



Vendor Open House

Capital Improvement Program

November 4, 2015



San José-
Santa Clara
Regional
Wastewater
Facility

Agenda

- Regional Wastewater Facility (RWF) Overview
- Capital Improvement Program (CIP) Overview
- Overview of Packages & Project Highlights
- Procurements
- Questions & Answers (Q&A)

RWF Overview

San José-Santa Clara Regional Wastewater Facility



Who We Serve



What We Do



Treat water to high standard

Deliver drought-proof water supply



Produce High-Quality Biosolids



Strive to be Energy Self-Sufficient



Use sustainable energy sources

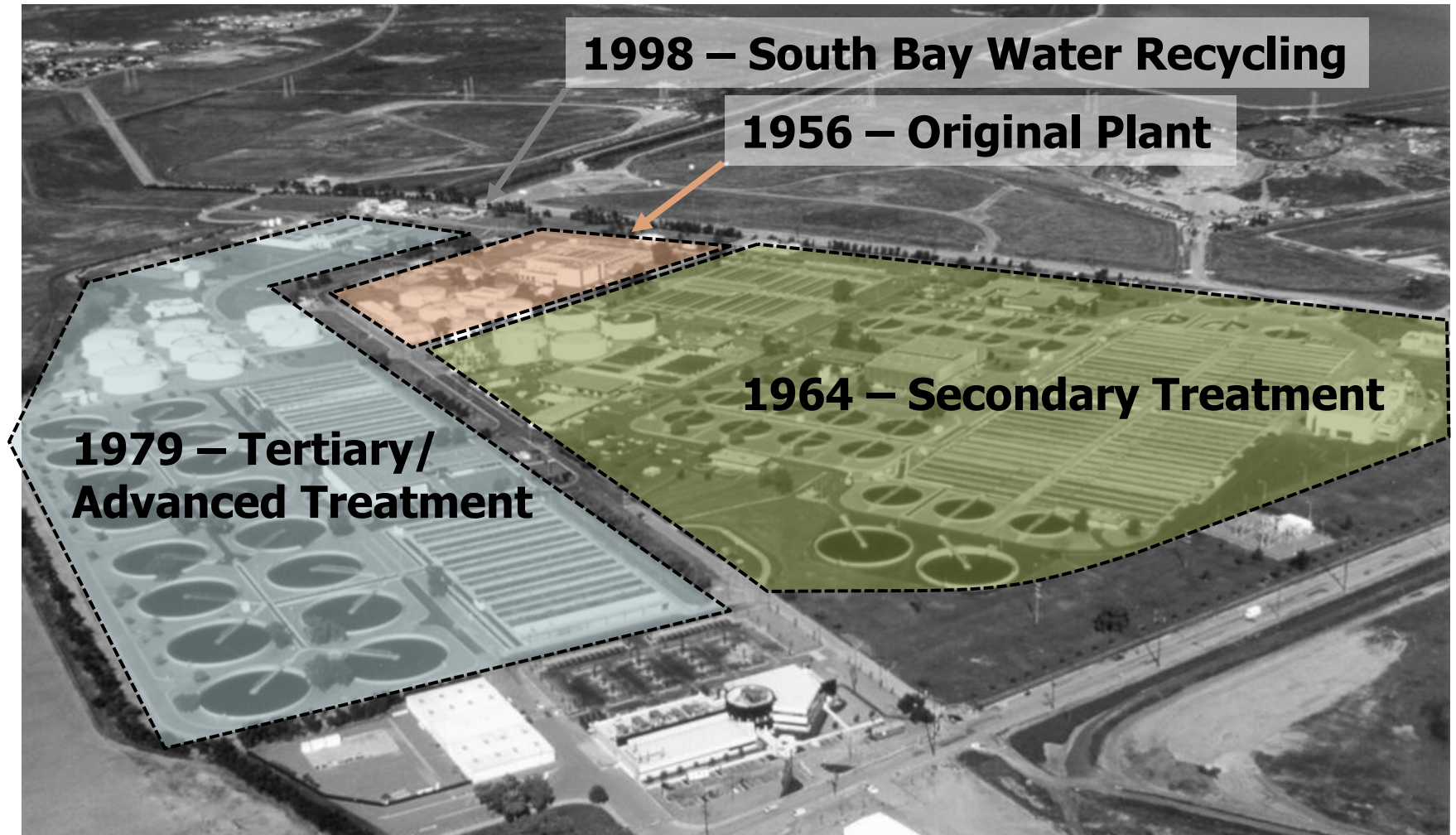
Produce sustainable energy sources



Foster a Thriving Ecosystem



History



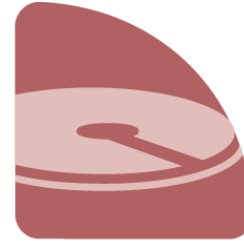
CIP Overview

Plan for the Future

Plant Master Plan Goals

operational

Result in a reliable, flexible Plant that can respond to changing conditions.



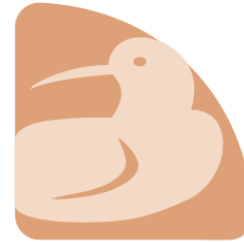
economical

Maximize economic benefits for customers through cost-effective options.



environmental

Improve habitat and minimize impacts to the local and global environment.



social

Maximize community benefits through improved aesthetics and recreational uses.



Future RWF Operational Footprint



Plant Master Plan Final Adopted Alternative

Legend

- Project Boundary
- Existing Levee
- - - Tentative Shoreline Levee
- Existing Trail
- Proposed Trail
- Proposed Boardwalk Trail

Mission & Vision

CIP PROGRAM MISSION

Rebuild and revitalize the Regional Wastewater Facility and deliver the CIP on time and within budget.

