Digested Sludge Dewatering Facility
Approval of Amended and Restated Contract

CIP

San José-Santa Clara Regional Wastewater Facility

San José City Council Item No. 6.1 March 1, 2022

Presenters: Environmental Services Department
Mariana Chavez-Vazquez, Deputy Director, RWF CIP
Alicia Alba, Principal Engineer, RWF CIP

Project History – PMP and Biosolids Transition Planning

2013

Approval of Plant Master Plan
- Incorporated Milpitas Guiding Principles
- Recommended new Biosolids Management Program

2015

Approval of Biosolids Transition Strategy
- Proceed with temperature-phased anaerobic digestion (TPAD) process, **New Dewatering Facility**, retirement of lagoons and drying beds, postponement of on-site thermal and greenhouse drying facilities, and procurement of various off-site disposition service contracts

Approval of Odor Control Implementation Plan
- Completion of Phase 1 and decommissioning of lagoons and drying beds needed to achieve RWF's odor goal and fence line (Phase 1: DTFU, New Headworks, **New Dewatering Facility**, and East PC Rehabilitation)

2019

Approval of Design-Build Contract with Walsh Construction Company (Prelim. Services) & Completion of Biosolids Disposition Market Assessment
- Limited capacity around SF Bay Area with no single service provider with sufficient capacity
- Increasing prices to beneficially use biosolids

2021

Approval of Dewatered Biosolids Management Strategy
- Procure short-term contracts for off-site beneficial use of the RWF's dewatered biosolids, develop an on-site fertilizer facility, and permit local natural and working lands to receive biosolids

Issued RFP for Transportation and Beneficial Use Services for Dewatered Biosolids

2022

Senate Bill 1383 Regulations Take Effect
- Goal: Reduce short-lived climate pollutants in landfills
- Organic waste definition includes biosolids and its use as ADC is considered landfill disposal

San José-Santa Clara Regional Wastewater Facility

Drivers for Dewatering Facility

- Position RWF to have multiple and diversified end use options
- Reduce Odors in the Community
- Reduce footprint of Biosolids Processing area and enable other land use
- Provide Flexibility to respond to regulatory changes and market preferences

San José-Santa Clara Regional Wastewater Facility

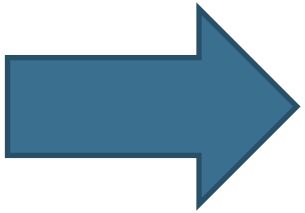
Current and Future Biosolids Management

Design Build Contract - 2 Phases

Original Contract

Preliminary Services Phase

- Awarded in June 2019 to Walsh
- $7.4M plus 10% contingency, including:
  - Permitting,
  - Subsurface investigations
  - Condition assessments
  - Design to 60%
  - GMP
- Status: Completed Nov. 2021
- Early Work Package for $10.0M initiated in July 2021



