

Annual CIP Status Report (January – December 2022)

Transportation and Environment Committee

March 6, 2022

San José-Santa Clara Regional Wastewater Facility

Presenter:

David Ohlson – Division Manager, ESD CIP

Program History

- The San José and Santa Clara City Councils adopted the Plant Master Plan (PMP) in November 2013 and December 2013, respectively.
- The PMP identified more than 100 capital improvement projects totaling over $2.1 billion to be implemented at the RWF over the next 30 years.
- A validation process was completed in early 2014 to update and prioritize the recommended PMP projects and additional gap projects into 33 projects to be initiated over 10 years.
- Beginning in fiscal year 2014-2015, the validation process was used to inform the five-year CIP and ten-year funding strategy, which are approved by the San José City Council.

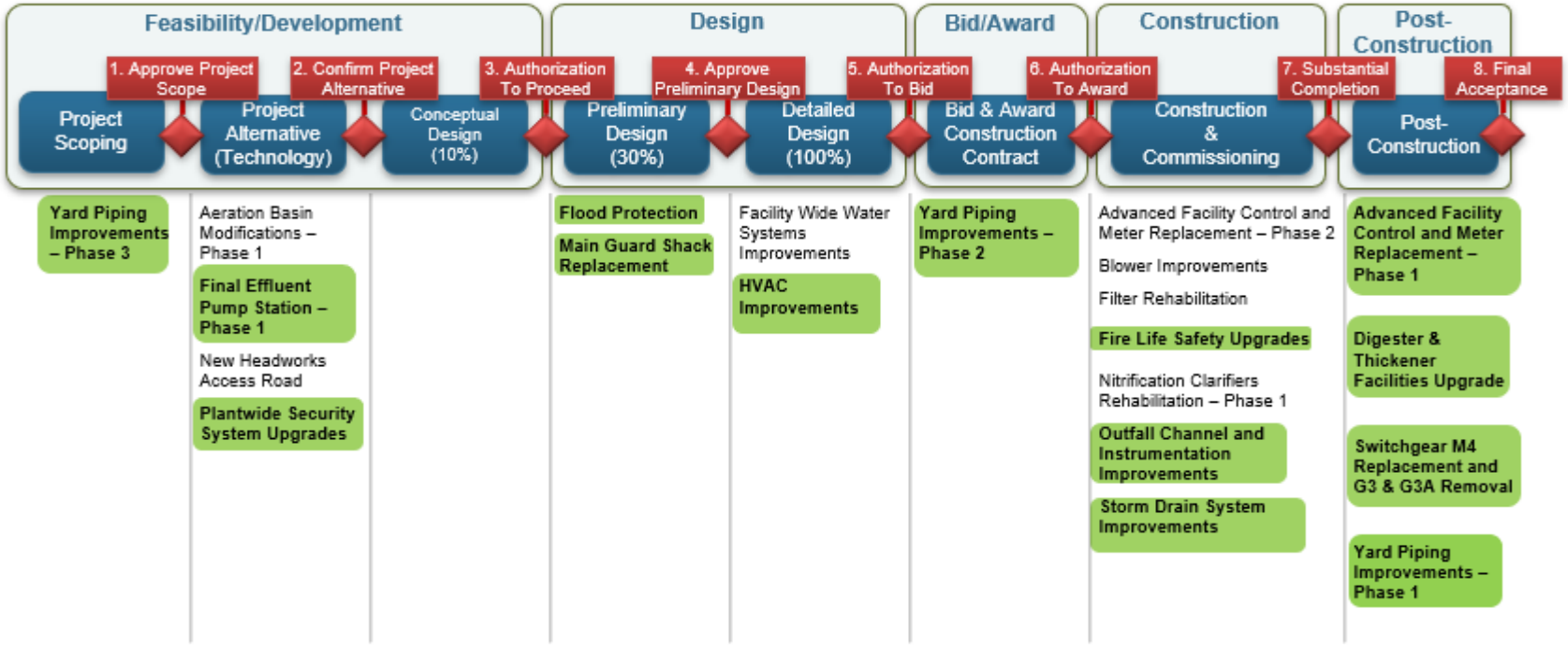
Significant Program Activities

- Dewatered Biosolids Management Strategy
  - Scope of services: schedule delivery of empty and clean containers, loading biosolids and covering containers, transporting biosolids, and prepare reports for billing and regulatory
  - Five proposals were received, Council approved three agreements with Denali Water Solutions, LLC (35%), Synagro West, LLC (57%), and Lystek International Limited (8%) in December 2022 through June 2029
  - New Dewatering Facility to begin operation in FY 2025-2026