CIP
Program

\$1.4B
Program

10 YEAR
CIP Program

9
Plant-Wide
Studies

57
Projects

50-100
CIP Program Staff

6
City Departments

50+
Year-Old
Infrastructure

1 Mission

1 Vision

1 Team

4
Sanitation Districts
Served

8
Cities Served

180
Acre Operational
Area

2,600
Acre Site

110 MGD
Treated

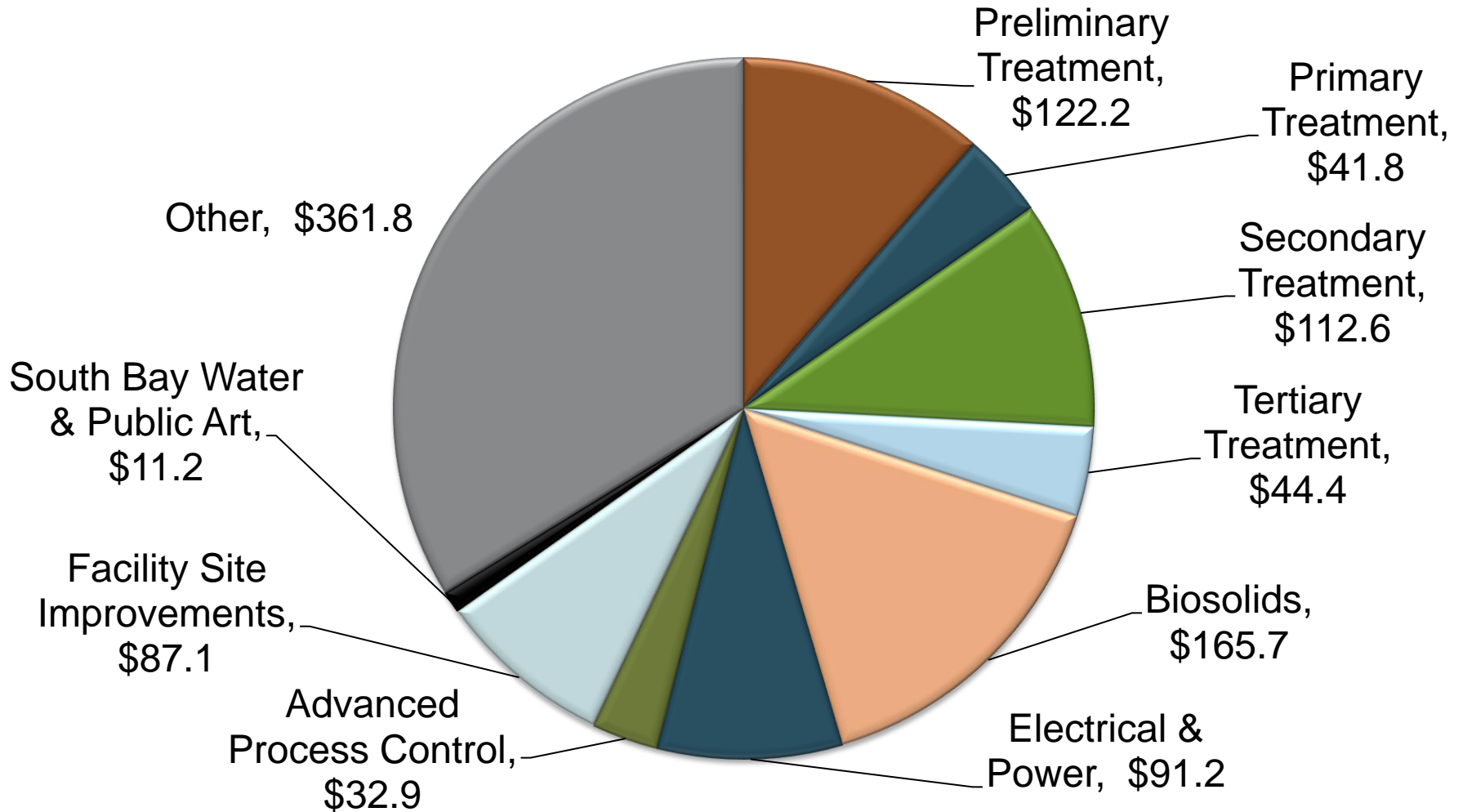
1.4 M
Residential
Customers

17,000
Commercial
Connections

To deliver a world class facility that successfully serves the region.