Contract Negotiations

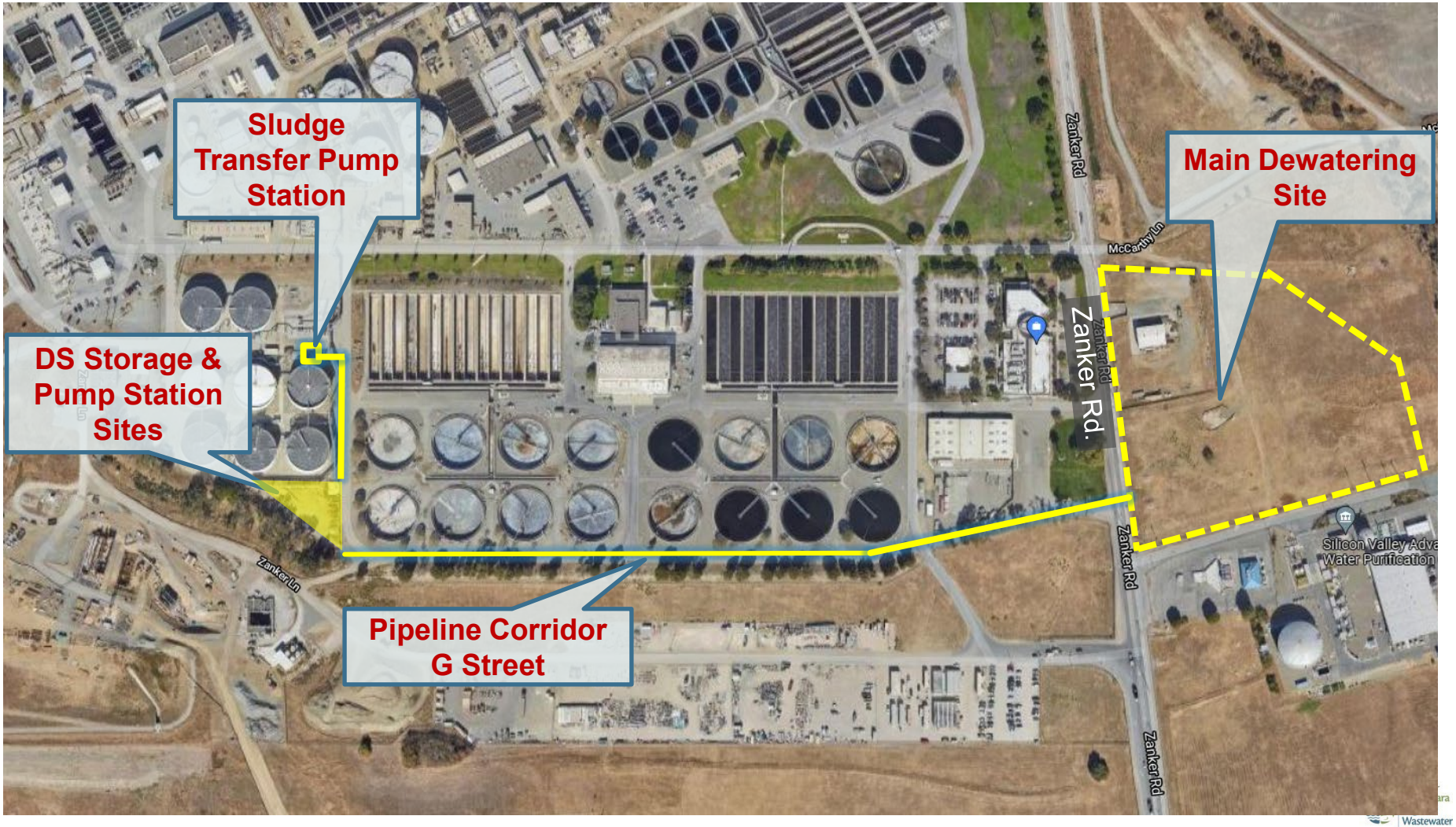
Amended Contract

Design-Build Phase

- $131M (includes EWP) plus 10% contingency
- Including:
  - Permitting
  - Construction
  - Engineering Services
  - Startup and commissioning
  - Acceptance testing
  - Transitional Services
- Notice to Proceed: March 2022
- Final Completion: July 2025

