Memorandum
City of Lawrence
City Manager’s Office

TO: Tom Markus, City Manager
CC: Diane Stoddard, Casey Toomay, Bryan Kidney, Chuck Soules, Mark Hecker
FROM: Eileen Horn, Sustainability Coordinator
DATE: May 24, 2016
RE: Selection of Energy Service Company for Facilities Conservation Improvement Program & Initiation of Investment Grade Audit

Background
At the January 12, 2016 City Commission meeting, the Commission voted to authorize staff to sign up for the Facilities Conservation Improvement Program (FCIP) hosted by the Kansas Corporation Commission Energy Division to initiate an energy savings program for city buildings. This longstanding State program uses an innovative approach known as Energy Savings Performance Contracting (ESPC) to improve public facilities. ESPC offers a budget-neutral way to make energy-efficiency and deferred maintenance improvements—and then repay all project costs with the money saved on energy and O&M costs.

In February, the City conducted a selection process to select an energy service company (ESCO) from the list of 13 pre-qualified FCIP partner companies. We received six responses to our Request for Information from the following companies: 360 Energy Engineers, OpTerra, Johnson Controls, Schneider Electric, CTS Group, and Energy Solutions Professionals. A selection committee of city staff was convened from Parks & Recreation, Public Works, City Manager’s Office, and Finance. This committee selected Schneider Electric, CTS Group, and 360 Energy Engineers to conduct preliminary energy assessments of a few facilities (free of charge to the city) and to interview with the selection committee on March 9th.

The selection committee recommends 360 Energy Engineers be selected as the energy service company for the City of Lawrence’s FCIP project. 360 Energy Engineers provided exceptional results in their preliminary assessment of city facilities, and offered many innovative energy and cost-saving ideas for the City. They have significant experience working with other municipalities, and are currently working with the City of Eudora on an energy performance project. In addition, 360 Energy Engineers is a Lawrence-based company, and actually started their business in the BTBC. They have a commitment to Lawrence and to hiring local contractors to implement the project.

The next step in the process is to work with the selected ESCO over the next 3-4 months to conduct Investment Grade Audits of our key facilities. The Investment Grade Audit will identify key energy and cost-savings opportunities that the City should pursue. Staff have created a list of approximately 40 buildings and facilities for the audits, and
will work with 360 Energy Engineers to determine which of those buildings show the most potential for energy savings.

Upon signing a contract with 360 Energy Engineers for the Investment Grade Audit, we will officially be enrolled in the state’s FCIP program.

What this means is that after receiving the results of the Investment Grade Audit, staff will come back to the Commission to decide to enter an energy performance contract with the selected firm. In a typical energy performance contract, an ESCO (1) provides all the services required to design and implement a comprehensive project, (2) identifies and develops a package of energy-efficiency measures tailored to fit the needs of the customer’s facilities, and (3) provides a guarantee that the savings produced by the project will be sufficient to finance all project costs. The project can be paid for through the CIP, Equipment Reserves, or various financing options, all of which will be considered by city staff.

If, after the Investment Grade Audit, we decide for some reason NOT to pursue an energy performance contract, the City would be responsible for paying the cost of the audits. 360 Energy Engineers has provided us a fee proposal of $64,000 to audit all 40 buildings and facilities.

After the completion of the Investment Grade Audit, city staff will provide a full presentation to the Commission with the recommended energy conservation projects, and will bring forward various options for funding/financing the recommended improvements. We anticipate coming back to the Commission in August with audit results and a recommendation for next steps.

See pages 3-5 of this memo for a detailed overview of the process.

Participating in the FCIP program and conducting comprehensive energy retrofits of our buildings will save energy, save money, and address deferred maintenance in our facilities. In addition, this will serve as a demonstration project for partner organizations and citizens, demonstrating opportunities for energy savings.

As an add-on to this project, 360 Energy Engineers has committed to offering three pro-bono Investment Grade Audits for social service agencies funded by the City. Therefore, upon initiation of this contract, city staff will contact our social service agency partners with a simple application process where they demonstrate their interest in receiving expert advice on how to improve the efficiency of their facilities and reduce their utility costs. See pages 6-7 for the sample application.

**Action**

Authorize the City Manager to sign a contract with 360 Energy Engineers to conduct Investment Grade Audits of City facilities to identify energy saving opportunities for the City.
(excerpted from the IGA contract)

ATTACHMENT D:
The Investment Grade Audit Process

1. Following are the steps that are to be used in the Investment Grade Audit Agreement. These steps are enumerated in order to offer clarity to all parties as to what can be expected during the IGA process.