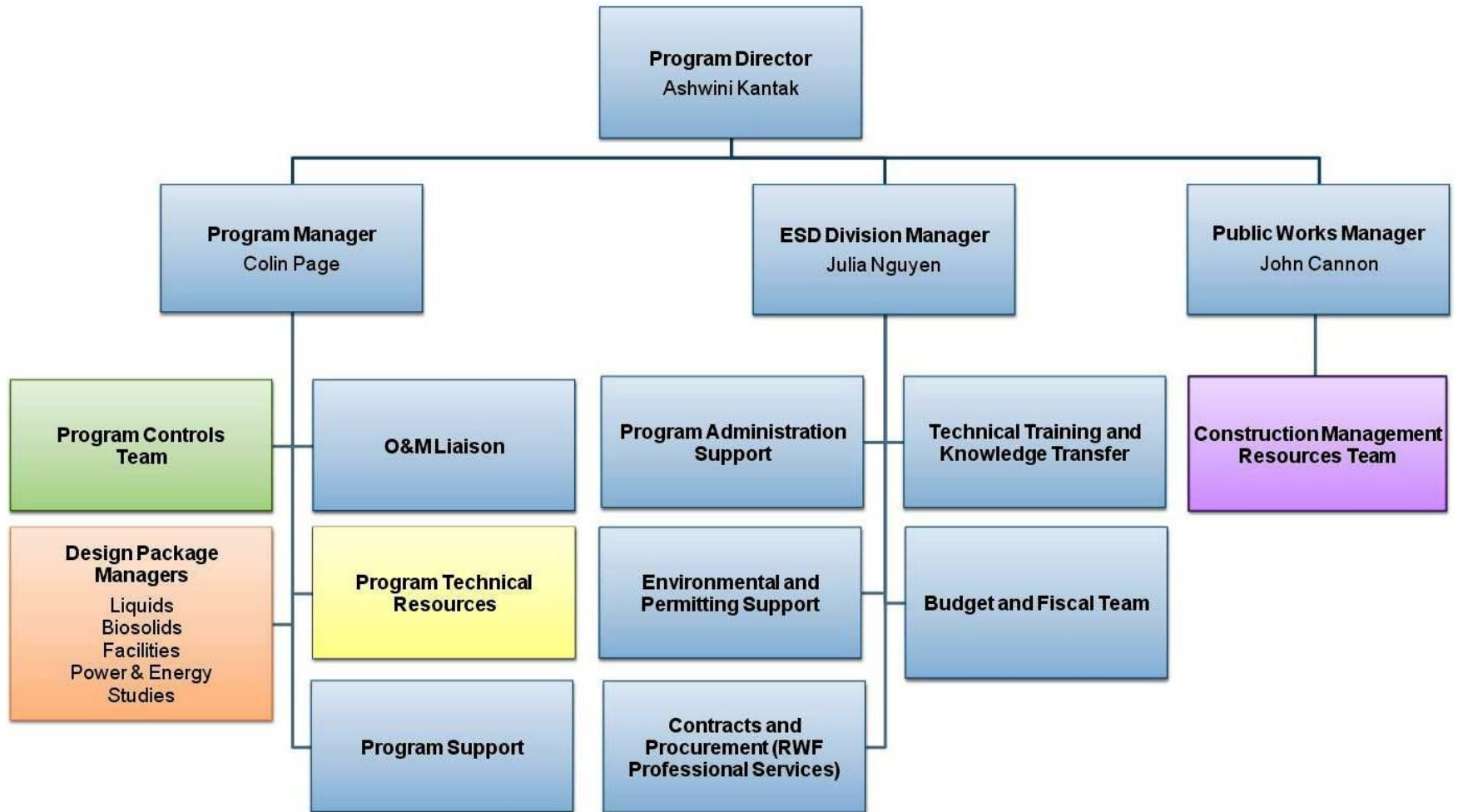
CIP PROGRAM VISION

Adopted 5-Year CIP Budget (FY16-20): \$1.07B



Note: Amounts shown are in millions.

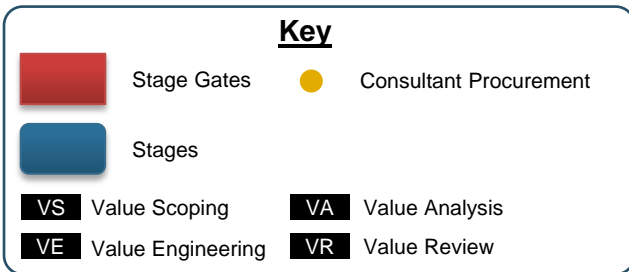
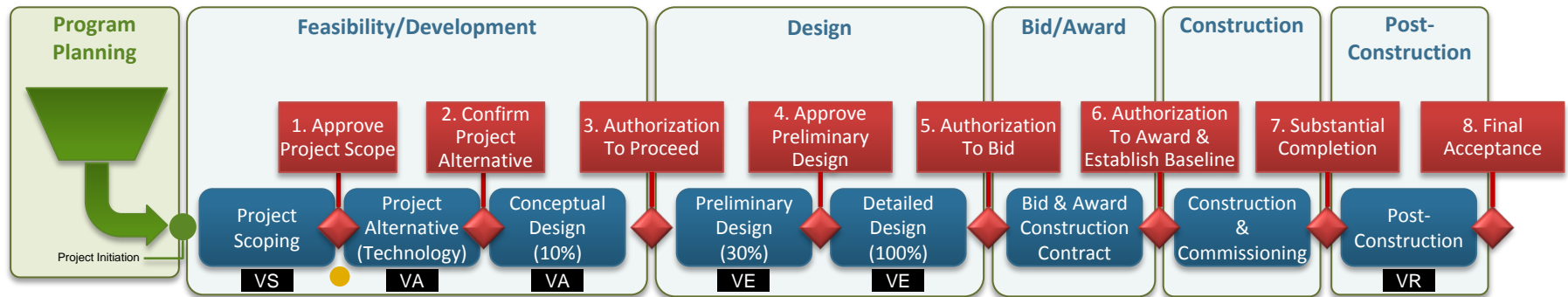
Program Team Organization



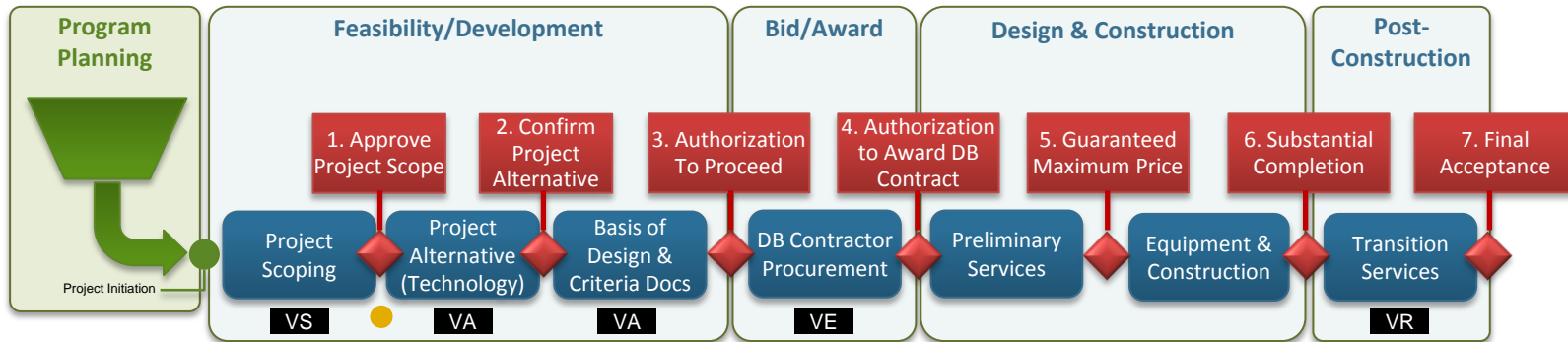
Systems & Tools

- Project Delivery Model (PDM)
- Primavera P6
- Online Document Management
- Design Guidelines Library
- Templates

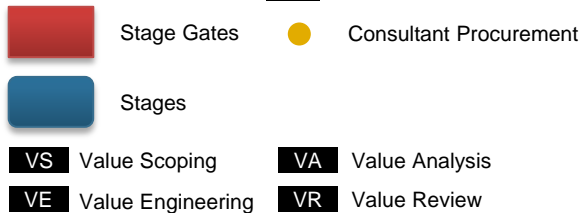
Design-Bid-Build PDM



Progressive Design-Build PDM



Key



Recent Accomplishments

- December 2014: Odor Strategy adopted
- March 2015: Project Delivery & Procurement Strategy adopted
- June 2015: Biosolids Transition Strategy adopted
- June 2015: Ten-Year CIP Funding Strategy adopted
- 10 programmatic studies completed

