

ENERGY PERFORMANCE CONTRACT

This Energy Performance Contract (the "Contract")) is made and entered into as of this ____ day of January, 2017, between Willdan Group, Inc., DBA 360 Energy Engineers ("ESCO"), and the City of Lawrence, Kansas ("Customer"), for the purpose of installing certain energy, water or other operating cost saving equipment, described in Schedule A, and providing other services designed to save energy, water or other operating costs for the Customer's property and buildings (the "Premises").

Recitals

WHEREAS, Customer owns and operates the Premises, and is in need of energy saving equipment and service designed to save costs at said Premises;

WHEREAS, ESCO has made an assessment of the energy consumption characteristics of the Premises and existing Equipment described in Schedule B, which Customer has approved;

WHEREAS, Customer desires to retain ESCO to purchase, install and service certain equipment of the type or class described in Schedule A, attached hereto and made part hereof and to provide other services for the purpose of achieving cost reductions within Premises, as more fully set forth herein; and

WHEREAS, Customer is authorized under the Constitution and the laws of the State of Kansas to enter into this Contract for the purposes set forth herein.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and intending to be legally bound hereby, Customer and ESCO hereto covenant and agree as follows:

SECTION 1. ENERGY MANAGEMENT PLAN

Section 1.1. Plan Details. ESCO has completed an Investment Grade Audit of Customer' Premises.

Section 1.2. Attachments, Schedules, Exhibits and Appendices. The Contract Terms and Conditions to the Master Investment Grade Audit Agreement dated October 1, 2016, between ESCO and the Kansas Corporation Commission is Incorporated herein by reference as Schedule N of this Contract. ESCO has prepared and Customer has approved and accepted the Schedules as set forth below, copies of which are attached hereto and made parts of this Contract by reference.

Schedules:

Schedule A	Equipment to be Installed by ESCO
Schedule B	Description of Premises; Pre-Existing Equipment Inventory
Schedule C	Energy Savings Guarantee
Schedule D	Compensation to ESCO
Schedule E	Baseline Energy Consumption
Schedule F	Savings Measurement & Calculation Formulae; Methodology to Adjust Baseline
Schedule G	Construction and Installation Schedule
Schedule H	System Start-Up and Commissioning; Operating Parameters of Installed Equipment
Schedule I	Standards of Comfort
Schedule J	ESCO's Maintenance Responsibilities
Schedule K	Customer's Maintenance Responsibilities
Schedule L	Facility Maintenance Checklist
Schedule M	ESCO's Training Responsibilities
Schedule N	General Conditions
Schedule O	Annual Installment Payment Schedule to Financing Party
Schedule P	Detailed ECM Savings Calculations

Schedule Q Detailed Pollution Credit Calculations

Exhibits

Exhibit I Performance Bond
Exhibit II Labor and Material Payment Bond
Exhibit III i. Certificate of Acceptance – Investment Grade Audit
ii. Certificate of Acceptance - Installed Equipment
Exhibit IV Equipment Warranties

Appendices

Appendix A RFP for ESCO Solicitation
Appendix B ESCO Proposal
Appendix C Investment Grade Audit Agreement
Appendix D Investment Grade Audit Report

Section 1.3. Other Documents. This Contract incorporates herein and makes a part hereof the General Conditions set forth in Schedule N, and Special Provisions as set forth in Section 36, as well as the entire RFP and ESCO Proposal for this Project labeled Appendix A (**RFP for ESCO Solicitation**) and Appendix B (**ESCO Proposal**) respectively. Acceptance by the Customer of the Investment Grade Audit is reflected in Exhibit III (i) (**Certificate of Acceptance—Investment Grade Audit**). All architectural and engineering work shall comply with the Manual of Policies and Procedures of the Kansas Department of Administration, Division of Facilities Management. The manual being used as of the date of this Agreement is incorporated into this Agreement by reference. The provisions of this Contract and the attached Schedules shall govern in the event of any inconsistencies between the Investment Grade Audit and the provisions of this Contract.

