RESOLUTION 2013 - 100

ORIGINAL

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SUNNYSIDE, WASHINGTON, AUTHORIZING AGREEMENT WITH MCKINSTRY FOR AN INVESTMENT GRADE AUDIT

WHEREAS, the City of Sunnyside Public Works Department operates and maintains all City facilities as well as the Waste Water Treatment Plant; and

WHEREAS, City staff has identified energy savings within the WWTP and lighting upgrades within numerous City facilities and has an opportunity to address these energy issues using programs by the Washington State Department of Enterprise Services (DES) and McKinstry; and

WHEREAS, the City of Sunnyside City Council finds and determines that an agreement with McKinstry for the purpose of providing an Investment Grade Audit (IGA), establishing a vehicle to provide energy/utility conservation projects, and is in the best interest of the residents of the City of Sunnyside and will promote the general health, safety and welfare;

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF SUNNYSIDE, WAHSINGTON, as follows:

SECTION 1. That the Sunnyside City Council hereby approves the proposal for an Investment Grade Audit not to exceed $23,312.00 as set forth in the agreement attached hereto as Exhibit "A", and the City Manager is hereby authorized to execute such agreement for and on behalf of the City of Sunnyside and to take all actions reasonable and necessary to administer performance of such agreement.

SECTION 2. This Resolution shall be effective upon passage, approval and signatures hereon in accordance with law.

PASSED this 9th day of December, 2013.

JAMES A. RESTUCCI, MAYOR

ATTEST:

DELILAH SAENZ, CMC, CITY CLERK

APPROVED AS TO FORM:

KERR LAW GROUP, LLP
Attorneys for the City of Sunnyside

Investment Grade Audit Proposal

December 3, 2013

Shane Fisher
Public Works Superintendent
City of Sunnyside
818 E. Edison St.
Sunnyside, WA 98944

Chris McCarthy P. E.
Energy Engineer
Dept. Enterprise Services - E&A Services Energy Group
PO Box 11098, Spokane Valley, WA 99211

Regarding: Investment Grade Audit Proposal | City of Sunnyside

The City of Sunnyside is interested in improving the energy performance, indoor air quality, and HVAC infrastructure of its buildings and facilities through a performance-based energy savings contract with McKinstry. Based on an initial assessment, the targeted buildings have no immediate plans for remodel, some have more use than the energy star benchmark for similar buildings, and have potential mechanical, digital controls, and other renovation needs. This proposal provides the guidelines under which McKinstry will complete the following tasks:

1. Conduct an Investment Grade Audit (IGA) at the targeted facilities.
2. Support City of Sunnyside with an Department of Commerce grant application
3. Develop a comprehensive Energy Services Proposal (ESP) for selected initiatives.
4. Develop a proposal for ongoing Measurement and Verification (M&V).

The target facilities to be studied are as follows:

- City Hall – 15,824 SF – Lighting and Controls
- Water Department – 6,800 SF – Lighting
- Service Buildings – 10,810 SF – Lighting and Controls
- Wastewater Treatment Plant – 7,668 SF – Blower Capacity Controls
- Law and Justice Building – 25,000 SF – Lighting and Controls
- Community Center – 10,050 SF – Gym lighting and Controls Optimization

FOCUS AND OUTCOME OF STUDY | McKinstry proposes under this Investment Grade Audit to focus on developing potential energy conservation and facility improvement measures that will save the City energy and operational costs by focusing on the items shown above for each building.

McKinstry will conduct this Investment Grade Audit over the next 2 months in anticipation of developing a Guaranteed Maximum Construction Cost with the intent of assisting the City in securing any grants and rebates which may be available, including Department of Commerce grants and utility incentives. McKinstry will evaluate potential strategies for leveraging available capital and/or financing for the project.

ACTIONS TO BE PERFORMED |McKinstry will complete the following actions leading to implementation of performance-based initiatives:

Investment Grade Audit (IGA): The study will identify and analyze performance-based

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contracting measures along with their associated savings, costs, and potential for utility rebates and/or grants.