Overview of Packages & Project Highlights

Liquids Package Overview

Bid & Award

- Iron Salt Feed Station

Feasibility/Development

- Advanced Facility Control & Meter Replacement
- Aeration Tanks & Blower Rehabilitation
- Filter Rehabilitation
- Headworks Critical Improvements
- Headworks Improvements & New Headworks (design-build)
- Nitrification Clarifier Rehabilitation

Programmed

- East Primaries Rehabilitation, Seismic, Retrofit & Odor Control
- Secondary Clarifier Rehabilitation

Advanced Facility Control & Meter Replacement

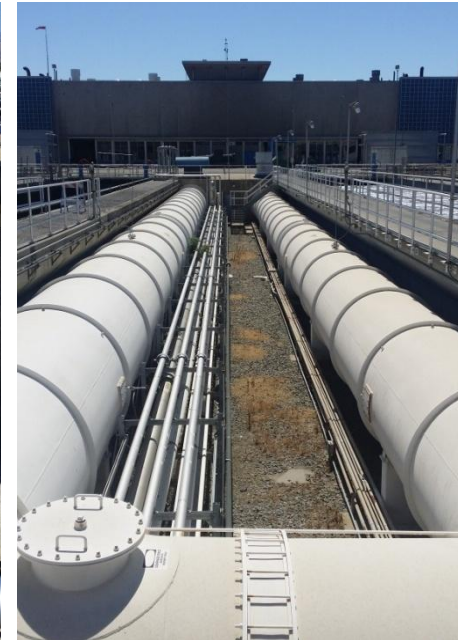
- Consultant: To Be Procured
- Advertisement: October 2015 (Consultant RFQ)
 - Non-Mandatory Conference & Site Tour on Thursday, November 5
 - Statements of Qualifications due on Wednesday, November 18
- Estimated Construction Completion: 2021
- Estimated Total Cost: \$15M
- Scope:
 - Replace existing meters, valve actuators, transmitters and sensors
 - Upgrade process control equipment



* Note: Amounts & dates listed are subject to change.

Aeration Tanks & Blower Rehabilitation

- Consultant: To Be Procured
- Estimated Advertisement: December 2015 (Consultant RFQ)
- Estimated Construction Completion: 2024
- Estimated Total Cost: \$119M
- Scope:
 - Convert from coarse bubble diffusion to fine bubble diffusion
 - Rehab concrete
 - Replace corroded piping, valves, fittings & meters
 - Install/Update electrical blowers



* Note: Amounts & dates listed are subject to change.

Biosolids Package Overview

Construction

- Digester Gas Storage Replacement

Design

- Digester & Thickener Facilities Upgrade

Feasibility/Development

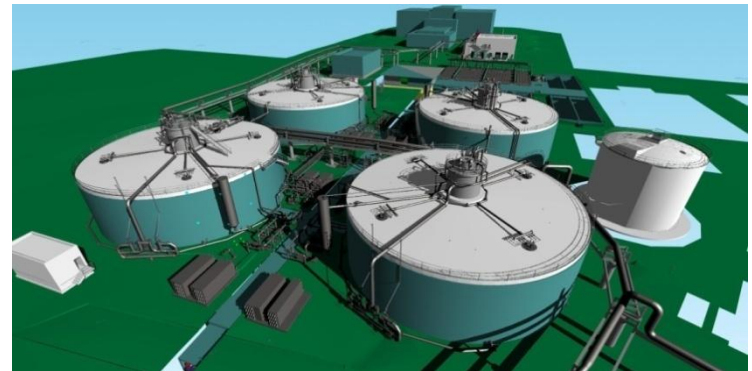
- Digested Sludge Dewatering Facility

Programmed

- Lagoons & Drying Beds Retirement

Digester & Thickener Facilities Upgrade

- Consultant: Brown & Caldwell
- Estimated Advertisement: January 2016 (Construction Bids)
- Estimated Construction Completion: 2019
- Estimated Construction Cost: \$80M
- Scope:
 - Rehab 4 digesters
 - Convert to a temperature-phased anaerobic digestion (TPAD) process
 - Remove gas lines from tunnels
 - Add new flares



Digested Sludge Dewatering Facility

- Consultant: To Be Procured
- Estimated Advertisement: February 2016 (Consultant RFQ)
- Estimated Construction Completion: 2022
- Estimated Total Cost: \$70M
- Scope:
 - Evaluate technologies
 - Provide mechanical units, feed storage tank, chemical/polymer storage, dosage facilities, cake storage and conveyance systems in an odor-controlled building



* Note: Amounts & dates listed are subject to change.

Facilities Package Overview

Bid & Award

- Cogeneration Facility (design-build)

