



City of Emeryville

CALIFORNIA

MEMORANDUM

DATE: FEBRUARY 7, 2017

TO: Carolyn Lehr, City Manager

FROM: Maurice Kaufman, Public Works Director

SUBJECT: Resolution Of The City Council Of The City Of Emeryville Authorizing The City Manager To Enter Into A Contract With DC Electric Inc. In An Amount Not To Exceed \$193,928 For The Construction Of The Lumec Streetlight LED Retrofit Project, EPW 106-16 (CIP #15475015)

RECOMMENDATION

Staff recommends that the City Council authorize the City Manager to enter into a contract with DC Electric Inc. in an amount not to exceed \$193,928 for the Lumec Streetlight LED retrofit project.

BACKGROUND

The Capital Improvement Program adopted by the City Council in June 2016 includes funding for the Lumec Streetlight Pole Painting and LED Retrofit, CIP (#15475015). To increase quality control and efficient management of the project, the LED retrofit of the streetlights will be performed as a separate construction project prior to the painting of the poles.

The retrofit project includes upgrading to Lumec streetlights throughout the City of Emeryville from the existing 100 and 175 watt metal halide fixtures to 65 watt LED fixtures. The LED fixtures use a more energy efficient lamp than the existing metal halide fixtures, and LED lamps have a much longer lamp life and do not require replacement of failed ballasts. The new LED fixtures will reduce annual maintenance and energy costs and will help in achieving the City's goals in the Climate Action Plan.

The attached Exhibit A contains a Project Overview Map and the approximate number of streetlight poles to be retrofitted as follows:

96 triple-fixture poles (to be converted to double-fixture poles);
174 double-fixture poles; and
269 single-fixture poles.

The most cost effective way to purchase the Lumec materials needed for the project was for the City to buy them directly from Lumec's local distributor at a discounted price as opposed to a contractor making the purchase for a listed price and marking up the cost to the City. On September 6, 2016 the City Council authorized the City Manager to

purchase the materials from Independent Utility Supply of Tracy, California in an amount not to exceed \$982,930.04. Given that there is a 10 to 12 week lead time to ship the materials and given that the materials will occupy a large space for storage once they are shipped, the materials were ordered in late January 2017 once a responsible bid was received for the construction contract for the installation of the materials.

On September 6, 2016, the City Council also approved the project concept plans for the Lumec Streetlight LED Retrofit Project, EPW 106-16 (CIP #15475015) and authorized the City Engineer to advertise the project for public bids. The project includes rewiring poles to eliminate ballasts, installing new photo cells and installing new City furnished LED fixtures. This project was also determined to be exempt under categorical exemption Class 1 Existing Facilities, State CEQA Guidelines Section 15301(c).

Construction Bids:

On December 12, 2016, the City advertised the project and invited bids. On January 10, 2017, the following bid proposals for the project were received:

- | | |
|------------------------------|-----------|
| 1. DC Electric Inc. | \$193,928 |
| 2. NET Electric Inc. | \$209,000 |
| 3. Nema Construction Inc. | \$276,250 |
| 4. St. Francis Electric Inc. | \$282,122 |
| 5. Long Electric Inc. | \$334,366 |
| 6. Ray's Electric In. | \$418,070 |

DC Electric. of Cotati, CA submitted the lowest responsible bid in the amount of \$193,928 which includes a contingency of \$10,000 and is significantly less than the Engineer's Estimate of \$400,000.

With an estimated 10 week lead time for material ordering, it is anticipated that the Contractor will begin construction in April and will have 120 working days to complete the project.

FISCAL IMPACT

Streetlight operation and maintenance costs are expected to decrease as a result of this project. PG&E's billing rates for LED streetlight lamps are nearly one third that of the existing metal halide lamps. In particular, the current PG&E flat rate for a 175 watt and a 100 watt metal halide lamp amounts to \$11.29 and \$6.43 per month respectively. The current PG&E flat rate charged for a 65 watt LED lamp amounts to \$3.35 per month. With the completed project, Staff estimates that there will be a net savings of almost two thirds of the amount currently being paid to PG&E for streetlight energy for these lamps.

Staff is also working with PG&E to receive a rebate for the conversion of the existing streetlights to LED's. It is Staff's understanding that the rebate is \$50 per lamp retrofitted, which amounts to approximately \$31,750.

Maintenance costs will also be reduced since LED fixtures do not utilize the high maintenance ballasts that metal halide fixtures require and LED lamps have a significantly longer lamp life (5-10 times longer) than metal halide lamps. The City currently pays a monthly flat rate of \$3.19 per month for the maintenance of the Lumec fixtures with metal halide lamps. It is anticipated that the flat rate will be reduced to approximately \$1.00 per month.

Lastly, converting the existing triple fixture poles to double fixture poles, will eliminate ninety-six 100 watt lamps on the system, which creates an additional operational and maintenance savings of approximately \$11,000 per year.

There is \$2,025,000 in funds allocated in the Lumec Streetlight Pole Painting and LED Retrofit Project, EPW 106-16 (CIP #15475015) and this amount is sufficient to cover the anticipated project costs. The following estimated costs have been identified:

Construction Contract (DC Electric Inc. Contract.):	\$ 193,928
City Furnished Materials (Independent Utility Supply):	\$ 982,930
Construction Inspection (WC3):	\$ 15,000
Total for LED Retrofit:	\$ 1,191,858
Project Budget (Pole Painting and LED Retrofit)	\$2,025,000
Budget Remaining for Pole Painting	\$833,142

Detailed estimates for pole painting are yet to be completed but it is expected that painting can be done within the remaining project budget.

CONCLUSION

Staff concludes that it is in the public's interest for City Council to adopt the above stated resolution.

PREPARED BY: Michael Roberts, Senior Civil Engineer, Public Works

**APPROVED AND FORWARDED TO THE
CITY COUNCIL OF THE CITY OF EMERYVILLE:**



Carolyn Lehr, City Manager

ATTACHMENTS

1. Resolution

2. DC Electric Inc. Contract
3. Exhibit “A” – Project Overview Map