SECTION 2. ENERGY USAGE RECORDS AND DATA

Customer has furnished or shall furnish (or cause its energy suppliers to furnish) to ESCO, upon its request, all of its records and complete data concerning energy usage and energy-related maintenance for the Premises described in Schedule B (**Description of Premises; Pre-Existing Equipment Inventory**), including the following data for the most current thirty-six (36) month period; utility records; occupancy information; descriptions of any changes in the building structure or its heating, cooling, lighting or other systems or energy requirements; descriptions of all energy consuming or saving equipment used in the Premises; bills and records relating to maintenance of energy-related equipment, and a description of energy management procedures presently utilized. If requested, Customer shall also provide any prior energy audits of the Premises, and copies of Customer's financial statements and records related to energy usage and operations for said thirty-six (36) month period at said Premises, and shall make agents and employees familiar with such records available for consultations and discussions with ESCO. ESCO agrees to work with the City of Lawrence to input 13 months of utility data (electricity and gas) into EnergyCAP, and to share this data with the Customer and Energy Division of the Kansas Corporation Commission electronically.

SECTION 3. COMMENCEMENT DATE AND TERMS; INTERIM PERIOD

See Schedule G.

SECTION 4. PAYMENTS TO ESCO

Section 4.1. Energy Savings Guarantee. ESCO has formulated the estimated annual level of energy and operations savings to be achieved as a result of the installation and operation of the Equipment and provision of services provided for in this Contract as specified in Schedule C and Further described the methodology of savings verification in Section 7 of the Investment Grade Audit. Customer accepts the estimate of savings calculated by ESCO.

Section 4.2. Annual Review. As per negotiated agreement between customer and ESCO, annual savings may or may not be verified at a specific time each year to determine if the ESCO guarantee was satisfied.

Section 4.3. ESCO Compensation and Fees. ESCO's fees and compensation are set forth in Schedule D.

Section 4.4. Billing Information Procedure. Payments due to ESCO shall be calculated each month and paid in accordance with Schedule D.

Section 4.5. Payment. Customer shall pay ESCO within thirty days of receipt of ESCO'S invoice.

Section 4.6. Effective Date of Payment Obligation. See Schedule D.

SECTION 5. FISCAL FUNDING

Section 5.1. Non-appropriation of Funds. In the event no Customer or other funds or insufficient Customer or other funds are appropriated and budgeted, and funds are otherwise unavailable by any means whatsoever in any fiscal period for which payments are due ESCO under this Contract, then the Customer will, not less than thirty days prior to end to such applicable fiscal period, in writing, notify the ESCO of such occurrence and this Contract shall terminate on the last day of the fiscal period for which appropriations were made without penalty or expense to the Customer of any kind whatsoever, except as to the portions of payments herein agreed upon for which Customer and/or other funds shall have been appropriated and budgeted or are otherwise available.

SECTION 6. CONSTRUCTION SCHEDULE AND EQUIPMENT INSTALLATION; APPROVAL

Section 6.1. Construction and equipment installation shall proceed in accordance with the construction schedule approved by Customer and attached hereto as Schedule G **(Construction and Installation Schedule)**.

Section 6.2. Systems Startup and Equipment Commissioning: The ESCO shall conduct a thorough and systematic performance test of each element and total system of the installed Equipment in accordance with the procedures specified in Schedule H **(Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment)** and prior to acceptance of the project by Customer. The ESCO shall provide notice to the Customer of the scheduled test(s) and the Customer and/or its designees shall have the right to be present at any or all such tests conducted by ESCO and/or manufacturers of the Equipment. The ESCO shall be responsible for correcting and/or adjusting all deficiencies in systems and Equipment operations that may be observed during system commissioning procedures.

SECTION 7. EQUIPMENT WARRANTIES

ESCO covenants and agrees that all equipment installed as part of this Contract is new, in good and proper working condition and protected by appropriate written warranties covering all parts and equipment performance. ESCO further agrees to deliver to the Customer for inspection and approval, all such written warranties and which shall be attached and set forth as Exhibit IV **(Equipment Warranties)**; to pursue rights and remedies against manufacturer and supplier of the equipment under the warranties in the event of equipment malfunction or improper or defective function, and defects in parts, workmanship and performance, to notify the Customer whenever defects in equipment parts or performance occur which give rise to such rights and remedies and those rights and remedies are exercised by ESCO. The cost of any risk of damage or damage to the equipment and its performance, including damage to property and

equipment of the Customer or the Premises, due to ESCO's failure to exercise its warranty rights shall be borne solely by ESCO.