- The preliminary list of opportunities to be investigated can be found in **Attachment A – "Preliminary Opportunity List"**.
- Develop GMAX (Guaranteed Maximum Construction Costs) project budget.
- Provide a rough order of magnitude and pre-final review with the owner to determine improvement measures contained in the final project proposal.
- Deliver an Energy Services Proposal for implementation of selected initiatives with associated energy cost savings and payback information. The deliverables associated with the energy service proposal can be found in **Attachment B – "Investment Grade Audit Deliverables"**.
- The breakdown of hours by trade for the Investment Grade Audit can be found in **Attachment C – "Investment Grade Audit Matrix"**.

REQUESTED INFORMATION | For effective execution of this proposal, we request the City of Sunnyside to provide access to the following:

- Historical utility bills for the last 36 months;
- As-built mechanical, electrical, architectural, and structural plans;
- Operational records related to the cost of maintaining specific equipment, as well as copies of existing service agreements;
- Access to individuals that have relevant information pertaining to the day-to-day operation of energy using systems at this site.

TIMELINE AND MILESTONES | McKinstry will initiate this scope of work immediately upon the execution of an agreement with the City. Formal progress review meetings will be conducted regularly throughout the study phase. During these review meetings, McKinstry will recommend measures based on preliminary analysis, while the City of Sunnyside will provide final direction regarding recommended measures. The goal of these review meetings is to focus engineering efforts, budgeting, and savings assessment on those measures that possess a high probability for implementation. During this time, McKinstry will provide a detailed measurement and verification plan for the energy savings.

McKinstry will target completion of the Investment Grade Audit in time for the January 30th Department of Commerce grant application deadline.

CRITERIA FOR IMPLEMENTATION | It is the City of Sunnyside's intent that McKinstry will implement approved projects that meet the following criteria:

- Aggregate simple payback for measures shall be equal to or less than the useful life of the equipment/system less any utility rebates. Savings will include utility and may include hard-cost operational savings at the City's approval. It is understood that some measures to be studied at the City of Sunnyside may have a simple payback longer than the expected life of the equipment, however these measures to be studied are needs based and are being pursued at the direction of City of Sunnyside.

- The City's loan term may not exceed the economic life of the Facility Improvement Measures implemented.

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- The City may infuse capital from planned capital project budgets or cash reserves to assist with implementation of Facility Improvement Measures.
- McKinstry will work with the following entities to assist with securing conservation grant funding or low interest loans for applicable initiatives:
    - Department of Commerce Energy Operational Savings Project Grants
    - Pacific Power and Light
    - Cascade Natural Gas

FEE BILLING | All fees assessed under this Letter of Intent will be rolled into the final project cost. In the event that McKinstry is unable to recommend projects that meet the above criteria, the City of Sunnyside has no financial obligation to McKinstry. However, if the recommendations meet or exceed the "Criteria for Implementation" (list above), and the City of Sunnyside chooses not to enter into an agreement with McKinstry to implement the projects, the City of Sunnyside shall reimburse McKinstry for its time and expenses, not to exceed **$23,312** plus taxes. All associated information, including deliverables, will become the property of City of Sunnyside upon final receipt of payment.

We appreciate the opportunity to continue serving the City of Sunnyside as your energy partner. Please let us know if we can answer any questions or provide you with additional information.

Respectfully,

Casey McGourin, PE
Program Manager
McKinstry

cc: McKinstry, David Ray

4.1 Attachment A - Opportunity Fim List

Project	City of Sunnyside
Scenario	Attachment A - Opportunity Fim List
Date	December 3, 2013

Building	FIM Name	FIM Description	Strategic Benefit
City Hall	Controls Upgrade	Install new IP addressable programmable thermostats for central scheduling, monitoring and trending.	Saves energy by reducing equipment run time through scheduling. Increases equipment life by reducing equipment run time through scheduling. Provides central web based control for set point adjustment, scheduling, and system monitoring. Could be part of a City wide strategy to integrate controls for all City buildings to a common web based dashboard.
City Hall	Lighting Upgrade	Upgrade T-12 lighting with T-8 fluorescent lighting. Install occupancy sensors for those spaces that have intermittent occupancy.	Reduces energy consumption through a wattage reduction while producing the same or better lighting output. Saves energy by reducing lighting burn times.