Design

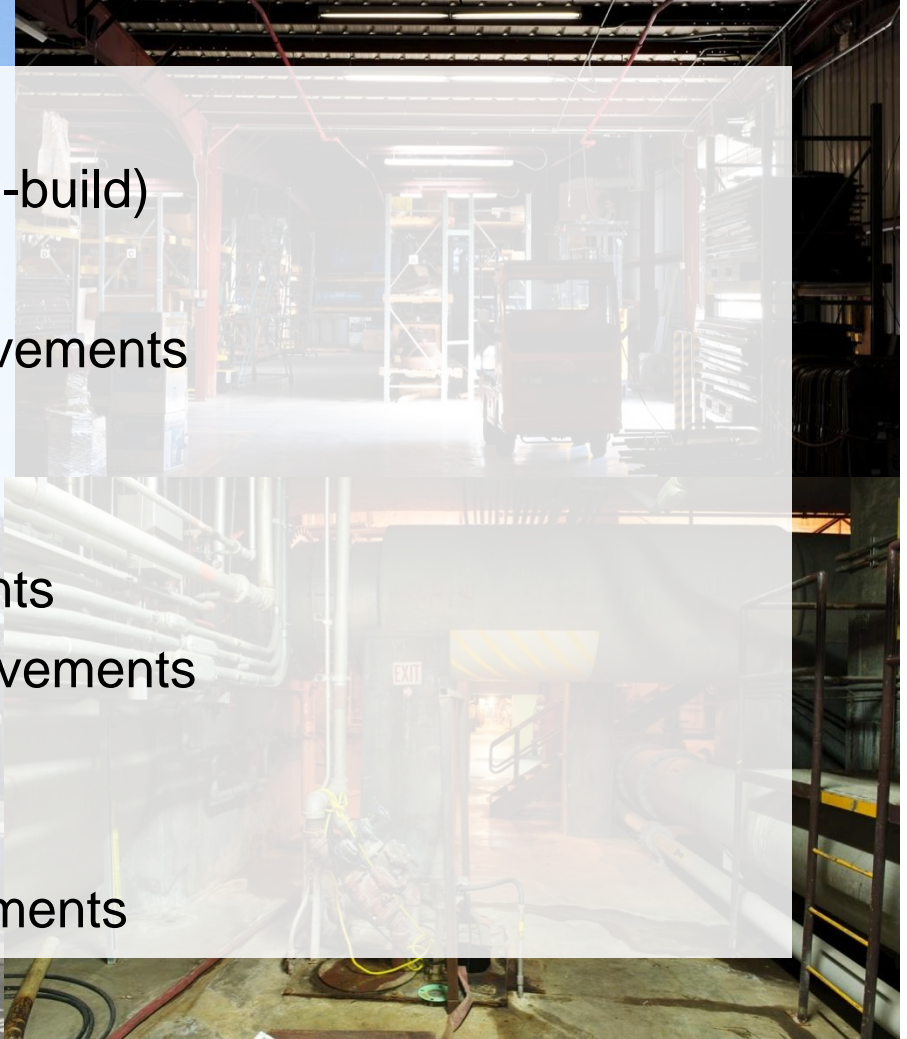
- Construction-Enabling Improvements

Feasibility/Development

- Facility-Wide Water Systems
- Support Building Improvements
- Outfall Bridge & Levee Improvements

Programmed

- Tunnel Rehabilitation
- Yard Piping & Road Improvements



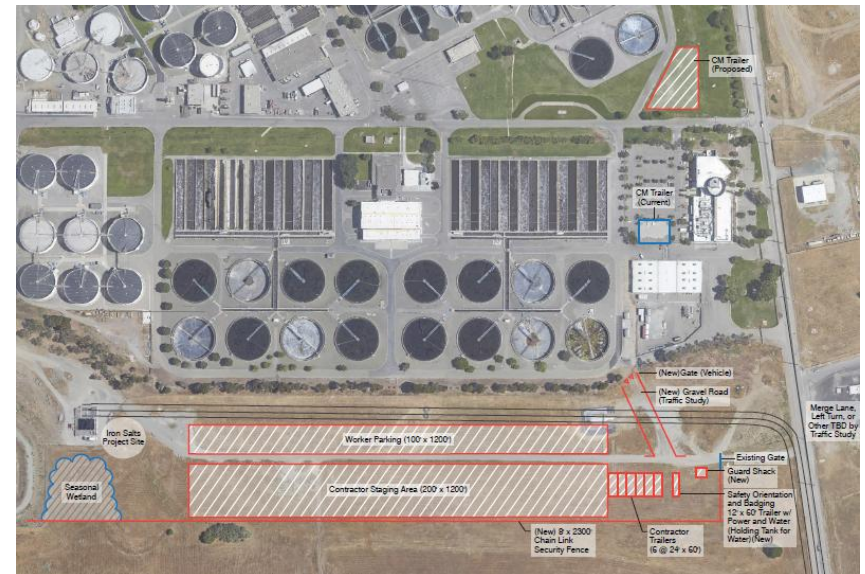
Cogeneration Facility

- Consultant: Black & Veatch
- Design-Build Entity: Being Procured
- Estimated Construction Completion: 2018
- Estimated Construction Cost: \$65M
- Scope:
 - Install internal combustion engines
 - Provide a digester gas treatment system, boilers, control & monitoring system, electrical switchgear & various appurtenances



Construction-Enabling Improvements

- Consultant: GHD (electrical only)
- Estimated Advertisement: January 2016 (Construction Bids)
- Estimated Construction Completion: 2016
- Estimated Construction Cost: \$2.8M
- Scope:
 - Improve access points to/from RWF operational area
 - Enhance security features & systems
 - Provide parking for future construction worker parking & construction management



* Note: Amounts & dates listed are subject to change.

Power & Energy Package Overview

Under Construction

- Digester Gas Compressor Upgrades (design-build)
- Emergency Diesel Generators (design-build)

Being Designed

- Plant Instrument Air System Upgrade

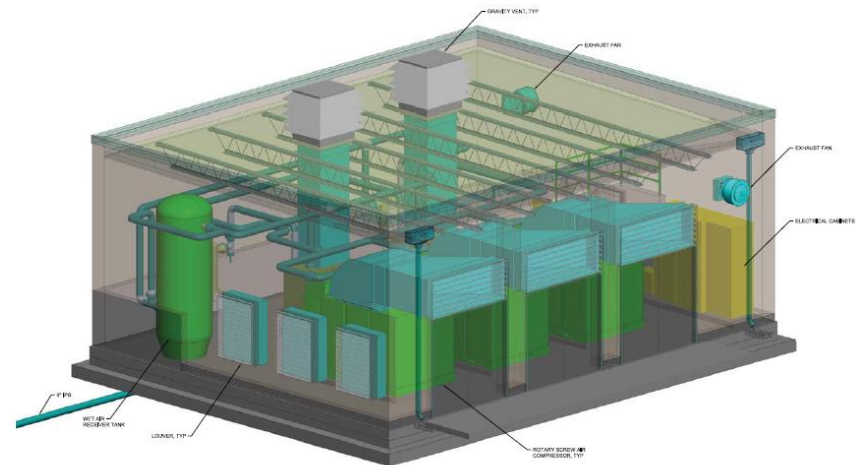
Programmed

- Switchgear S40/G3 Relay Upgrade



Plant Instrument Air System Upgrade

- Consultant: CH2M Hill
- Estimated Advertisement: May 2016 (Construction Bids)
- Estimated Construction Completion: 2018
- Estimated Construction Cost: \$2.5M
- Scope:
 - Replace existing high-pressure air supply system used to control pneumatic controls in two buildings with an above-grade distributed air supply system
 - Upgrade electrical system to provide power & redundancy improvements



* Note: Amounts & dates listed are subject to change.