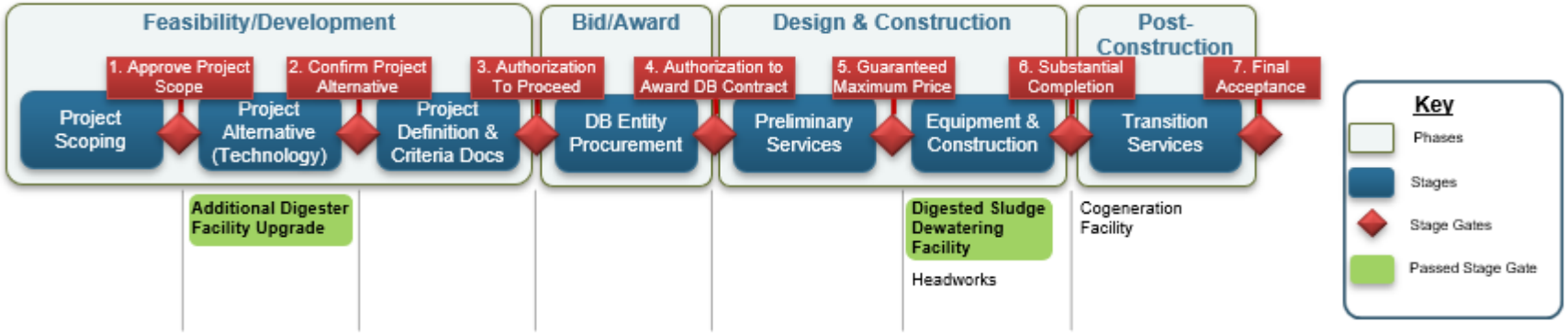
- Aeration Tanks Approach
  - 2024 Nutrient Watershed Permit to impose Total Inorganic Nitrogen limits by 2029
  - Phase 1 to optimize SND/inDENSE™ operation
  - Incremental approach to upgrade

Program Snapshot: All Projects

Design-Bid-Build Active Projects



Progressive Design-Build Active Projects



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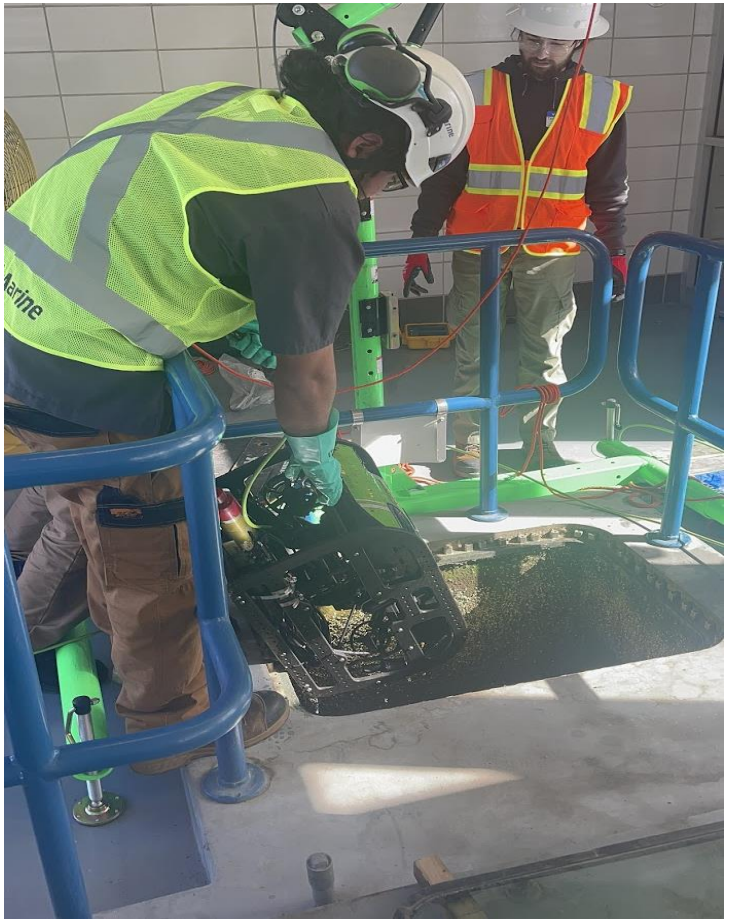
Six Projects in Feasibility/Development