All warranties shall be transferable and extend to the Customer. The warranties shall specify that only new, and not reconditioned parts, may be used and installed when repair is necessitated by malfunction.

All warranties required hereunder shall be in force for a minimum of one year from the commencement date as defined in Section 3.1 hereof.

Notwithstanding the above, nothing in this Section shall be construed to alleviate/relieve the ESCO from complying with its obligations to perform under all terms and conditions of this Contract and as set forth in all attached Schedules.

SECTION 8. TRAINING BY ESCO

The ESCO shall conduct the training program described in Schedule M (**ESCO's Training Responsibilities**) hereto. The training specified in Schedule M must be completed prior to acceptance of the Equipment installation. The ESCO shall provide ongoing training whenever requested by Customer with respect to updated or altered Equipment, including upgraded software. The fee for such training shall be provided at no charge to the Customer.

SECTION 9. PERMITS AND APPROVALS; COORDINATION

Section 9.1. Permits and Approvals. Customer shall use its best efforts to assist ESCO in obtaining all necessary permits and approvals for installation of the Equipment. In no event shall Customer, however, be responsible for payment of any permit fees. The equipment and the operation of the equipment by ESCO shall at all times conform to all federal, state and local code requirements. ESCO shall furnish copies of each permit or license which is required to perform the work to the Customer before the ESCO commences the portion of the work requiring such permit or license.

Section 9.2. Coordination During Installation. The Customer and ESCO shall coordinate the activities of ESCO's equipment installers with those of the Customer, its employees, and agents. ESCO shall not commit or permit any act which will interfere with the performance of business activities conducted by the Customer or its employees without prior written approval of the Customer.

SECTION 10. PERFORMANCE BY ESCO

ESCO shall perform all tasks/phases under the Contract, including construction, and install the Equipment in such a manner so as not to harm the structural integrity of the buildings or their operating systems and so as to conform to the standards set forth in Schedule I (**Standards of Comfort**) and the construction schedule specified in Schedule G (**Construction and Installation Schedule**). In addition, ESCO covenants and agrees that its installation of equipment shall be performed in accordance with all applicable contract documents and design and per the manufacturer's instructions. Further, its installation work shall be performed free of defects and in workmanlike manner and with the same standard of care as performed by other qualified energy engineer firms in the time and locality for the Project. ESCO shall repair and restore to its original condition any area of damage caused by ESCO's performance under this Contract. The Customer reserves the right to review the work performed by ESCO and to direct ESCO to take certain corrective action if, in the opinion of the Customer, the structural integrity of the Premises or its operating system is or will be harmed. All costs associated with such corrective action to damage caused by ESCO's performance of the work shall be borne by ESCO.

ESCO shall remain responsible for the professional and technical accuracy of all services performed, whether by the ESCO or its subcontractors or others on its behalf, throughout the term of this Contract.

SECTION 11. OWNERSHIP

Section 11.1. Ownership of Certain Proprietary Property Rights. Customer shall not, by virtue of this Contract, acquire any interest in any formulas, patterns, devices, secret inventions or processes, copyrights, patents, other intellectual or proprietary rights, or similar items of property which are or may be used in connection with the Equipment. The ESCO shall grant to the Customer a perpetual, irrevocable royalty-free license for any and all software or other intellectual property rights necessary for the Customer to continue to operate, maintain, and repair the Equipment in a manner that will yield maximal energy consumption reductions.

All drawings, reports and materials by ESCO under this Contract shall become the property of Customer and shall be delivered to Customer no later than completion of Contract or termination of ESCO's services.

Section 11.2. Ownership of Existing Equipment. Ownership of the equipment and materials presently existing at the Premises at the time of execution of this Contract shall remain the property of the Customer even if it is replaced or its operation made unnecessary by work performed by ESCO pursuant to this Contract. If applicable, ESCO shall advise the Customer in writing of all equipment and materials to be replaced at the Premises and the Customer shall within thirty days designate in writing to the ESCO which equipment and materials that should not be disposed of off-site by the ESCO. It is understood and agreed to by both Parties that the Customer shall be responsible for and designate the location and storage for any equipment and materials that should not be disposed of off-site. The ESCO shall be responsible for the disposal of all equipment and materials designated by the Customer as disposable off-site in accordance with all applicable laws and regulations regarding such disposal.

