



# 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





# Mills Plant





# 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**

# 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**



**SCADA Testing**



**Temporary Power**



# 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	September 15, 2021
No. of Bidders	2
Low Bidder	CSI Electrical Contractors, Inc.
Low Bid	\$9,200,000
Other Bid	\$11,590,000
Engineer's estimate	\$10,100,000
SBE Participation*	25%

\*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.	\$9,200,000
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Riverside Public Utilities	270,400
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## Metropolitan Labor

Construction inspection	1,630,000
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Force construction	1,989,000
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Submittals review & record drwgs.	595,000
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Program mgmt. & contract admin.	1,100,000
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## Professional Services

Lee & Ro, Inc.	830,000
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Materials & Equipment	265,000
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<u>Remaining Budget</u>	<u>1,320,600</u>
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**Total: \$17,200,000**

**Total construction cost: \$11.72 M**

# 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