Scoping

- Yard Piping Improvements – Phase 3

Project Alternatives

- Additional Digester Facility Upgrade
- Aeration Basin Modifications – Phase 1
- Final Effluent Pump Station – Phase 1
- New Headworks Access Road
- Plantwide Security System Upgrades



- **Contractor deploying remote operated vehicle to perform condition assessment in the 108-inch Filter Influent pipe in the Yard Piping Improvements – Phase 3 project**

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Five Projects in Design and Bid/Award

Preliminary Design

- Flood Protection
- Main Guard Shack Replacement

Detailed Design

- Facility-wide Water Systems Improvements
- HVAC Improvements

Bid & Award

- Yard Piping Improvements – Phase 2



- **Corrosion and cracking of the 96” raw sewage pipe that will be rehabilitated by the Yard Piping Improvements – Phase 2 project**



- **Preferred alternative for the new RWF entrance for the Main Guard Shack Replacement project**

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Nine Projects in Construction

- Advanced Facility Control and Meter Replacement – Phase 2 **($7.0m)**
- Blower Improvements **($29.5m)**
- Digested Sludge Dewatering Facility (**$131.2m**)
- Filter Rehabilitation **($33.3m)**
- Fire Life Safety Upgrades (**$2.8m**)
- Headworks **($126.9m)**
- Nitrification Clarifiers Rehabilitation – Phase 1 **($26.2m)**
- Outfall Channel and Instrumentation Improvements (**$4.3m**)
- Storm Drain System Improvements (**$6.3m**)



