

# DD1391- Tab C

## EW-201017: Bi-Level Demand Sensitive Street Lighting

The project will install a smart demand-sensitive light-emitting diode (LED) outdoor street lighting system. The system uses sensors and a central server to operate the LED streetlights on a light and demand based schedule, saving the installation up to 75% in energy costs compared to the existing high-intensity discharge (HID) lamps. The project is required to cut facility energy costs while providing a safer nighttime environment for facility personnel. The system will replace the existing streetlights with more efficient and brighter lighting, resulting in increased cost savings, safety, and satisfaction, as well as decreased carbon emissions. The proposed systems will greatly reduce maintenance costs. The new system also eliminates mercury-based bulbs, eliminating the disposal costs and environmental risks the existing system carries. The new lights will be mounted on existing poles. The system helps ensure the sustainability of the base, in accordance with DoD and Federal policies. The LED luminaires are expected to last a minimum of 12 years, compared to 3 years per HPS bulb. The lighting quality of the new system exceeds that of the existing system in all required metrics and provides for better compatibility with security camera systems.

Additional: The estimates provided in this form are based on the final Cost and Performance Report for Environmental Security Technology Certification Program (ESTCP) Project Number EW-201017.