1.1. **Approve Investment Grade Audit**
   1.1.1. The City Commission formally acts to approve this Investment Grade Audit Agreement. The Agreement is signed by the City of Lawrence, 360 Energy Engineers, and The Kansas Energy Office.
   1.1.2. This approval authorizes 360 Energy Engineers to complete the Investment Grade Audit, as outlined elsewhere in these documents.
   1.1.3. The goal of the IGA is to develop a report that will allow the City of Lawrence to proceed with implementation of certain projects with 360 Energy Engineers as its partner.
   1.1.4. The contingent fee outlined elsewhere in these documents shall be payable if the City of Lawrence declines to proceed with project implementation with 360 Energy Engineers after completion of an IGA report that satisfies the FCIP requirements.

1.2. **360 Energy Engineers Completes Audit**
   1.2.1. Engineers and Energy Managers complete site reviews of all selected City of Lawrence facilities and locations
   1.2.2. Staff creates energy models for buildings, as needed
   1.2.3. Energy calculations completed for other measures
   1.2.4. Solicit input from City administration, building leadership, facilities staff, and occupants to shape recommendations
   1.2.5. Develop preliminary project scope recommendations of potential energy conservation measures and facility-improvement opportunities
   1.2.6. Complete engineering estimates of costs for recommended energy conservation measures and facility-improvement opportunities

1.3. **Submission of Draft IGA Report**
   1.3.1. 360 details findings from Audit, in accordance with FCIP requirements put forth elsewhere in these documents
   1.3.2. Provides overview of conceptual project scope of work items, including specific energy conservation measures and facility-improvement opportunities
   1.3.3. Outlines anticipated energy savings associated with each energy conservation measure and facility-improvement opportunity
   1.3.4. Outlines anticipated cost of implementation for each energy conservation measure and facility-improvement opportunity
   1.3.5. FCIP reviews draft IGA report for accuracy of estimates and appropriateness of recommendations
   1.3.6. 360 Energy Engineers and City of Lawrence staff will review the Draft Report to evaluate viability of individual measures and to develop recommended action(s) for the City Commission

1.4. **Commission Review and Approval of Draft IGA Report**
   1.4.1. City staff and 360 Energy Engineers present overview of IGA Report to City Commission
   1.4.2. City staff makes recommendations for specific projects to be further developed for implementation
   1.4.3. Commission provides feedback and adjustment to recommendations, as needed
   1.4.4. Commission approves continued development of recommended project scope

1.5. **360 Energy Engineers Project Design**
   1.5.1. Development of detailed project plans
   1.5.2. Creation of engineering drawings for projects, as necessary
1.5.3. Detailed specifications for all project scope items
1.5.4. Coordination with City of Lawrence Finance office to identify preferred project financing methodology

1.6. **Subcontractor Pre-Approval**
1.6.1. City staff advertises projects to subcontractors, asks them to submit for pre-approval
1.6.2. 360 conducts pre-approval process to ensure experience, resources, etc.
1.6.3. City of Lawrence and 360 collectively approve list of subcontractors to receive invitation to bid, with goal of 3-5 subcontractor per project or trade

1.7. **360 Subcontractor Solicitation**
1.7.1. Provide bid packages, including specifications, to selected potential subcontractors
1.7.2. Conduct site visit with subcontractors considering bidding for each trade
1.7.3. Manage questions, addenda, etc.
1.7.4. Receive bids for all projects or trades
1.7.5. Receive bids for project financing, if City is contemplating use of third-party financing under KSA 75-37, 125

1.8. **Bid Qualification and Review**
1.8.1. 360 conducts reviews of all bids receives, including interview of apparent low bidders
1.8.2. 360 makes recommendation of most qualified low-bid for each project
1.8.3. City staff reviews bid tabulations with 360
1.8.4. City staff and 360 agree upon final list of recommended subcontractors

1.9. **Final IGA Report Submission**
1.9.1. 360 provides final project scope of work, guaranteed annual energy savings, maintenance savings calculations, and fixed project cost
1.9.2. FCIP provides final approval of scope, energy and maintenance savings projections, and project cost proposal
1.9.3. City staff reviews final IGA report
1.9.4. City staff reviews project financing options (internal and external)
1.9.5. City and FCIP attorneys review and approve final project contract documents

1.10. **Final Contract Approval**
1.10.1. City Commission reviews staff recommendations for final project scope
1.10.2. City Commission asks questions, adjustments to recommendations as necessary
1.10.3. If the City Commission authorizes implementation of the recommended projects, an Energy Performance Contract will be signed with 360 Energy Engineers and the Kansas Corporation Commission (FCIP)
1.10.3. City Commission reviews staff recommendations related to project financing options, takes action on preferred methodology