Section 11.3. New Equipment. All new equipment or materials supplied to the Customer shall become the property of the Customer.

SECTION 12. LOCATION AND ACCESS

Customer shall provide sufficient space on the Premises for the installation and operation of the Equipment and shall take reasonable steps to protect such Equipment from harm, theft and misuse. Customer shall provide access to the Premises for ESCO to perform any function related to this Contract during regular business hours, or such other reasonable hours as may be requested by ESCO and acceptable to the Customer. The ESCO's access to Premises to make emergency repairs or corrections as it may determine are needed shall not be unreasonably restricted by the Customer.

SECTION 13. EQUIPMENT SERVICE

Section 13.1. Actions by ESCO. ESCO shall provide all service, repairs, and adjustments to the Equipment Installed under terms of this Contract pursuant to Schedule J (**ESCO's Maintenance Responsibilities**). Customer shall incur no cost for Equipment service, repairs, and adjustments, except as set forth in Schedule D (**Compensation to ESCO**), provided, however, that when the need for maintenance or repairs principally arises due to the negligence or willful misconduct of the Customer or any employee or other agent of Customer, and ESCO can so demonstrate such causal connection, ESCO may charge Customer for the actual cost of the maintenance or repair insofar as such cost is not covered by any warranty or insurance proceeds.

Section 13.2. Malfunctions and Emergencies. Customer shall use its best efforts to notify the ESCO or its designee(s) promptly after the Customer's discovery and actual knowledge and occurrence of: (i) any malfunction in the operation of the Equipment or any preexisting energy related equipment that might materially impact upon the guaranteed energy savings, (ii) any interruption or alteration to the energy supply to the

Premises, or (iii) any alteration or modification in any energy-related equipment or its operation.

Where Customer exercises due diligence in attempting to assess the existence of a malfunction, interruption, or alteration it shall be deemed not at fault in failing to correctly identify a such conditions as having a material impact upon the guaranteed energy savings. Customer shall notify ESCO promptly upon its having actual knowledge of any emergency condition affecting the Equipment. ESCO shall respond or cause its designee(s) shall respond within twenty-four (24) hours and shall promptly proceed with corrective measures. Any telephonic notice of such conditions by Customer shall be followed within three business days by written notice to ESCO from Customer. If Customer unreasonably delays in so notifying ESCO of a malfunction or emergency, and the malfunction or emergency is not otherwise corrected or remedied, such conditions will be treated as a Material Change and the applicable provisions of Section 16 (**Material Changes**) shall be applied.

Section 13.3. Actions by Customer. Customer shall not move, remove, modify, alter, or change in any way the Equipment or any part thereof without the prior written approval of ESCO except as set forth in Schedule K (**Customer's Maintenance Responsibilities**). Notwithstanding the foregoing, Customer may take reasonable steps to protect the Equipment if, due to an emergency, it is not possible or reasonable to notify ESCO before taking any such actions. In the event of such an emergency, Customer shall take reasonable steps to protect the Equipment from damage or injury and shall follow instructions for emergency action provided in advance by ESCO.

Customer agrees to maintain the Premises in good repair and to protect and preserve all portions thereof which may in any way affect the operation or maintenance of the Equipment.

SECTION 14. UPGRADING OR ALTERING THE EQUIPMENT

ESCO shall at all times have the right, subject to Customer's prior written approval, which approval shall not be unreasonably withheld, to change the Equipment, revise any procedures for the operation of the equipment or implement other energy saving actions in the Premises, provided that:

- (i) The ESCO complies with the standards of comfort and services set forth in Schedule I (**Standards of Comfort**) herein;
- (ii) Such modifications or additions to, or replacement of the Equipment, and any operational changes, or new procedures are necessary to enable the ESCO to achieve the energy savings at the Premises and;
- (iii) any cost incurred relative to such modifications, additions or replacement of the Equipment, or operational changes or new procedures shall be the responsibility of the ESCO.