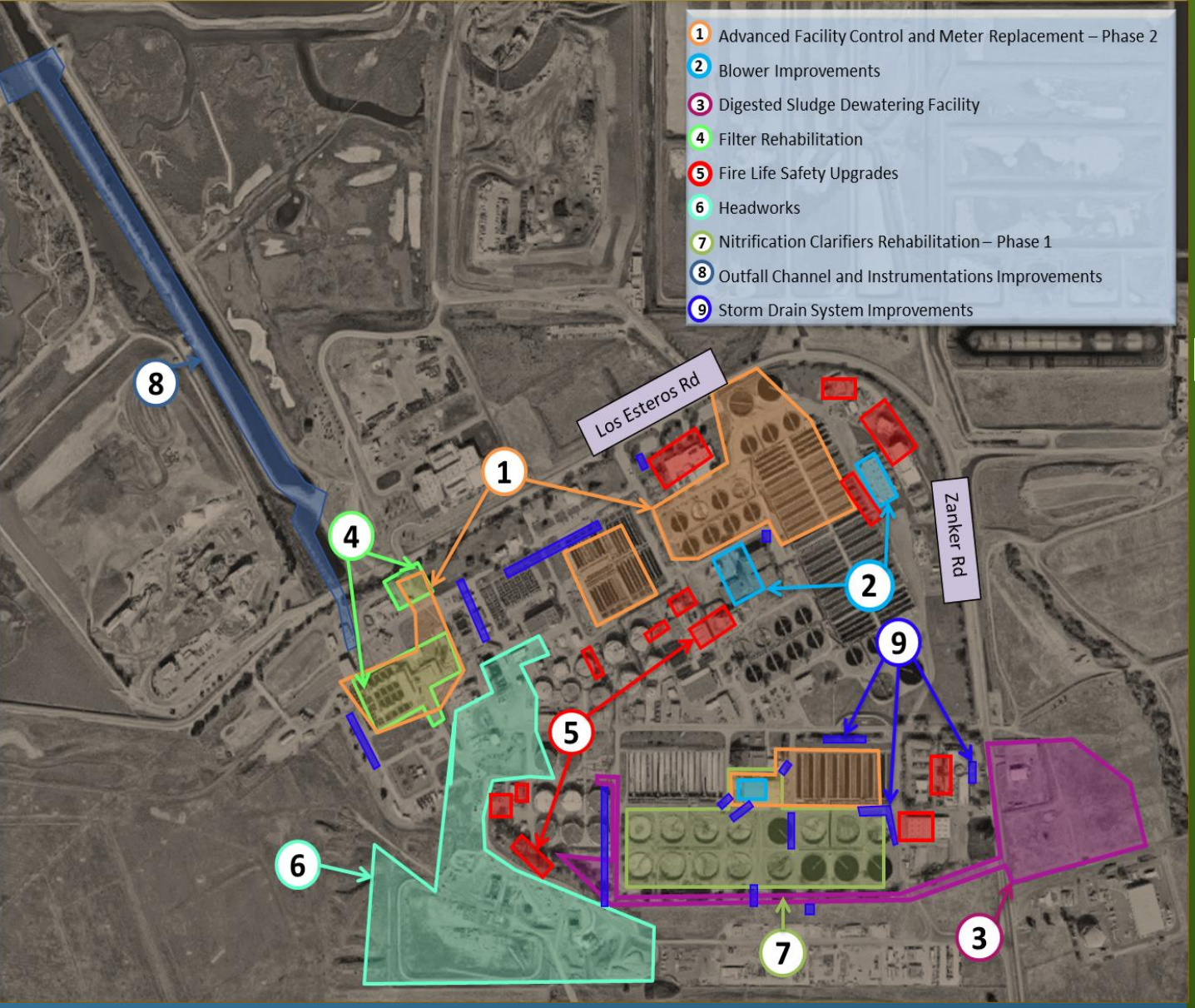






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Nine Projects In Construction