1.11. **Project Implementation**
1.11.1. The IGA Process is now complete, and 360 Energy Engineers works with the City of Lawrence to implement the selected projects
1.11.2. 360 serves as the single-source of accountability throughout the construction process
1.11.3. 360 is the general contractor/construction manager for all projects selected
1.11.4. 360 leads subcontractor progress updates and project status meetings with the City of Lawrence
1.11.5. Provide written project updates to City Commission, as well as as-requested in-person updates
1.11.6. Full system commissioning
1.11.7. Ongoing performance maximization
1.11.8. Continued FCIP review and involvement
Approve Investment Grade Audit
- City Commission approves IGA
- Authorizes 360 Energy Engineers to complete detailed analysis of facilities
- Goal: build final projects for implementation
- Contingent fee: $64,000 if City does not proceed with project implementation

Commission Draft IGA Approval
- City Commission reviews draft IGA
- City staff makes recommendations regarding scope of project
- Commission provides preliminary approval of scope for development

360 Energy Audit
- Review selected City facilities
- Create energy models and calculations
- Gather input from City staff
- Estimate project costs
- Develop preliminary project scope

360 Project Design
- Develop detailed project plans
- Create drawings for applicable projects
- Detailed specifications for all scope
- Work with City Finance office to identify preferred project financing options

Completion of Draft IGA
- Details of energy audit findings
- Conceptual project design
- Detailed energy analysis
- Individual project scope
- Review with City Commission for approval

Contactor Pre-Approval
- City staff approves contactors, in pre-approval
- 360 conducts project to ensure experienced
- City staff and 360 review subcontractors

360 Subcontractor Solicitation
- Provide bid specs to potential subcontractors
- Conduct site visit with each trade
- Manage questions, addenda, etc.
- Receive bids for all project components
- Receive bids for project financing, if City elects to use 3rd-party financing

Bid Qualification and Review
- 360 conducts reviews of bids received
- 360 makes recommendations of most qualified low-bidder for each project
- City staff and 360 review bid tabulations
- City staff and 360 agree upon final list of recommended subcontractors

Final IGA Report Submission
- State Energy Office findings
- 360 provides for guaranteed savings of work
- City staff reviews final list
- City staff reviews all project documentation
Application for Energy Savings Assessment

Background:

The city of Lawrence is participating in the Facilities Conservation Improvement Program (FCIP) through the state of Kansas Energy Division. This longstanding state program uses energy savings performance contracting, a budget-neutral way to finance energy-efficiency improvements. Project costs are paid for from savings on energy and maintenance costs.

The FCIP program in city-owned facilities would:

- Save energy,
- Address deferred maintenance,
- Reduce utility bills and maintenance costs,
- Provide important comfort and safety upgrades, and
- Provide leadership on sustainability and greenhouse gas emissions reduction goals.

The first step in an Energy Savings Performance Contract is to have an Investment Grade Audit (IGA) conducted. The IGA includes a thorough assessment of energy savings opportunities in a building, and creates a list of recommended energy conservation measures.

The City has selected 360 Energy Engineers, a Lawrence-based company, to conduct the IGA for 40+ city facilities. **As part of their contract with the City, 360 Energy Engineers is offering free energy audits for three social service agency partners.**

The IGA that they are offering will result in a full building assessment of your lighting, heating, cooling, building envelope, etc., and will yield a list of energy conservation measures that you can implement to save energy. Some of the recommendations may be behavioral (i.e. setting thermostats) and some may be capital improvement projects (i.e. replacing old boiler units).

Process:

Your organization was selected as a social service agency partner of the City of Lawrence. If you are interested in receiving a free Investment Grade Audit of your organization's buildings or facilities, please complete the application on page 2, and email it to:

**Eileen Horn, Sustainability Coordinator, ehorn@lawrenceks.org** by **July XX, 2016.**

City staff will review applications, and select organizations who demonstrate their interest in energy efficiency, and their ability to effectively utilize the IGA information to implement energy saving projects in their buildings.
Application for Investment Grade Audit

SECTION 1. APPLICANT INFORMATION

Legal Name of Agency: ________________________________________________

Primary Contact Information

Contact Name and Title: ________________________________________________

Address: ___________________________________________ Telephone: __________

Fax: __________________________ Email: ____________________________

SECTION 2. BUILDING INFORMATION

Building/facility to be included in Investment Grade Audit: 

Address of building/facility: __________________________________________

Age of building: ____________ Square footage: __________________________

Description of building’s use (i.e. office space, healthcare facility, etc.):

____________________________________________________________________

____________________________________________________________________

SECTION 3: GOALS AND NEEDS TO BE ADDRESSED

1. What are your energy saving goals for your organization?
2. What would reducing your utility bills allow you to achieve?
3. Do you have the ability to implement the energy saving measures identified by the audit? (i.e. if the audit recommends converting to LED lighting fixtures, do you have, or could you fundraise for the retrofit project?)
4. Will you commit to giving 360 Energy Engineers the opportunity to present the IGA results to both the Director of the organization and to the Board for consideration of next steps?