

#### Mills Plant Electrical Upgrades

Engineering and Operations Committee Item 7-3 November 8, 2021

#### **Current Action**

- Award a \$9.2 million contract to CSI Electrical Contractors, Inc. for Stage 2 electrical upgrades at the Mills plant
- Authorize granting of a permanent easement to Riverside Public Utilities
- Authorize an increase of \$830,000 to an agreement with Lee & Ro, Inc., for a new not-to-exceed amount of \$1,927,000

#### **Distribution System**

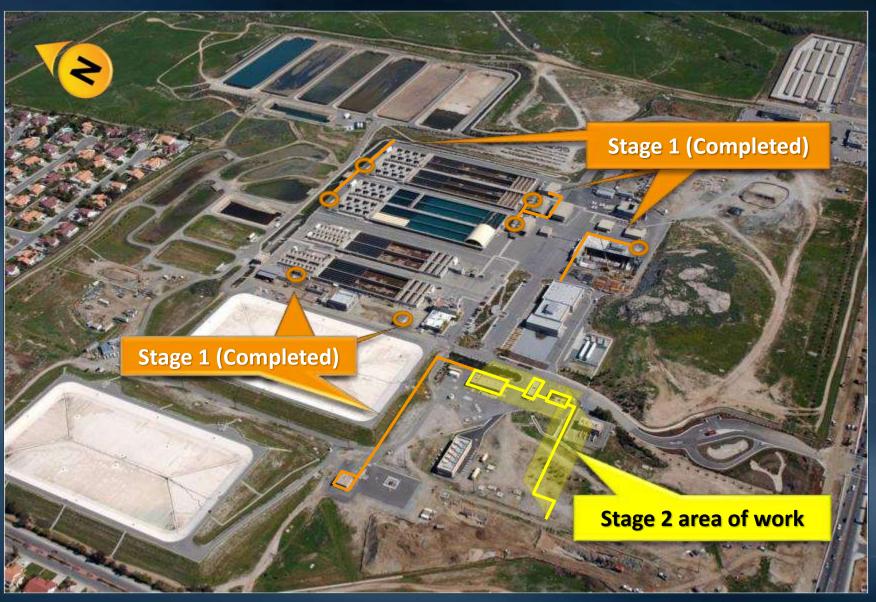


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#### Mills Plant



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# **Electrical Upgrades**

#### Background

- Aging equipment difficult to maintain & repair
- Plant's electrical system is powered by a single electrical feed from the local utility
- Plant vulnerable to shutdown caused by single point of failure

#### Objectives

- Improve reliability & safety
- Replace aging equipment
- Provide backup systems



Mills Plant Existing RPU High-Voltage Switchyard



#### Jensen Plant Switchyard Repair - Example

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#### **Alternatives Considered**

- Complete all electrical work under one large construction contract
  - Extended design period which would have delayed critical work and impact plant operations
- Selected alternative

Staged contracts expedited completion of the most critical work and reduced impact to plant operations

### Scope of Work – Contractor/Utility

- CSI Electrical Contractors, Inc.
  - Expand existing high-voltage switchyard & switchgear building
  - Expand and reconfigure plant's 4.16 kV main switchgear
  - Replace standby generator switchgear
  - Install ductbanks & accessways
- Riverside Public Utilities (RPU)
  - Install RPU-furnished equipment inside the outdoor high-voltage switchyard
  - Energize a second incoming 12 kV electrical service to the Mills plant



Jensen Plant Switchgear Building - Example

#### Scope of Work – Metropolitan

- Provide field inspection, coordinate shutdown & utility power outages
- Perform SCADA system integration
- De-energize equipment for shutdowns, testing & switchover
- Keep plant in service by temporary electrical systems



**Testing & Switchover** 





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#### Existing Agreement – Lee & Ro, Inc.

- Competitively Selected & Engineer of Record
- Scope of Work
  - Review submittals
  - Respond to RFIs
- Prepare record drawings
  SBE/DVBE participation level 100%
  Increased amount \$830,000
  NTE \$1.927 M

#### **Bid Results** Specifications No. 1990

Bids Received No. of Bidders Low Bidder Low Bid Other Bid Engineer's estimate SBE Participation\* September 15, 2021 2 CSI Electrical Contractors, Inc. \$9,200,000 \$11,590,000 \$10,100,000

\*SBE (Small Business Enterprise) participation level set at 25%

### Agreement with Riverside Public Utilities (RPU)

- Metropolitan Board Approval Required for Easement
  - Real property interest to be conveyed exceeds five years & does not contain Metropolitan's standard conditions for easement
  - Provide easement rights to access, install, & maintain electrical equipment
- Installation of Second 12kV Electrical Service
  - RPU agreement amount: \$270,400
  - All customer-requested improvements are performed via a project-specific contract

## Allocation of Budgeted Funds

**Contracts/Agreements** CSI Electrical Contractors, Inc. **Riverside Public Utilities Metropolitan Labor Construction** inspection Force construction Submittals review & record drwgs. Program mgmt. & contract admin. **Professional Services** Lee & Ro, Inc. Materials & Equipment **Remaining Budget** 

\$9,200,000 270,400 1,630,000 1,989,000 595,000 1,100,000

830,000 265,000 1,320,600 Total: \$17,200,000

Total construction cost: \$11.72 M

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#### **Project Schedule**



### **Board Options**

Option #1

- a. Award a \$9.2 million contract to CSI Electrical Contractors, Inc. for Stage 2 electrical upgrades at the Mills plant.
- b. Authorize the General Manager to grant permanent easement to Riverside Public Utilities.
- c. Authorize an increase of \$830,000 to the agreement with Lee & Ro, Inc. for a new not-to-exceed amount of \$1,927,000.

Option #2

Do not proceed with the project at this time.

# Staff Recommendation

Option #1