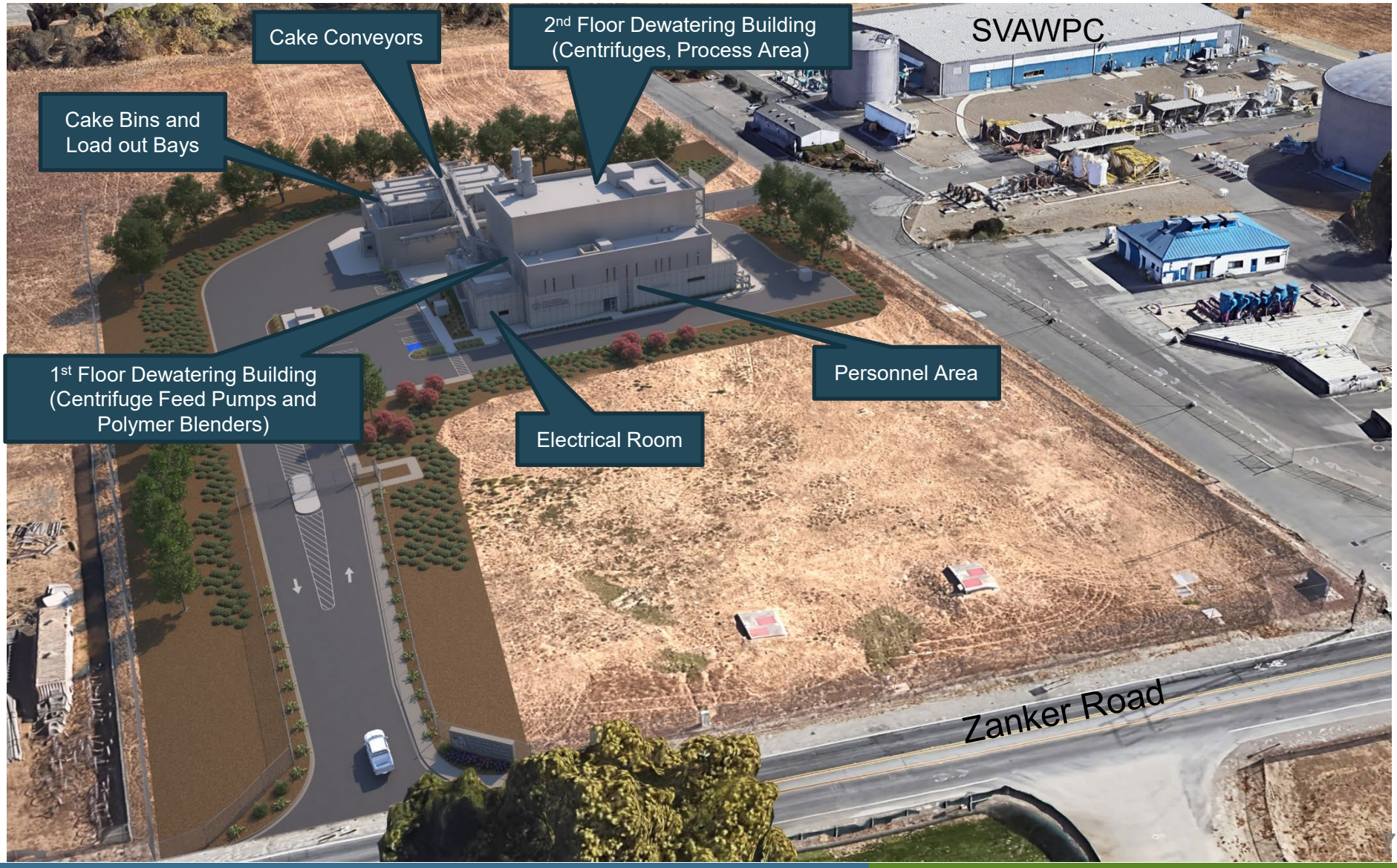
San José-Santa Clara Regional Wastewater Facility