Procure- ments

Upcoming Procurements

- 2 Request for Bids
 - Digester & Thickener Facilities Upgrade (contractors must have been pre-qualified in October)
 - Construction-Enabling Improvements

- 5 Project-Specific Requests for Qualifications
 - Goal is to have 1 consultant throughout the life of a project
 - Scope of services will vary based on delivery method
 - 2 project-specific RFQs currently posted on [BidSync](#)

- 4 Program-Level Requests for Qualifications
 - Audit Services
 - Construction Management Services
 - System Integration Services
 - Value Engineering & Peer Review Services

Additional Information

- BidSync
www.bidsync.com
- CIP Document Library
www.sjenvironment.org/cip
- San José-Santa Clara Regional Wastewater Facility
www.sjenvironment.org/rwf

BidSync

- www.bidsync.com



- Send additional questions to John Cannon (john.cannon@sanjoseca.gov)
- When procurements come out, the cone of silence comes down.



Source:

<http://thingsthatmadeanimpression.wordpress.com/2013/12/14/dialogue-from-get-smart-mr-big-cone-of-silence/>

CIP Document Library

The screenshot shows the San Jose CA government website. At the top, the logo "sanjoseca.gov" is visible, along with navigation links for Home, City Services, Departments, Follow Us, and Sign up. A search bar is located in the top right corner. Below the navigation is a large banner image of a wastewater treatment facility with the word "Environment" overlaid. A dark blue navigation bar contains links for Community, Business, Visitors, Government, and Environment. On the left side, there is a sidebar menu with "Environment" selected, and "CIP Document Library" is highlighted with a red circle. The main content area is titled "Capital Improvement Program" and includes a sub-header "Modernizing today for tomorrow's wastewater challenges". It features a photograph of industrial equipment and a list of key CIP elements. A right-hand sidebar contains "News & Announcements" with links to "You're Invited - CIP Vendor Open House on Nov. 4, 2015" and "CIP Monthly Status Report - August 2015".

sanjoseca.gov

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Search site

Environment

Community | Business | Visitors | Government | Environment

Environment

Plant Master Plan

Resources


CIP Document Library

Home > Environment > Regional Wastewater Facility > Capital Improvement Program

Capital Improvement Program

Modernizing today for tomorrow's wastewater challenges

As a vital business and residential center, Silicon Valley requires a modern, state-of-the-art treatment plant to reliably clean its wastewater. The Facility is addressing this need through its Capital Improvement Program (CIP), rebuilding infrastructure worn from nearly six decades of nonstop service, and updating treatment processes with exciting new technologies.



The CIP plans and carries out selected projects recommended by the 2013 [Plant Master Plan](#), which envisions \$2 billion in Facility investments over the next 30 years. Key CIP elements include:

- Infrastructure rehabilitation at all stages of the treatment process for greater efficiency and reliability.
- New, more efficient [biosolids](#) (sludge) dewatering and drying processes to better control odors and reduce the operational footprint.
- New methods of [generating energy](#) to sustainably power Facility operations.

The five- and 10-year CIPs are updated yearly. Projects are "packaged" into groups based on process areas and interdependency. Using escalated costs, the projects scheduled to begin in the next 10 years total approximately \$1.4 billion. Cost breakdown per process area is as follows:

- Energy and Automation – 12%
- Plant-wide Facilities – 19%
- Liquids Processing – 41%
- Solids Processing – 28%

[Monthly status reports](#) provide information on projects, budget, and schedule; [quarterly CIP status reports](#) are presented to the San José City Council in public meetings.

News & Announcements

You're Invited - CIP Vendor Open House on Nov. 4, 2015
Learn about upcoming consulting and contracting opportunities for the San Jose-Santa Clara Regional Wastewater Facility's Capital Improvement Program. [Read on...](#)

CIP Monthly Status Report - August 2015
This report provides a summary of the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility ("Wastewater Facility") for the period of August 2015. [Read on...](#)

Upcoming Procurements for the San José-Santa Clara Regional Wastewater Facility
[Read on...](#)

[View All](#)

