The facility includes numerous circular clarifiers, rectangular aeration tanks, and various support buildings. Two specific areas are highlighted with red outlines: a large rectangular area in the upper right containing several circular tanks and a rectangular aeration tank, and a rectangular area in the lower left containing a row of circular tanks and a rectangular aeration tank. The surrounding landscape is flat with some roads and parking areas.

Advanced Facility Control & Meter Replacement Phase 1 Project

Construction Value: \$6.9M | Estimated Beneficial Use: Summer 2021

Construction Highlights – Advanced Facility Control & Meter Replacement - Phase 1



Contractor Conducting Functional Testing on Various Instruments



Blower Improvements Project

Construction Value: \$33.9M | Estimated Beneficial Use: Fall 2022

Construction Highlights – Blower Improvements



Blower (PAB 2) Sandblasted and Painted

Construction Highlights – Blower Improvements



New Electric Motor Installed for Blower (PAB 2)



Cogeneration Facility Project

Construction Value: \$91.2M | Estimated Beneficial Use: Fall 2020

Construction Highlights – Cogeneration Facility



Power and Air Operations Center, Main Generator Building, Electrical Building, and Gas Treatment System

Construction Highlights: Cogeneration Facility



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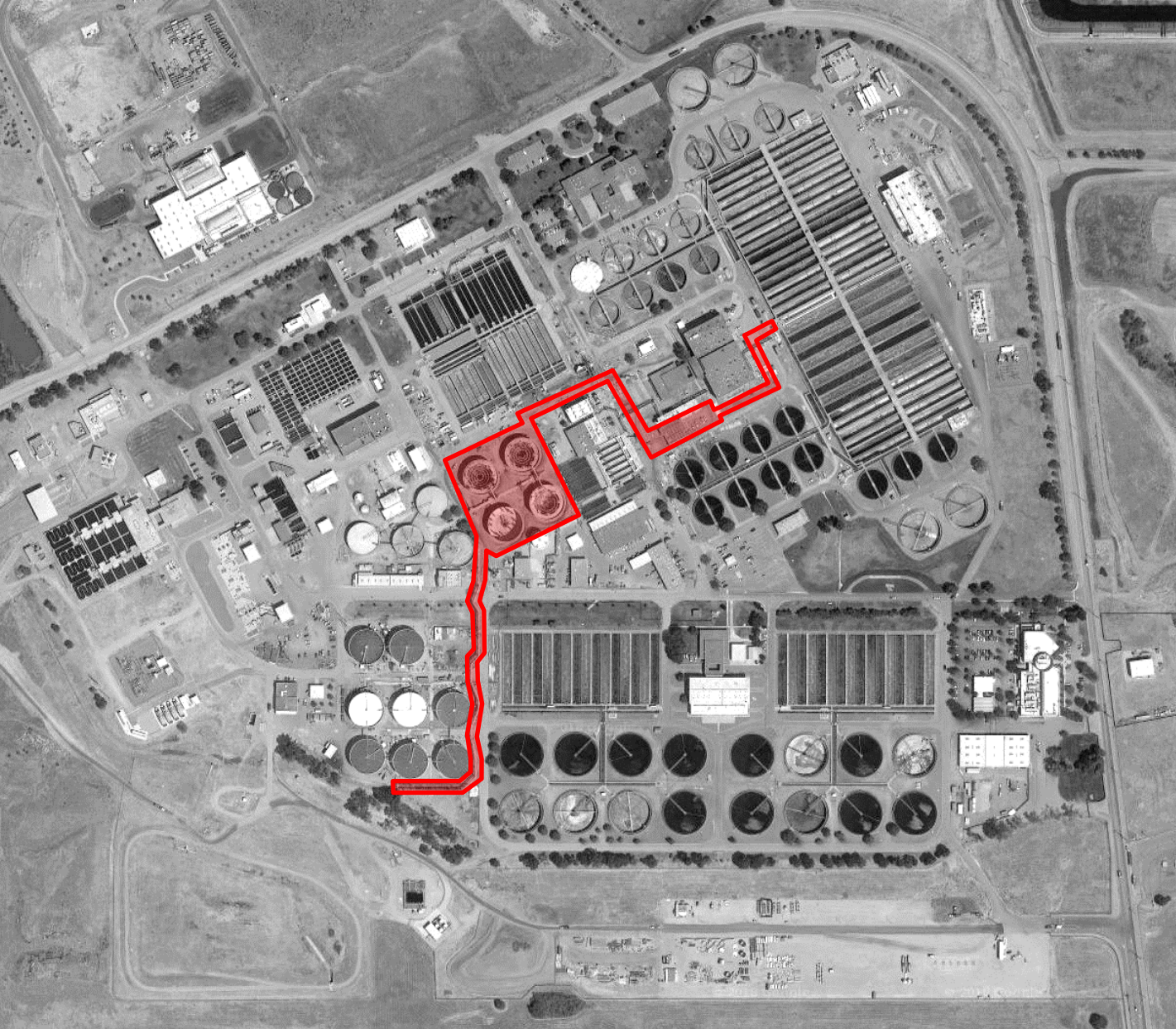
Main Generator Building (Building 45) - Gas Blending Skid Connected to Generator

Construction Highlights: Cogeneration Facility

Jun 22, 2020 at 11:17:03 AM
N 37° 26' 3", W 121° 56' 32"
700 Los Esteros Rd
Santa Clara