Dewatering Project Overview – Site Location



Wastewater Facility

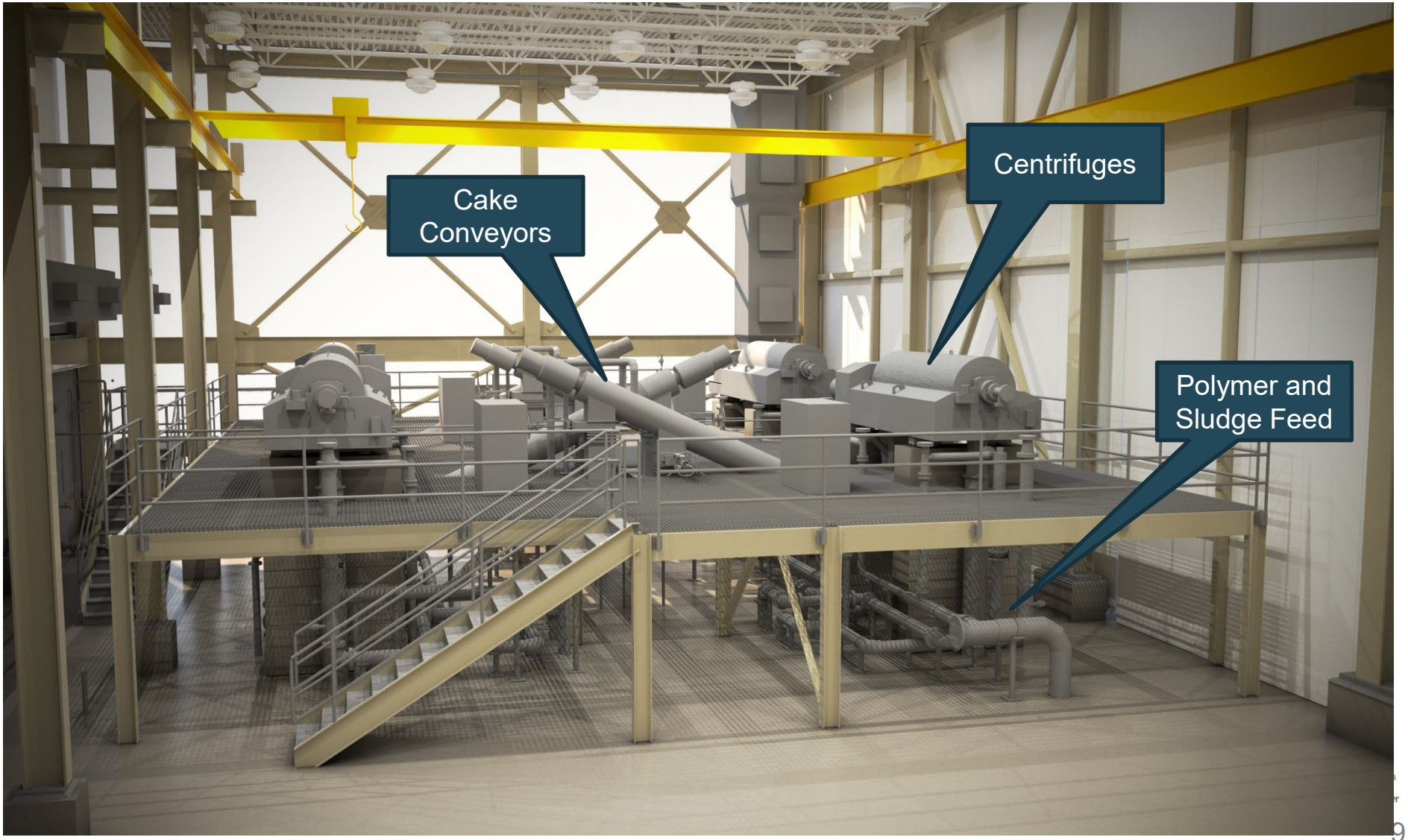
Rendering of New Dewatering Facility



