

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: JULY 9, 2018

ITEM NO: 5

SUBJECT: PLAZA SUBSTATION 4kV TO 12kV CONVERSION OF CIRCUIT 448 – APPROVE WORK ORDER NO. 1808449 FOR \$973,000

ISSUE:

Approve Work Order No. 1808449 for the Plaza Substation 4kV to 12kV conversion of circuit 448, in the amount of \$973,000.

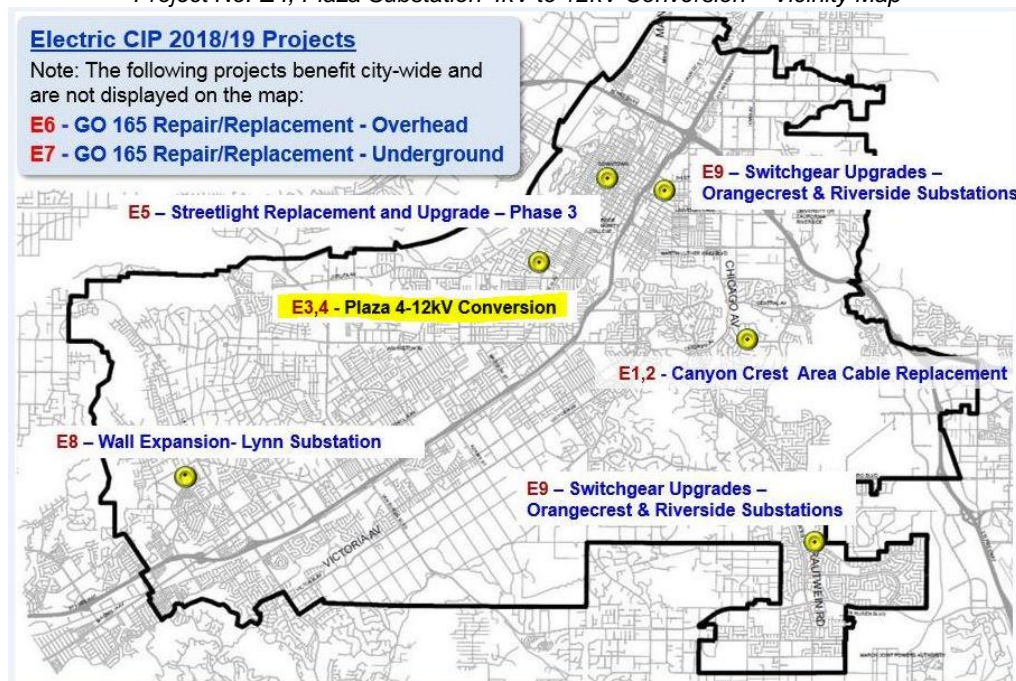
RECOMMENDATION:

That the Board of Public Utilities approve Work Order No. 1808449 for the Plaza Substation 4kV to 12kV conversion of circuit 448 in the amount of \$973,000.

BACKGROUND:

On June 25, 2018, the Board of Public Utilities (Board) received the Planned Routine Capital Projects over \$500,000 for Electric for Fiscal Year 2018-19 report. The report provides an overview of the routine infrastructure projects and highlights the importance of these capital improvement projects. Discussion of these projects was intended to provide context and familiarity of projects that staff plan to bring forward to the Board for approval throughout the fiscal year.

Project No. E4, Plaza Substation 4kV to 12kV Conversion – Vicinity Map



One of the projects discussed was the planned voltage conversion of all remaining 4kV to 12kV distribution circuits to improve system capacity and reliability as recommended in the Electric System Master Plan. This project will upgrade existing 4kV electrical distribution facilities to 12kV and provide additional electrical field ties to existing 12kV circuits to improve system reliability and outage restoration time for area customers. Intermittent electric service disruptions will be coordinated during construction and advanced outage notifications will be issued to minimize the impact to customers.

4kV to 12kV Conversion – Transformer and Cross-arm Replacement



DISCUSSION:

The scope of work will upgrade electric distribution facilities north of Arlington Avenue, south of Central Avenue, east of Brockton Avenue and west of De Anza Avenue. The work includes the replacement and installation of 29 wooden poles, 23 transformers, 1980 linear feet of cable and related overhead and underground distribution facilities. The project will convert 21,700 linear feet of wires and associated component to a 12kV system. The work also includes the removal 17,875 linear feet of underground primary cable. The project will be constructed using RPU crews; no civil work is required as part of this project.

The project will replace existing aging 4kV distribution facilities with new 12kV electric distribution facilities to improve system reliability and safety, improve power quality and electric service to customers in the area, and replace aging infrastructure that is beyond its useful life. Replacement of 4kV to 12kV and related distribution facilities is identified as part of the Utility 2.0 Electric Infrastructure Road Map.

Riverside Public Utilities (RPU) electrical engineering staff designed the project to eliminate any negative visual impacts to the project and surrounding area, with sensitivity to the existing neighborhood, and within City Planning guidelines for the designated area of the project. Electrical work will be completed by RPU field forces.

The project breakdown is proposed as follows:

Project Breakdown	
Engineering Performed By:	RPU Engineering Staff
Civil Construction Performed By:	None
Electrical Work Performed By:	RPU Field Forces
Anticipated Start Date:	August 2018
Anticipated Duration:	24 Weeks
Coordination Required With:	RPU Field Superintendent
Reimbursements:	None

The breakdown for the total capital expenditure is as follows:

Description	Amount
Design, Construction Management, and Inspection	\$48,156
Electric Construction	\$840,767
Electric Construction Contingency – 10% of Electric Work	\$84,077
Total	\$973,000

FISCAL IMPACT:

The total fiscal impact for Work Order No. 1808449 is \$973,000. Sufficient funds are available in Public Utilities Electric Capital Account No. 6130100-470644.

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Approved by: Todd L. Jorgenson, Interim Utilities General Manager
Approved by: Al Zelinka, FAICP, City Manager
Approved as to form: Gary G. Geuss, City Attorney

Certifies availability of funds: Laura M. Nomura, Utilities Assistant General Manager/Finance & Administration

Attachment: Presentation

Project Site Map