Contractor Starting Up Gas Treatment Skid



Digester & Thickener Facilities Upgrades Project

Construction Value: \$161.4M | Estimated Beneficial Use: Fall 2020

Construction Highlights – Digester Upgrades



Digesters 5-8, Pipe Racks, Covered Dissolved Air Flotation Thickener (DAFT) Tanks, and Sludge Screening Building

Construction Highlights – Digester Upgrades



Foul Air Piping Installation Around the DAFT Tanks

Headworks Project



Construction Value: \$139.6M | Estimated Beneficial Use: Summer 2023

Construction Highlights – Headworks




Tower Crane Foundation Excavation

Construction Highlights – Headworks



Temporary Electrical Duct Bank Reroute

An aerial photograph of a large industrial facility, likely a wastewater treatment plant. The facility features numerous circular tanks, rectangular basins, and various buildings. A red rectangular box is superimposed on the image, highlighting a specific area in the lower-middle section. This highlighted area contains a grid of circular tanks, which are the nitrification clarifiers mentioned in the text. The surrounding area includes roads, parking lots, and some greenery.

Nitrification Clarifiers Rehabilitation Phase 1

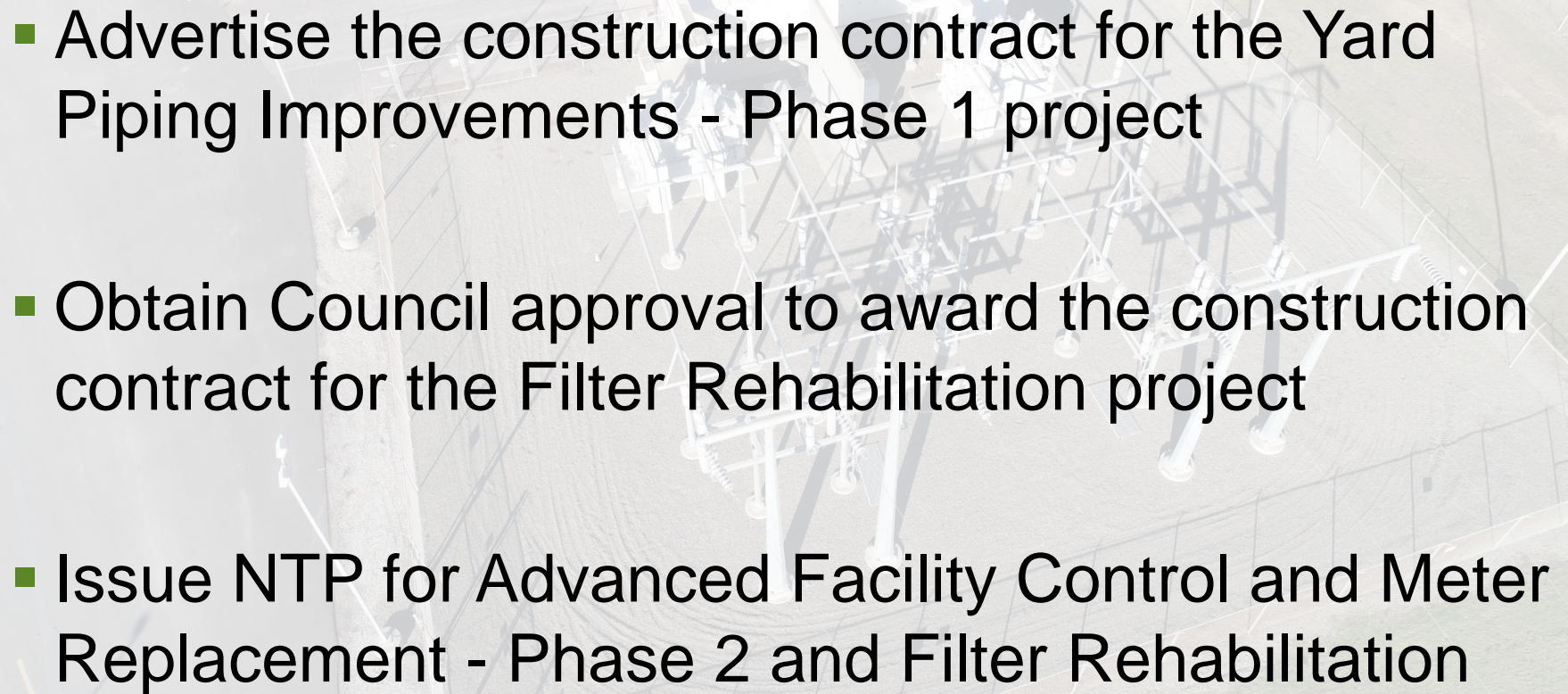
Construction Value: \$31.4M | Estimated Beneficial Use: Fall 2022

Nitrification Clarifiers Rehabilitation Phase 1




Aerial View of the Nitrification Clarifiers

The Next Six Months – Project Activities

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- Advertise the construction contract for the Yard Piping Improvements - Phase 1 project
 - Obtain Council approval to award the construction contract for the Filter Rehabilitation project
 - Issue NTP for Advanced Facility Control and Meter Replacement - Phase 2 and Filter Rehabilitation

The Next Six Months – Programmatic Activities

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- Obtain Council approval to the award master consultant agreements for construction management and construction controls.
 - Continue to implement the construction management and testing, startup and commissioning strategies.
 - Continue to fill remaining CIP vacancies