View of Access from Zanker Road

San José-Santa Clara Regional Wastewater Facility

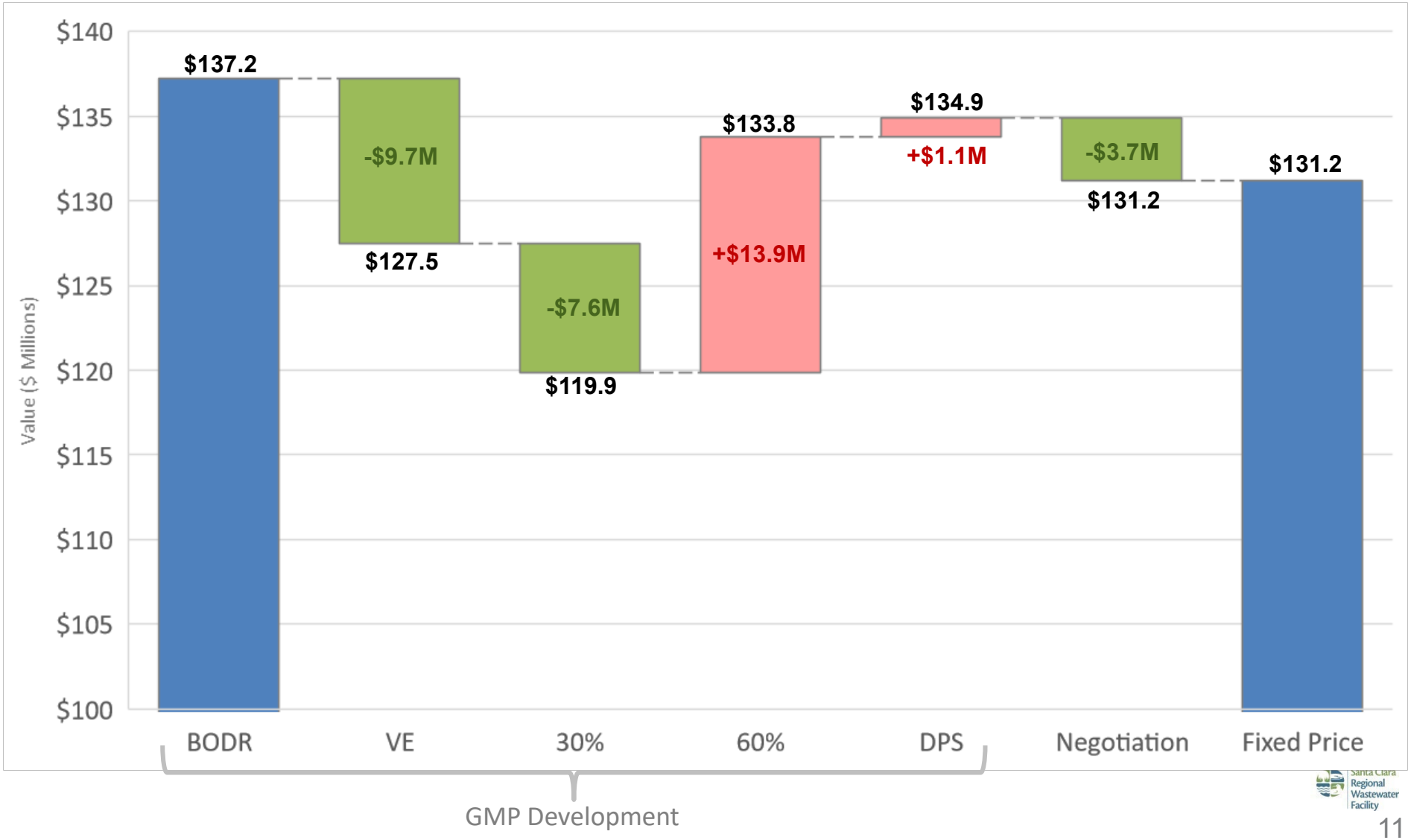
View of Centrifuges for Dewatering Sludge