www.sjenvironment.org/cip

Q&A

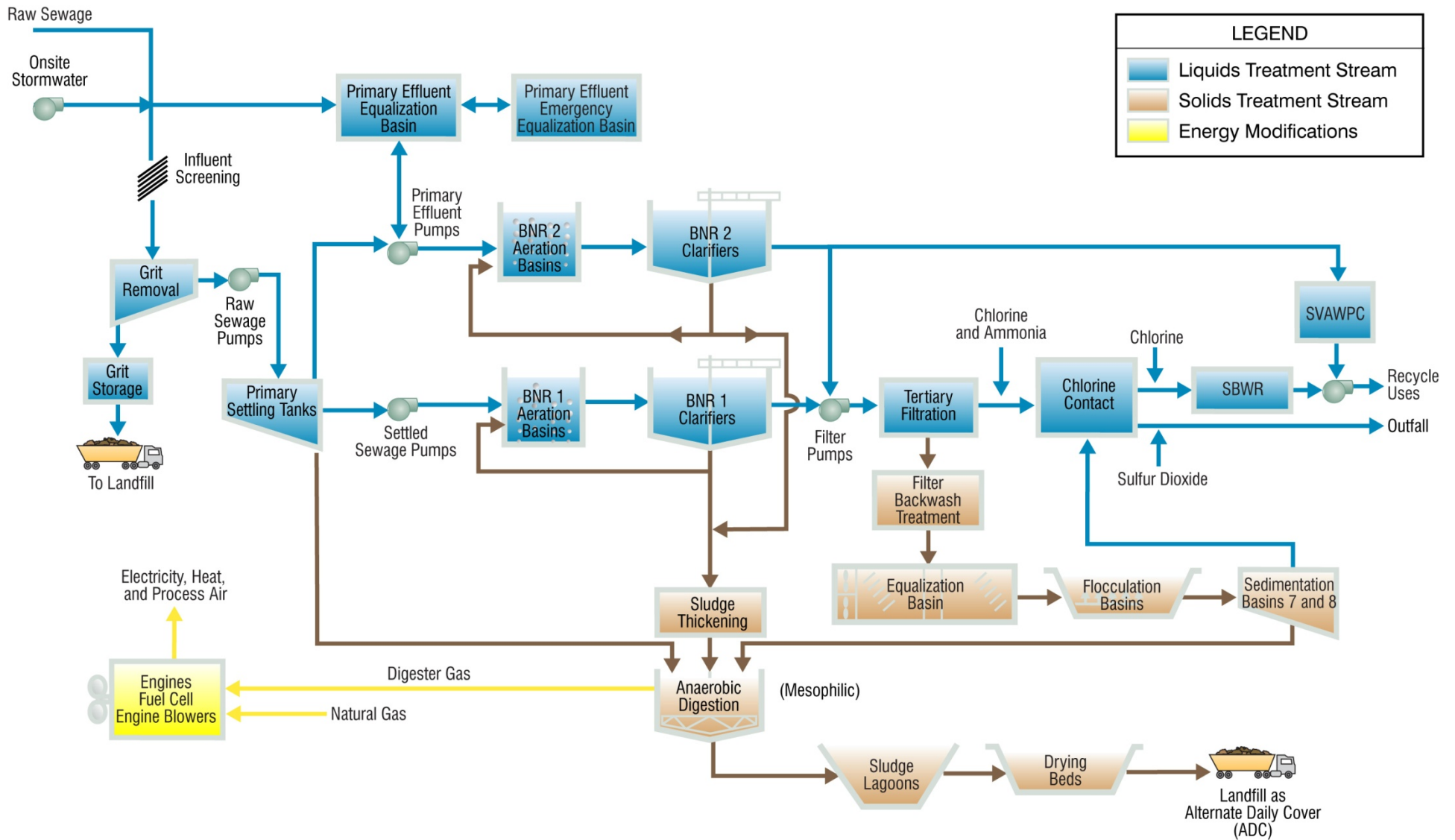


Figure 1 – Current Treatment Process Flow Diagram



San José-Santa Clara Regional Wastewater Facility

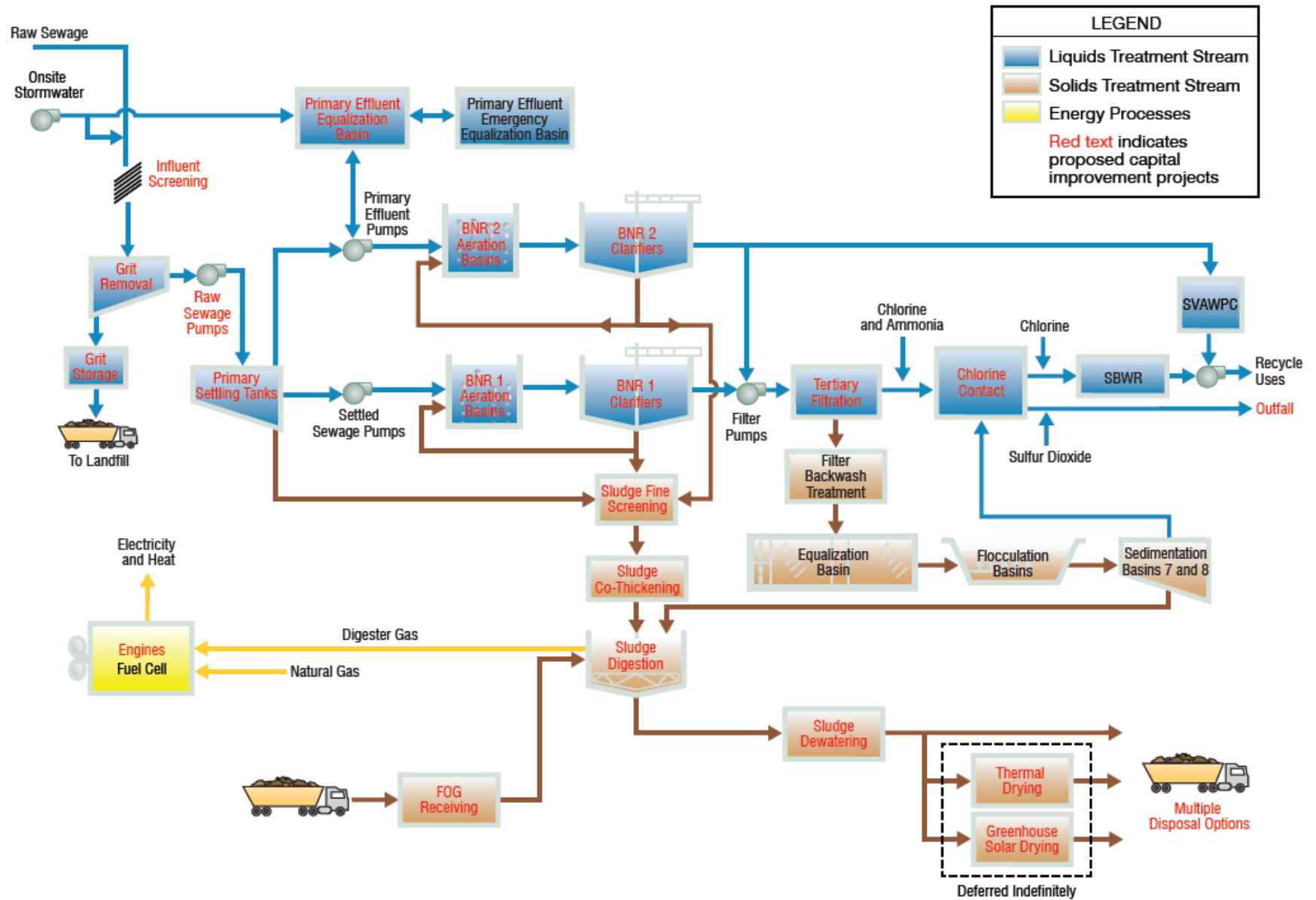


Figure 2 – Proposed Treatment Process Flow Diagram

The San José-Santa Clara Regional Wastewater Facility's (RWF) Capital Improvement Program (CIP) is rebuilding and modernizing the RWF. The CIP envisions an investment of approximately \$1.5 billion in the first 10 years, with an approximate total investment of \$2.1 billion over the next 30 years. The CIP is the largest current public works project in the South Bay.

The City of San José has consolidated all procurement solicitations to post on BidSync (<https://www.bidsync.com/>). All bid documents, questions and answers, addenda, and results will be available electronically during the procurement process. Interested firms must register on BidSync to receive notifications when procurements are posted.

Construction Bid Opportunities

<i>Project Name</i>	<i>Description</i>	<i>Anticipated Advertisement*</i>	<i>Construction Estimate**</i>
Construction-Enabling Improvements	This project will provide infrastructure to support increased CIP construction activity across the RWF site, including access improvements, security, worker parking, contractor trailer space, staging areas and space for future construction management staff.	January 2016	\$2.8 million
Digester & Thickener Facilities Upgrade	This project will upgrade four existing digesters to include new covers, mixing systems, and heat exchangers. Will modify low-pressure digester gas piping system and dissolved air flotation thickeners to co-thicken combined primary and waste-activated sludge, incorporate odor control; build sludge screening facility and flare system; rehabilitate existing flare system.	January 2016	\$80.0 million

*All dates listed are estimates that are subject to change.

