



Legislation Text

File #: 10-0555, **Version:** 1

Resolution to Authorize the Purchase of LED Cobra Head Streetlight Fixtures from Lumecon (\$163,437.50) ITB-4081

The attached resolution will authorize the purchase of 250 LED streetlight cobra head street light fixtures from Lumecon. The purchased fixtures will be installed in the residential neighborhoods of the City.

In order to achieve energy and maintenance savings, the Public Services Area Field Operations Unit began the process of converting all the City-owned streetlight to LED fixtures in 2007. Crews began the project with the conversion of 1,000 downtown streetlights through a grant from the Downtown Development Authority. This phase of the project is on pace to be completed by September of 2010.

With the authorization of this purchase, we are preparing to move into phase II of the project in the residential areas. We will be replacing the current 100 Watt cobra head fixtures which will address the majority of the City-owned residential streetlights. Once completed, we will move to phase III of the project along the arterials in the City which is comprised mostly of 250 Watt cobra head fixtures.

Staff from the Field Operations Unit of the Public Service Area solicited bids (ITB-4081) for the fixtures. The bid had detailed specifications for our lighting requirements that would ensure that the City receives a quality product. We received twenty-three responses to the bid. The twenty-three bidders were all evaluated for the photometric requirement of the bid. Only three of the bidders met the photometric specification portion of the bid.

The three remaining bidders were evaluated for the remaining requirements and specifications of the bid. Of the three remaining bidders, Lumecon was the only vendor to respond to all bid requirements. One of the most important requirements of the bid was an In-Situ report. Because LEDs rarely fail catastrophically like conventional light bulbs, an industry standard has been developed to define and estimate the useful life of LEDs. This standard, known as L70, sets 30% degradation of light output as the end-of-life. In-situ LED temperature measurement and LED manufacturers' LM-80 test data are used with a regression and linear modeling yield curves to predict L70 performance at given drive currents and junction temperatures. The bid specification required a maximum of 52 degree C. Independent third party certification by an energy start laboratory was required in the bid specifications. Without this report there is no way to confirm the L70 lifetime of the fixture. Lumecon was the only vendor to meet this bid requirement.

The City has received a US Department of Energy for Energy Efficiency and Conservation Block Grant in the amount of \$1,243,400.00. Council accepted the grant and appropriated the monies to fund LED streetlight conversions with resolution R-09-501. The project includes LED streetlight upgrades for the approximately 800 City-owned streetlights within the City of Ann Arbor.

City staff from the Public Service Area, Field Operations Unit will install the 250 cobra head fixtures in the residential neighborhoods. This installation process is expected to take six to eight months. We

anticipate 50-70% in energy and maintenance savings after installation.

Lumecon received Human Rights approval on May 3, 2010.

Grant funds will be available for the life of the project regardless of fiscal year. The Energy Office will provide grant management services and Field Operations will serve as project manager.

Prepared By: Chuck Fojtik, Field Operations Supervisor, Craig Hupy, Acting Field Operations Manager, Andrew Brix, Energy Programs Manager

Reviewed By: Sue F. McCormick, Public Services Administrator

Approved By: Roger W. Fraser, City Administrator

Whereas, The City of Ann Arbor is in support of new energy technology and energy savings;

Whereas, Lumecon was the only respondent to meet all bid specifications and requirements of ITB-4081;

Whereas, Lumecon received Human Rights Approval on May 3, 2010;

Whereas, The City of Ann Arbor was a recipient of a US Department of Energy for Energy Efficiency and Conservation Block Grant in the amount of \$1,243,400.00;

Whereas, LED Streetlight upgrades are a component of this grant;

Whereas, We anticipate a 50-70% savings in energy and maintenance costs; and

Whereas, This grant will assist the City of Ann Arbor in continuing its leadership role in the installation of LED Light bulbs for energy conservation and cost savings;

RESOLVED, That a purchase order in the amount of \$163,437.50 be authorized to Lumecon for the purchase of 250 LED cobra head streetlight fixtures; and

RESOLVED, That the City Administrator be authorized to take the necessary administrative actions to implement this resolution.