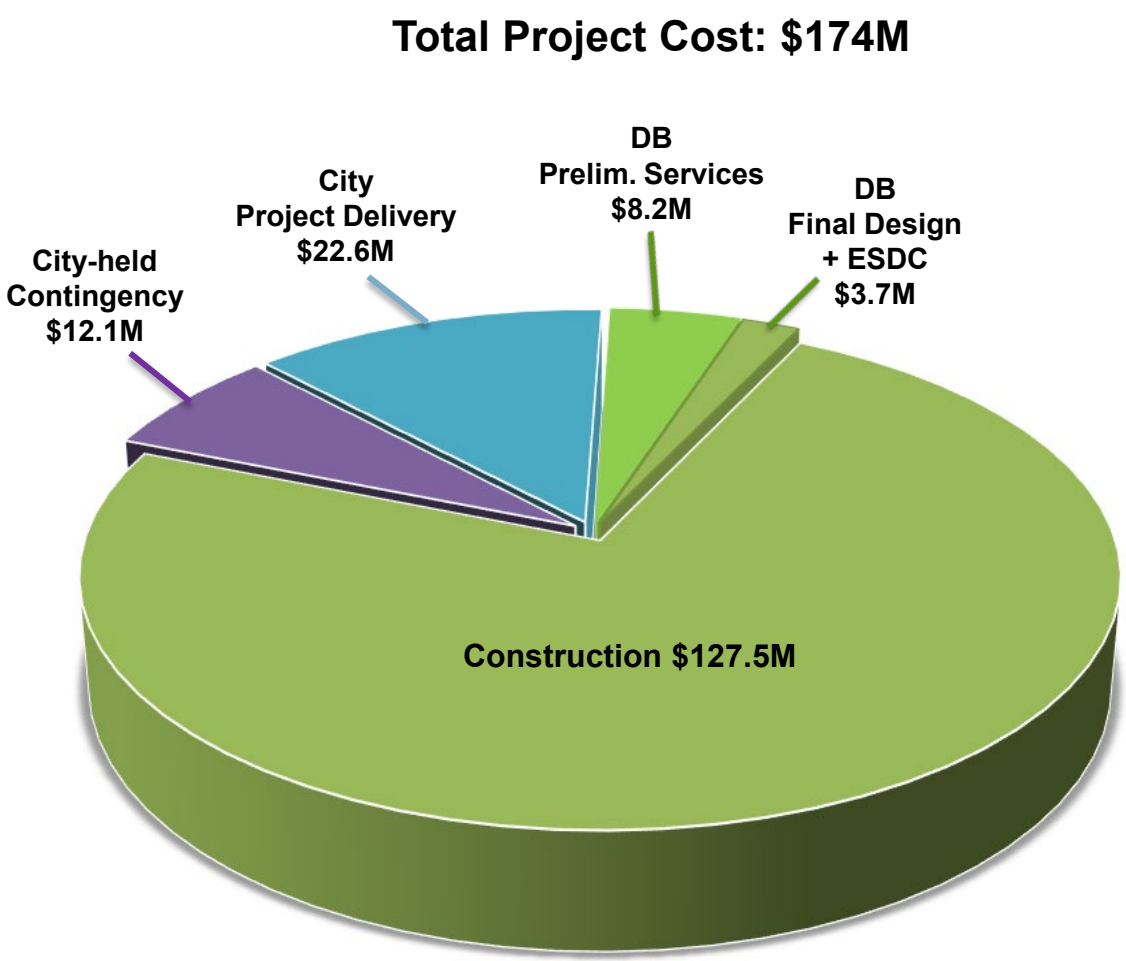
Amended Contract Negotiations

- Issues and Challenges:
  - Market conditions due to COVID impacts have led to supply chain issues resulting in higher cost escalation and schedule impacts:
    - *Lack of inventory leading to longer material/equipment procurement times*
    - *Subcontractor bid prices expiring within 30 to 60 days compared to usual 90-120 days*
    - *Higher subcontractors' bids e.g Glazing, HVAC, Fencing, Curb and Gutter, Landscaping, Paving, Electrical, Misc. Metals.*
- Steps taken to ensure fair pricing:
  - Open book pricing by design-builder (early cost model)
  - Value Engineering (Program Practice)
  - Independent cost estimate reviews, analyses and benchmarking (Program Practice)
  - Competitive bidding of subcontractor and supplier packages
  - Collaborative risk management: DB contingency; market escalation risk
  - Negotiation of Fixed Price Contract:
    - *Reduced Walsh's Price from $134.7M to $131.2M*
    - *Increased Walsh's Delay Liquidated Damage from $1,000 per day to $7,000 per day*

Cost Evolution of Price



Project Cost Summary



Fixed Price Build-Up

- Final Design (60-100%)
- Engineering Services During Construction
- Construction
  - Direct Costs
  - General Conditions
  - Overhead and Profit
  - DB Contingency
  - Escalation
  - Allowances

Total Fixed Price: DB Final Design + ESDC ($3.7M) + Construction (incl. EWP) ($127.5M) =131.2M

San José-Santa Clara Regional Wastewater Facility

Recommendation

1. Approve the Amended and Restated Design-Build Contract (Amended Contract) with Walsh Construction for the final design, construction, commissioning and acceptance testing of the Digester Sludge Dewatering Project at the San José-Santa Clara Regional Wastewater Facility with a base Fixed Price of $131,161,646**.**

2. Approve a ten percent construction contingency (excluding the EWP price) in the amount of $12,115,379 for adjustments to the base Fixed price in accordance with the Amended Contract.

San José-Santa Clara Regional Wastewater Facility