All modifications, additions or replacements of the Equipment or revisions to operating or other procedures shall be described in a supplemental Schedule(s) to be provided to the Customer for approval, which shall not be unreasonably withheld, provided that any replacement of the Equipment shall be new and have equal or better potential to reduce energy consumption at the Premises than the Equipment being replaced. The ESCO shall update any and all software to be used in connection with the Equipment in accordance with the provisions of Section 11.1 (**Ownership of Certain Proprietary Rights**). All replacements of and alterations or additions to the Equipment shall become part the Equipment described in Schedule A (**Equipment to be Installed by ESCO**) and shall be covered by the provisions and terms of Section 6 (**Construction Schedule and Equipment Installation; Approval**).

SECTION 15. STANDARDS OF COMFORT

ESCO will maintain and operate the Equipment in a manner which will provide the standards of heating, cooling, hot water, and lighting as described in Schedule I (**Standards of Comfort**).

SECTION 16. MATERIAL CHANGES

Section 16.1 Material Changes Defined: A Material Change shall include any change in or to the Premises, whether structural, operational or otherwise in nature which reasonably could be expected, in the judgment of the customer, to increase or decrease an individual building's annual energy consumption in accordance with the provisions and procedures set forth in schedule E (**Baseline Energy Consumption**) and Schedule F (**Savings measurement and Calculation Formulae: Methodology to Adjust baseline**) by at least 1% after adjustments for climatic variations. Actions by the Customer which may result in Material Change include but are not limited to the following:

- (i) manner of use of Premises by the Customer; or
- (ii) hours of operation for the Premises or for any equipment or energy using systems operating at the Premises; or
- (iii) permanent changes in the comfort and service parameters set forth in Schedule I (**Standard of Comfort**); or
- (iv) occupancy of the Premises; or
- (v) structure of the Premises; or
- (vi) types and quantity of equipment used at the Premises; or
- (vii) modification, renovation or construction at the Premises; or
- (viii) the Customer's failure to provide maintenance of or repairs to the Equipment in accordance with Schedule K (**Customer's maintenance Responsibilities**); or
- (ix) any other conditions other than climate affecting energy use at the Premises.

Section 16.2. Reported Material Changes: Notice by Customer: The Customer shall use its best efforts to deliver to the ESCO a written notice describing all actual or proposed Material Changes in the Premises or in the operation of the Premises at least thirty (30) days before any actual or proposed material Changes is implemented or as soon as is practicable after any emergency or unplanned event. Notice to the ESCO of Material Changes which result because of a Bona Fide emergency or other situation which precludes advanced notification shall be deemed sufficient if given by the Customer within thirty (30) hours after having actual knowledge that the event constituting the Material Change occurred or was discovered by the Customer to have occurred.

Section 16.3. Unreported Material Change: In the absence of any Material Changes in the Premises or in their operations, the baseline energy consumption as set forth in Schedule E (**baseline Energy Consumption**) should not change more than 2.5% during any month from the projected energy use for that month, after adjustments for changes in climate conditions. Therefore, if energy consumption for any month as set forth in Schedule E (**Baseline Energy Consumption**) deviates by more than 2.5% from the energy consumption of the same month of the preceding contract year after adjustments for changes to climatic conditions, then such deviation shall be timely reviewed by the ESCO to ascertain the cause of deviation. The ESCO shall report its findings to the customer in a timely manner and the ESCO shall determine what, if any adjustments to the baseline will be made in accordance with the provisions see add.

SECTION 17. PROPERTY/ CASUALTY/ INSURANCE INDEMNIFICATION

Section 17.1. At all times during the term of this Contract, ESCO shall maintain in full force and effect, at its expense: (1) Workmen's Compensation Insurance sufficient to cover all of the employees of (ESCO) working to fulfill this Contract, (2) Casualty and Liability Insurance on the Equipment and Liability Insurance for its employees and the possession, operation, and service of the Equipment. The limits of such insurance shall be not less than \$500,000 for injury to or death of one person in a single occurrence and \$1 million for injury to or death of more than one person in a single occurrence and \$500,000 for a single occurrence of property damage. Such policies shall name the Customer as an additional insured.

Prior to commencement of work under this Contract, ESCO will be required to provide Customer with current certificates of insurance specified above. These certificates shall contain a provision that coverage afforded under the policies will not be canceled or changed until at least thirty (30) days' prior written notice has been given to Customer.

Section 17.2. ESCO shall be responsible for (i) any damage to the Equipment or other property on the Premises and (ii) any personal injury where such damage or injury occurs as a result of ESCO's performance under this Contract.