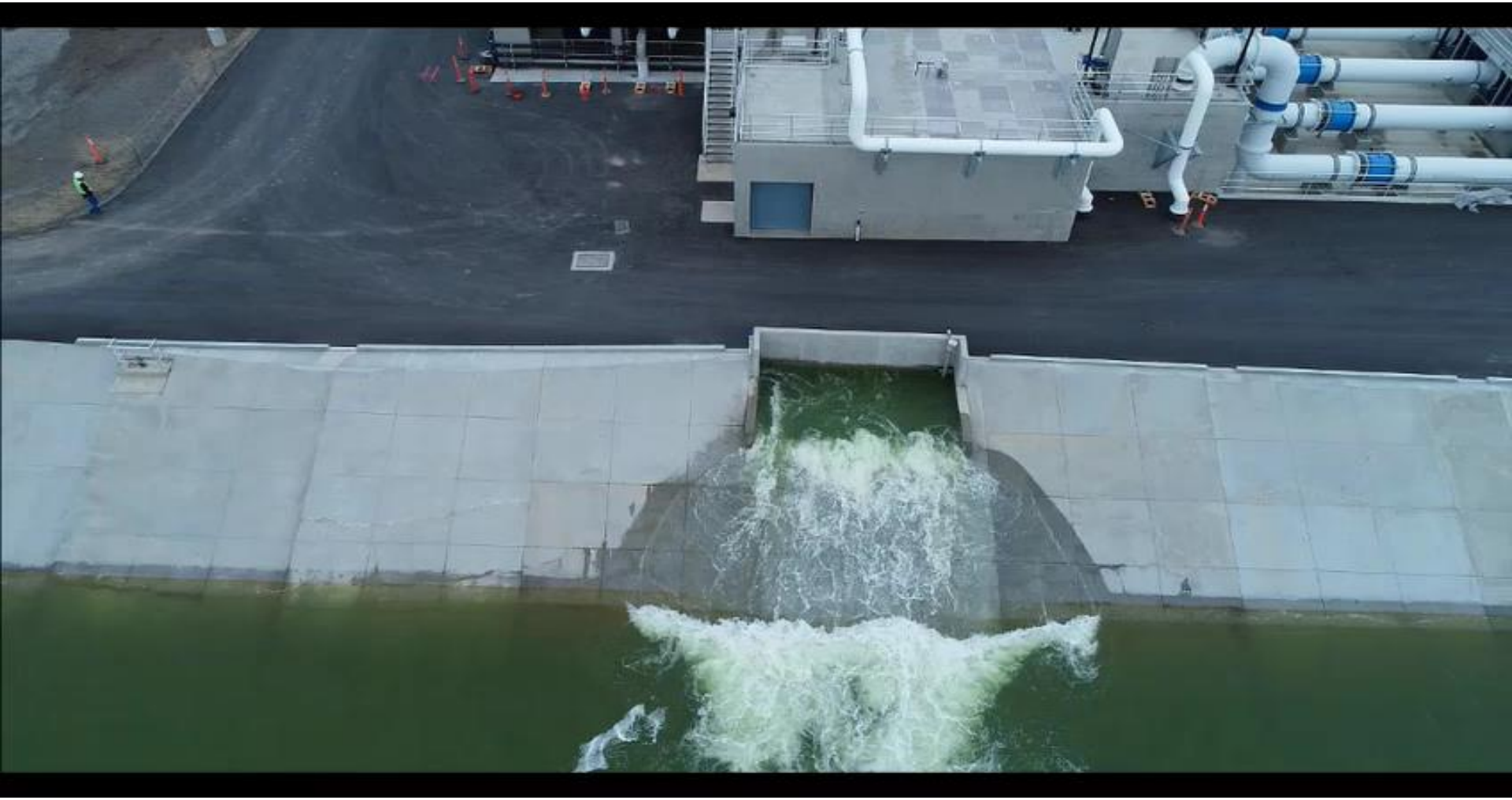
Total Base Construction Value: $368M



Headworks Project

Construction Value: $126.9M | Estimated Beneficial Use: Summer 2023

Headworks



- Flow circulates in a loop through new Headworks, Emergency Overflow Basin and EBOS