EXHIBIT "A"

Water Department	Lighting Upgrade	Replace T-12 shop lighting, outbuilding T-12 and high pressure sodium lighting with more energy efficient T-8 lighting. Provide occupancy sensors for those spaces that have intermittent occupancy.	Reduces energy consumption through a wattage reduction while producing the same or better lighting output. Saves energy through by reducing lighting burn times.
Service Center Buildings	Lighting Upgrade	Upgrade T-12 fluorescent lighting with the more energy efficient T-8 lighting for the main vehicle service building, parks maintenance building, and other storage and outbuildings. Provide occupancy sensing for those spaces that have intermittent occupancy.	Reduces energy consumption through a wattage reduction while producing the same or better lighting output. Saves energy by reducing lighting burn times.
Service Center Buildings	Controls Upgrade	Install new IP addressable programmable thermostats for central scheduling, monitoring and trending.	Saves energy by reducing equipment run time through scheduling. Increases equipment life by reducing equipment run time through scheduling. Provides central web based control for set point adjustment, scheduling, and system monitoring. Could be part of a City wide strategy to integrate controls for all City buildings to a common web based dashboard.
Waste Water Treatmant Plant	Aeration Blower VFD Upgrade and DO Control	Install variable frequency drives for the aeration blowers to reduce energy consumption and extend equipment life, along with providing SCADA controls and programming necessary to vary the speed of the blowers to maintain desired DO levels.	Reduces energy consumption by matching airflow to maintain desired DO levels. Improves equipment life by reducing blower RPM's.
Law and Justice Building	Controls Upgrade	Install new IP addressable programmable thermostats for central scheduling, monitoring and trending.	Saves energy by reducing equipment run time through scheduling. Increases equipment life by reducing equipment run time through scheduling. Provides central web based control for set point adjustment, scheduling, and system monitoring. Could be part of a City wide strategy to integrate controls for all City buildings to a common web based dashboard.

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Law and Justice Building	Lighting Upgrade	Upgrade remaining T-12 lighting with T-8 fluorescent lighting. Provide occupancy sensing for spaces with intermittent occupancy (admin. area).	Reduces energy consumption through a wattage reduction while producing the same or better lighting output. Saves energy by reducing lighting burn times.
Community Center	Controls Optimization	Provide training for occupancy scheduling and evaluate existing sequence of operation for optimization strategies.	Significant energy reductions can be achieved by scheduling the buildng to set back during unoccupied periods. Equipment life will be extended by reducing run times. Controls for other City buildings could be integrated to the existing Alerton graphics as part of a City wide strategy to integrate controls for all City buildings to a common web based dashboard.
Community Center	Gymnasium Lighting Upgrade	Replace existing metal halide gymnasium lighting with new T-5 fluorescent lighting. Provide occupancy sensing for the gymnasium lighting.	Reduces energy consumption by reducing lighting wattage and by reducing lighting burn times. Lamp life will be extended through reduced burn times.