Section 17.3. ESCO shall save and hold harmless Customer and its officers, agents and employees or any of them from any and all claims, demands, actions or liability of any nature based upon or arising out of any services performed by ESCO, its agents or employees under this Contract.

SECTION 18. CONDITIONS BEYOND CONTROL OF THE PARTIES

If a party ("performing party") shall be unable to reasonably perform any of its obligations under this Contract due to acts of Nature, insurrections or riots, or similar events, this Contract shall at the other party's option (i) remain in effect but said performing party's obligations shall be suspended until the said events shall have ended; or, (ii) be terminated upon ten (10) days' notice to the performing party, in which event neither party shall have any further liability to the other.

SECTION 19. EVENTS OF DEFAULT

Section 19.1. Events of Default by Customer. Each of the following events or conditions shall constitute an "Event of Default" by Customer:

- (i) any failure by Customer to pay ESCO any sum due for a service and maintenance period of more than thirty days after written notification to cure delinquent payment (provided that ESCO is not in default in its performance under the terms of this Contract); or
- (ii) any other material failure by Customer to perform or comply with the terms and conditions of this Contract, including breach of any covenant contained herein, provided that such failure continues for thirty days after notice to Customer demanding that such failures to perform be cured or if such cure cannot be effected in thirty days, Customer shall be deemed to have cured default upon the commencement of a cure within thirty days and diligent subsequent completion thereof;
- (iii) any representation or warranty furnished by Customer in this Contract which was false or misleading in any material respect when made.

Section 19.2. Events of Default by ESCO. Each of the following events or conditions shall constitute an "Event of Default" by ESCO:

- (i) the standards of comfort and service set forth in Schedule I (**Standards of Comfort**) are not provided due to failure of ESCO to properly design,

- install, maintain, repair or adjust the Equipment except that such failure, if corrected or cured within thirty days after written notice by Customer to ESCO demanding that such failure be cured, shall be deemed cured for purposes of this Contract.
- (ii) any representation or warranty furnished by ESCO in this Contract is false or misleading in any material respect when made;
 - (iii) failure to furnish and install the Equipment and make it ready for use within the time specified by this Contract as set forth in Schedules A **(Equipment to be Installed by ESCO)** and G **(Construction and Installation Schedule)**;
 - (iv) provided that the operation of the facility is not adversely affected and provided that the standards of comfort in Schedule I **(Standards of Comfort)** are maintained, any failure by ESCO to perform or comply with the terms and conditions of this Contract, including breach of any covenant contained herein except that such failure, if corrected or cured within thirty days after written notice by the Customer to ESCO demanding that such failure to perform be cured, shall be deemed cured for purposes of this Contract;
 - (v) any lien or encumbrance upon the equipment by any subcontractor, laborer or material man of ESCO;
 - (vi) the filing of a bankruptcy petition whether by ESCO or its creditors against ESCO which proceeding shall not have been dismissed within thirty days of its filing, or an involuntary assignment for the benefit of all creditors or the liquidation of ESCO;
 - (vii) Any change in ownership or control of the ESCO without the prior approval of the Customer, which shall not be unreasonably withheld;
 - (viii) failure by the ESCO to pay any amount due the Customer or perform any obligation under the terms of this Contract or the Energy Savings Guarantee as set forth in Schedule C **(Energy Savings Guarantee)**.

SECTION 20. REMEDIES UPON DEFAULT

Section 20.1. Remedies upon Default by Customer. All disputes shall be submitted to the Customer's department head for resolution. If resolution is not obtained, ESCO may appeal to the Energy Division of the Kansas Corporation Commission to assist with resolution or to arrange mediation or arbitration.

Section 20.2. Remedies Upon Default by ESCO. In the Event of Default by ESCO, Customer shall exercise any and all remedies at law or equity, or institute other proceedings, including, without limitation, bringing an action or actions from time to time for specific performance, and/or for the recovery of amounts due and unpaid and/or for damages, which shall include all costs and expenses reasonably incurred.

SECTION 21. ASSIGNMENT

The ESCO acknowledges that the Customer is induced to enter into this Contract by , among other things, the professional qualifications of the ESCO. The ESCO agrees that neither this Contract nor any right or obligations hereunder may be assigned in whole or in part to another firm, without the prior written approval of the Customer.

