

CITY OF SANTA ROSA  
CITY COUNCIL

TO: MAYOR AND CITY COUNCIL  
FROM: DOUGLAS WILLIAMS, FACILITIES MAINTENANCE AND  
OPERATIONS COORDINATOR, DEPARTMENT OF  
TRANSPORTATION AND PUBLIC WORKS.  
SUBJECT: PROFESSIONAL SERVICES AGREEMENT WITH AECOM  
TECHNICAL, INC. FOR CITY FACILITY ENERGY AUDIT AND  
MICROGRID STUDY

AGENDA ACTION: RESOLUTION

---

RECOMMENDATION

It is recommended by the Department of Transportation and Public Works, that the Council, by resolution, approve a Professional Services Agreement with AECOM Technical Services, Inc. of Los Angeles, California, to conduct a City Facility Microgrid Study and Energy Audit for City owned structures and property, in the amount of \$254,090 and appropriate the funding for the contract from the General Fund unassigned reserves.

---

EXECUTIVE SUMMARY

The Transportation and Public Works Department has been delegated the responsibility of maintaining the City's buildings and public structures. To improve the Department's ability to properly deploy staff resources, develop a long-term maintenance program, and to assist City Council with Climate Action goals, staff is recommending retaining a consultant to perform a City Facility Microgrid Study and Energy Audit.

The Microgrid study will occur at two general locations which include the following facilities:

1. Municipal Service Center North, Municipal Service Center South, Transit Operations Building, Finley Community Center, and the Fire Training Center.
2. City Hall Complex, City Hall Annex, Chamber Building, and the Public Safety Building.

The energy audit will be an American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Level 2 Audit that shall qualify and quantify how the

building energy systems are performing now and how that performance can be improved for General Fund facilities.

The renewable energy and storage recommendations will identify renewable energy and storage projects for General Fund facilities and City owned properties. The recommendations shall include a cost analysis of the project, utility cost savings, and the reduction of the City of Santa Rosa's carbon footprint as a result of a renewable energy and storage project implementation.

The ultimate goal of the audit will be to provide enough information for the city to determine how much funding should be set aside each year for each facility in order to properly maintain facilities, meet overall city fiscal sustainability goals, and reach climate action goals. After an extensive evaluation process, staff is recommending awarding a professional services agreement to AECOM Technical Services, Inc. in the amount of \$254,090.

## BACKGROUND

The Facilities Maintenance section completed a facilities assessment and maintenance analysis in January 2018. The consultant assessed the structures, building systems, and infrastructure components for the general fund supported buildings. The Facility Condition Assessment identified current deferred maintenance, recommended annual maintenance funding levels, and prioritized capital improvements and major repairs necessary to maintain the facilities.

The proposed City Facility Microgrid Study and Energy Audit coupled with the existing Facilities Assessment will help develop a comprehensive replacement plan of all systems at each of the facilities, determining both deferred maintenance needs and long-term maintenance schedules. This work will help Facilities to focus on addressing deficiencies that conserve energy and lower the City of Santa Rosa's carbon footprint.

A microgrid is a self-sufficient, local energy generation system that can operate independently or congruently with the centralized power grid. The microgrid study will help determine how the City of Santa Rosa may use renewable energy and storage to move toward energy independence and keep essential services operating during power outages.

## PRIOR CITY COUNCIL REVIEW

On January 28, 2020 during the Study Session (3.1) City Council directed the Transportation and Public Works Department to pursue an Energy Audit for City facilities.

## ANALYSIS

The City of Santa Rosa understands the condition of our fixed building assets as a result of the Facilities assessment completed in January 2018.

The Transportation and Public Works Department pursued a City Facility Microgrid Study and Energy Audit to understand:

- Where energy savings and lowering our greenhouse gases can target assets that are beyond their useful life, consuming the most energy, and contributing the most to our carbon footprint.
- Potential sites for renewable energy generation and storage.
- The potential for the City Hall complex and Municipal Service Center sites for microgrid technology.

On August 6, 2020, staff issued a request for proposal. Seven proposals were received and evaluated by an internal review committee consisting of staff members from the Transportation & Public Works Department. Two consultants' proposals were deemed non-responsive. A grading evaluation was completed by each committee member and one vendor unanimously scored the highest. The committee agreed that AECOM Technical Services, Inc. best met the City's needs for a City Facility Microgrid Study and Energy Audit and was additionally the most economic choice.

AECOM Technical Services, Inc. demonstrated through their proposal a clear understanding of the City of Santa Rosa's needs for this project.

The consultant will assess City facilities and properties for the energy audit, renewable energy and storage recommendation, and microgrid study. The report will contain three parts:

### **Microgrid Technology Recommendations**

Consultant will conduct a feasibility study and make recommendations for microgrid technologies at City facilities located at:

1. Municipal Service Center North, Municipal Service Center South, Transit Operations Building, Finley Community Center, and The Fire Training Center.
2. City Hall Complex, City Hall Annex, Chamber Building, and the Public Safety Building.

### **ASHRAE Level 2 Audit – Energy Survey and Analysis**

Consultant shall qualify and quantify how the building energy systems are performing now and how that performance can be improved for each facility listed in the Request for Proposal. Consultant will evaluate the building energy systems in detail to define a

variety of potential energy-efficiency improvements. This shall include the Building Envelope, Lighting, Heating, Ventilation, and Air Conditioning (HVAC), Domestic Hot Water (DHW), and Compressed Air and Process Uses. The audit shall include an evaluation of lighting, air quality, temperature, ventilation, humidity, and other conditions that may affect energy performance and occupant comfort. The process also includes detailed discussions with the building management team and occupants to explore potential problem areas and clarify financial and non-financial goals of the program. The audit shall result in a clear and concise report and briefing with the management team, describing a variety of Energy Efficiency Measures (EEMs) including no- and low-cost measures, modifications to system controls and building automation, operational changes, and potential capital upgrades. The findings shall include costs and performance metrics, as well as a means for the City of Santa Rosa to evaluate the EEMs and decide how to proceed with implementation.

### **Renewable Energy and Storage Recommendations**

Consultant will identify renewable energy and storage projects for City owned facilities, and properties listed in the Request for Proposal. The recommendations shall include a cost analysis of the project, utility cost savings, and the reduction of the City of Santa Rosa's carbon footprint as a result of a renewable energy and storage project implementation.

### **FISCAL IMPACT**

The funding for this project needs to be appropriated from the General Fund reserves in the amount of \$254,090 into JL 17566.

### **ENVIRONMENTAL IMPACT**

This action is exempt from the California Environmental Quality Act (CEQA) because it is not a project which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guideline section 15378.

### **BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS**

On September 22, 2020, the Transportation and Public Works Department briefed the Climate Action Subcommittee on the status and details of the proposed study. The Subcommittee provided comments and supported the Transportation and Public Works Department in bringing this proposal to Council.

### **NOTIFICATION**

Not applicable.

PROFESSIONAL SERVICES AGREEMENT WITH AECOM TECHNICAL, INC. FOR  
CITY FACILITY ENERGY AUDIT AND MICROGRID STUDY

Page | 5

ATTACHMENTS

- Resolution / Exhibit A (Professional Service Agreement).

CONTACT

Douglas Williams, Facilities Maintenance and Operations Coordinator  
[dwilliams@srcity.org](mailto:dwilliams@srcity.org), (707) 543-3712