EXHIBIT "A"

Attachment B

The final Energy Services Proposal (ESP) will include all required information as outlined under the State Energy Services Agreement. At least the following elements will be included:

1. A description of the facility and a description of those buildings and systems which shall receive McKinstry Equipment and McKinstry Services;

2. The cost effective Facility Improvement Measures (FIMs) to be installed or caused to be installed by McKinstry and a description of the FIMs analyzed but disqualified under the cost effectiveness criteria;

3. A description of the services that McKinstry will perform or cause to be performed on or in the facility, including but not limited to engineering, construction management, the operations and maintenance procedures for use on McKinstry Equipment, training for facility personnel, warranty service provided, and equipment maintenance provided;

4. The Maximum Allowable Project Cost, itemized in detail, which may be amended to represent actual costs;

5. Recommendations for replacement of existing equipment, along with recommendations for improvements to existing equipment and operating conditions;

6. The standards of comfort and service appropriate for the facility;

7. The baseline energy consumption for the facility, including the data, methodology and variables used to compute the baseline, and the baseline calendar period which shall not be less than twelve (24) months;

8. The estimated energy savings and energy cost savings that are expected to result from the installation of McKinstry Equipment and from McKinstry Service, and an explanation of the method used to make the estimate;

9. The method by which Energy Savings and Energy Cost Savings will be calculated during the term of the Energy Services Agreement;

10. A description of how McKinstry will finance its acquisition of McKinstry equipment and when title to McKinstry Equipment will pass to the Owner;

11. A description of how the Energy Cost Savings will be guaranteed by McKinstry;

12. A description of how McKinstry proposes to be compensated;

13. The term of the Energy Services Agreement;

14. The Termination Value for each year during the term of the Energy Services Agreement;

15. The schedule for project completion;

16. The nature and extent of the work and equipment that McKinstry anticipates it will receive from other firms under subcontract.

IGA COST ESTIMATE - Attachment C

JOB NAME	City of Sunnyside	Program Manager:	Casey McGourin
Loc'n	Sunnyside, WA	Account Manager	David Ray
Job #		Date:	12/3/13

Line Item	ITEM	Project Director	Program Manager	Energy Engineer	Utility Data Analyzer	Lighting Engineer	Design Engineer	Proj Mgr/ Constr. Mgr	Account Manager	Estimator	Admin/Shared Services	Commissioning Engineer	Performance Assurance			Totals
1	**Hrs expended to date**															0
2	**Project Development**															
3	**Project Development Management/PCF**															0
4	**Initial Project Walk Through**															0
5	**DES Proposal Development**															0
6	**Internal Meetings (DES Proposal Approval)**															0
7	**Client Meetings/Presentations (3)**															0
8	**Travel Time**															0
9	**Preliminary/ ROM Phase**															
10	Facility Walkthrough		8													8
11	FIM Matrix Development/Scope Definition		10					4								14
12	Deploy Loggers											8				8
13	ROM Energy Savings (Based on Number of FIMs)		2	16												18
14	ROM Construction Cost Estimate		12							8						20
15	Client Meetings/Presentations (2) Kickoff/ROM Pres		2						2							4
16	Travel Time															0
17	**Prefinal Phase**															
18	PA Plan and client / state review			2									2			2
19	Site Surveying / data gathering (Pre-Retrofit Measurments)		4									8				12
20	Detailed Lighting Audit					8										8
21	Analyzing Audit Data			4		4										8
22	Guaranteed Energy and Operational Calculations			24			24									48
23	Cost estimating		12			8	4	6								30
24	Additional Site Walkthrough															0
25	Utility rebate coordination			4		4										8
26	Packaging Scenarios/Deliverables		8						8							16
27	Pre-Final Costing/Constructability Risk Review	2	2	2		2		2	2				2			12
28	Pre-Final Energy Risk Review			2												2
29	**Final/Proposal**															
30	DES Presentation															0
31	ESP Development		8	8		2			4		4					26
32	Final Scoping	2	8						4							14
33	**Price/Bidding (may be done before ESP or after)**															
34	Request for Proposal Development															0
35	Bid walk thru															0
36	Bid Review/Evaluation															0
37	Utility rebate coordination (need commitment)															0
38	Financing Setup															0
39	Mechanical Engineering															0
40	Misc Administrative															0
40																0
SUBTOTAL (HRs)		4	76	62	0	28	28	12	20	8	4	16	4	0	0	262

EXHIBIT "A"