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Headworks



- Setting raw sewage pump #3



- New Milpitas Structure addition

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Filter Rehabilitation

Construction Value: $33.3M | Estimated Beneficial Use: Summer 2024

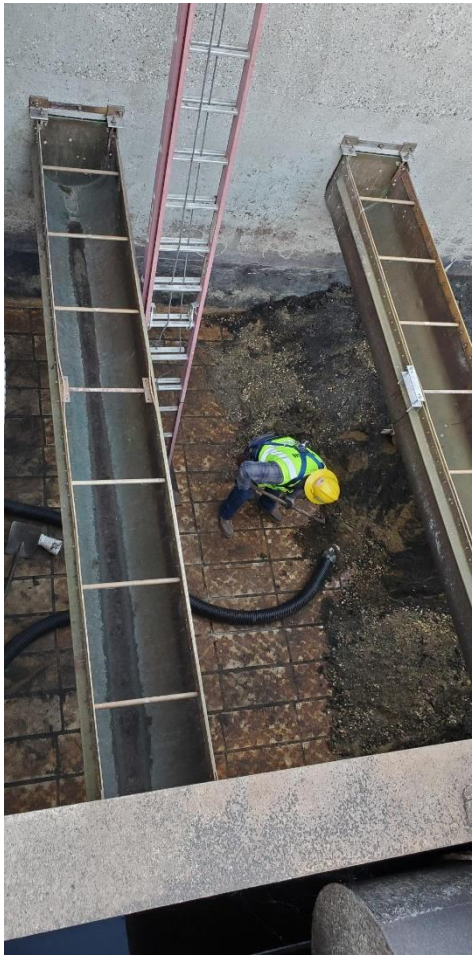
Filter Rehabilitation



- New gravel in the white sacks being added to the Filter Building as new media

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Filter Rehabilitation



- Old filter media removal



- Demolition of Surface Wash line containing lead paint in Gallery A



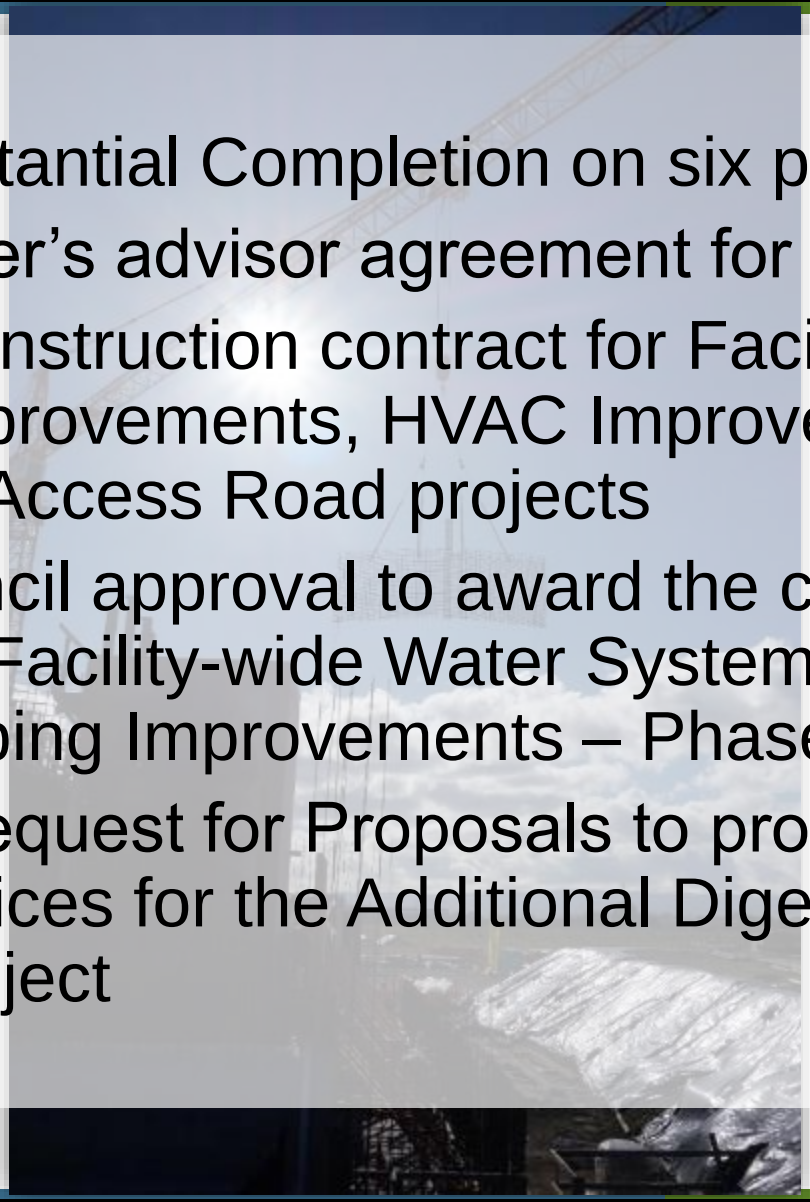
- Switchgear being laid onto pad



- New air scour blowers in service

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Expected Activities through December 2023



- Reach Substantial Completion on six projects
- Amend owner's advisor agreement for Dewatering
- Advertise construction contract for Facility-wide Water Systems Improvements, HVAC Improvements, and New Headworks Access Road projects
- Obtain Council approval to award the construction contract for Facility-wide Water Systems Improvements and Yard Piping Improvements – Phase 2
- Advertise Request for Proposals to procure owner's advisor services for the Additional Digester Facility Upgrade project