

PLAZA SUBSTATION 4kV to 12kV CONVERSION CIRCUIT 458 (PHASE 1)

Energy Delivery

Board of Public Utilities
April 9, 2018

RiversidePublicUtilities.com



1

BACKGROUND

1. On July 10, 2017, the Board received the Planned Routine Electric and Water Capital Projects over \$500,000 in FY 17/18 report to streamline the approval process
2. 4kV to 12kV conversions projects replace obsolete facilities with modern, higher capacity distribution equipment
3. Improve system reliability, safety, and power quality

RiversidePublicUtilities.com



2

AGED INFRASTRUCTURE

1. Upgrade obsolete system to a modernized 12kV system
2. Replace aged infrastructure that's beyond its useful life
3. Unreliable, inefficient, and lack switching capabilities
4. Replacement of aged overhead infrastructure is identified in the Utility 2.0 Electric Infrastructure Road Map

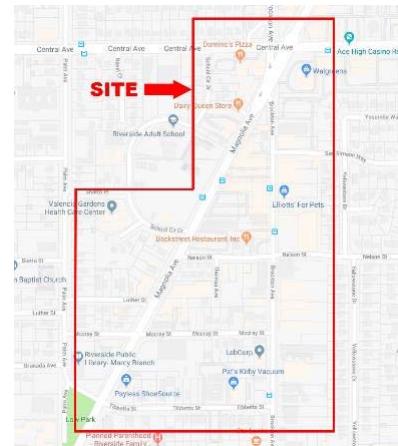


3

RiversidePublicUtilities.com

PROJECT LOCATION

1. North of Tibbetts Street, south of Central Avenue, east of Magnolia Avenue and West of Brockton Avenue
2. The project will upgrade facilities to approximately 189 customers
3. Customers will be notified in advance before start of work
4. Electric service disruptions will be coordinated to minimize impact to customers



4

RiversidePublicUtilities.com

SCOPE OF WORK

1. Replace and upgrade 22 wooden poles, 18 transformers, related facilities
2. Convert approximately three miles of primary overhead wires
3. Remove existing aged overhead and underground facilities
4. 16 weeks to complete work



5

RiversidePublicUtilities.com

BENEFITS

1. Keep up with increased demand for electricity
2. Improve overall system efficiency
3. Increase system reliability and safety
4. Faster outage restoration by transferring loads to nearby 12kV circuits
5. Improve electric service and power quality



6

RiversidePublicUtilities.com

FISCAL IMPACT

Description	Amount (\$)
Design, Construction Management, and Inspection	\$83,700
Electric Construction	\$987,545
Electric Construction Contingency-10% of Electric work	\$98,755
Total	\$1,170,000

RiversidePublicUtilities.com



7

RECOMMENDATION

That the Board of Public Utilities approve Work Order No. 1708710 for the Plaza Substation 4kV to 12kV Conversion of Circuit 458 (Phase 1) in the amount of \$1,170,000.

RiversidePublicUtilities.com



8