**The planning-level estimates shown are subject to change.

Professional Services Opportunities

<i>Procurement Name</i>	<i>Description</i>	<i>Anticipated Advertisement*</i>	<i>Total Project Estimate**</i>
Engineering Services for Nitrification Clarifiers Rehabilitation	The selected consultant will provide design services and engineering services during construction to implement modifications to improve performance of 16 nitrification clarifiers, focusing on mechanical, structural, and electrical rehabilitation.	September 2015	\$50.5 million
Engineering Services for Advanced Facility Control & Meter Replacement	The selected consultant will provide design services and engineering services during construction to replace or upgrade flow meters, valve actuators, and process indicators throughout the RWF.	October 2015	\$15.0 million
Value Engineering & Peer Review Services for Various CIP Projects	The selected consultants will provide as-needed value engineering and peer review services for various capital projects to identify and present alternatives for improving project value and provide quality assurance/control reviews to ensure designs adhere to industry standards and applicable codes.	November 2015	Not Applicable

Professional Services Opportunities

<i>Procurement Name</i>	<i>Description</i>	<i>Anticipated Advertisement*</i>	<i>Total Project Estimate**</i>
Engineering Services for Aeration Tanks & Blower Rehabilitation	The selected consultant will provide design services and engineering services during construction to rehabilitate and construct improvements within two secondary treatment processes, secondary and nitrification, to ensure continued operation and adequate aeration for treatment.	December 2015	\$119.3 million
Construction Management Services for Various CIP Projects	The selected consultants will provide as-needed construction management and inspection services for various capital projects. Services may include constructability reviews, document management, submittal and RFI management, schedule analysis, progress payment evaluation, change order request analysis, field inspections, safety and environmental monitoring, and commissioning and start-up support.	December 2015	Not Applicable
Audit Services for Various CIP Projects	The selected consultant will provide as-needed audit services for the various capital projects. Services may include financial, compliance, operational, investigative, or follow-up audits for design-build contracts, consultant agreements, and program processes.	December 2015	Not Applicable
Distributed Control System Integration Services for Various CIP Projects	The selected consultant will upgrade the existing Distributed Control System (DCS) Controllers to the new ABB HPC800 controller on 800xA platform, and provide as-needed DCS programming support for various CIP projects.	January 2016	Not Applicable
Owner's Representative & Construction Management Services for Digested Sludge Dewatering Facility	The selected consultant will provide owner's representative and construction management services for a new facility that will mechanically dewater 100 percent of the RWF's digested sludge to replace the existing sludge storage lagoons and open air solar drying beds.	February 2016	\$69.7 million
Engineering Services for Support Building Improvements	The selected consultant will provide design services and engineering services during construction for fire life safety improvements and existing building HVAC improvements, as well as master planning services for a new central warehouse.	March 2016	\$54.7 million

*All dates listed are estimates that are subject to change.

**The planning-level estimates shown are subject to change.

Capital Improvement Program Attendee List



San José-Santa Clara
Regional Wastewater Facility

Meeting Information:

Meeting Name: Vendor Open House
Date: Wednesday, November 4, 2015 **Time:** 1:30 p.m. – 4:30 p.m.
Location: Administration Building, 700 Los Esteros Road, San José, CA 95134

#	Company	First Name	Last Name	Email Address
1	ABB Inc.	Brian	Heimbigner	brian.e.heimbigner@us.abb.com
2	ABB Inc.	Tony	Amiri	tony.j.amiri@us.abb.com
4	AECOM	Brad	Sneed	brad.sneed@aecom.com
5	AECOM	Casper	van Keppel	casper.vankeppel@aecom.com
3	AECOM	Eric	Zagol	eric.zagol@aecom.com
6	Alisto Engineering Group	Keith	Packard	kpackard@alisto.com
7	Andersen Environmental	Matt	Sonnenberg	msonnenberg@andersenenviron.com
8	Anderson Pacific Engineering Construction, Inc.	Justin	Chow	jchow@andpac.com
9	Arcadis	Melanie	Turlington	melanie.turlington@arcadis.com
10	ASWB Engineering	Dean	Kahan	dkahan@aswb-engineering.com
11	BioMaAS, Inc.	Kimberly	Craighead	kimberly.a.craighead@gmail.com
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39	HydroScience Engineers, Inc.	Abraham	Philip	aphilip@hydroscience.com
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49	Koffler Electrical Mechanical Apparatus Repair, Inc.	Glen	Timbers	glen@koffler.com
50	Kwan Wo Ironworks	Florence	Kong	fykong@gmail.com
51	Lai & Associates Geotechnical Engineers	Steve	Tsang	stsang.lai@gmail.com
52	McCarthy Building Companies, Inc.	Rich	Distler	rdistler@mccarthy.com
53	M-I-C, Inc.	Mickey	Schriefer	mickey@m-i-cinc.com
54	MIG/TRA	Barbara	Beard	bbeard@migcom.com
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60	P&F Distributors	Thomas	Vedder	tom@pfdistributors.com
61	Pari & Gershon Incorporated	Romena	Jonas	rjonas@pgiinc.net
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63	RMC Water & Environment	Marc	Makamoto	mmakamoto@rmcwater.com
64	Ryan Process Inc.	Chuck	Decker	cd@ryanprocess.com
65	Schaaf & Wheeler	Peder	Jorgensen	pjorgensen@swsv.com
66	Shelf Investments	Fran	Taro	fran_taro@yahoo.com
67	Skanska	Steve	Agor	steve.agor@skanska.com
68	Stantec	Steven	Beck	steven.beck@stantec.com
69	Stantec	Wendy	Chen	wendy.chen@stantec.com
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71	Stevens Creek Quarry	Mark	Idemoto	midemoto@scqinc.com
72	SWCA Environmental Consultants	Seth	Dallmann	sdallmann@swca.com
73	Towill, Inc.	John	May	john.may@towill.com
74	U&R Civil Engineers and Surveyors	Mark	Sorenson	mark@uandr.com
75	V&A Consulting Engineers, Inc.	Karol-Lynn	Reed	kreed@vaengineering.com
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