Section 21.1. Assignment by ESCO. The ESCO may, with prior written approval of the Customer, which consent shall not be unreasonably withheld, delegate its duties and performance under this Contract, and/or utilize contractors, provided that any assignee(s), delegate(s), or contractor(s) shall fully comply with the terms of this Contract. Notwithstanding the provisions of this paragraph, the ESCO shall remain jointly

and severally liable with its assignees(s), or transferee(s) to the Customer for all of its obligations under this Contract.

Section 21.2. Assignment by Customer. Customer may transfer or assign this Contract and its rights and obligations herein to a successor or purchaser of the Buildings or an interest therein.

SECTION 22. DISPUTES

Disputes that cannot be resolved by negotiation between customer and the ESCO may be submitted to the Energy Division of the Kansas Corporation Commission to establish processes for mediation or arbitration.

SECTION 23. REPRESENTATIONS AND WARRANTIES

Each party warrants and represents to the other that:

- (i) it has all requisite power, authority, licenses, permits, and franchises, corporate or otherwise, to execute and deliver this Contract and perform its obligations hereunder;
- (ii) its execution, delivery, and performance of this Contract have been duly authorized by, or are in accordance with, its organic instruments, and this Contract has been duly executed and delivered for it by the signatories so authorized, and it constitutes its legal, valid, and binding obligation;
- (iii) its execution, delivery, and performance of this Contract will not breach or violate, or constitute a default under any Contract, lease or instrument to which it is a party or by which it or its properties may be bound or affected; or
- (iv) it has not received any notice, nor to the best of its knowledge is there pending or threatened any notice, of any violation of any applicable laws, ordinances, regulations, rules, decrees, awards, permits or orders which would materially and adversely affect its ability to perform hereunder.

SECTION 24. ADDITIONAL REPRESENTATIONS OF THE PARTIES.

Customer hereby warrants, represents and promises that it has provided or shall provide timely to ESCO, all records relating to energy usage and energy-related maintenance of Premises requested by ESCO and the information set forth therein is, and all information in other records to be subsequently provided pursuant to this Contract will be true and accurate in all material respects.

ESCO hereby warrants, represents and promises that:

- (i) before commencing performance of this Contract:
 - (a) it shall have become licensed or otherwise permitted to do business in the State of Kansas;
 - (b) it shall have provided proof and documentation of required insurance pursuant to Section 17 (**Insurance Requirements**);
- (ii) it shall make available, upon reasonable request, all documents relating to its performance under this Contract, including all contracts and subcontracts entered into;
- (iii) it shall use qualified subcontractors and delegates, licensed and bonded in this state to perform the work so subcontracted or delegated pursuant to the terms hereof;

- (iv) that it is financially solvent, able to pay its debts as they mature and possessed of sufficient working capital to complete the Work and perform its obligations under this Contract; and
- (v) that it has conducted reasonable investigation of all conditions affecting its performance and represents that it has the current capacity, expertise and qualified supervision and subcontractors to perform the services under this Contract.

SECTION 25. WAIVER OF LIENS

All property of the State (Customer) is exempt from attachment and levy, K.S.A. 60-723(d). A public works bond pursuant to K.S.A. 60-1111 shall be required.

SECTION 26. COMPLIANCE WITH LAW AND STANDARD PRACTICES

ESCO shall perform its obligations hereunder in compliance with any and all applicable federal, state, and local laws, rules, and regulations, in accordance with sound engineering and safety practices, and in compliance with any and all reasonable rules of Customer relative to the Premises. ESCO shall be responsible for obtaining all governmental permits, consents, and authorizations as may be required to perform its obligations hereunder.

SECTION 27. INDEPENDENT CAPACITY OF THE CONTRACTOR

The parties hereto agree that ESCO, and any agents and employees of ESCO, in the performance of this Contract, shall act in an independent capacity and not as officers, employees, or agents of the Customer.

SECTION 28. NO WAIVER

The failure of ESCO or Customer to insist upon the strict performance of the terms and conditions hereof shall not constitute or be construed as a waiver or relinquishment of either party's right to thereafter enforce the same in accordance with this Contract in the event of a continuing or subsequent default on the part of ESCO or Customer.

SECTION 29. SEVERABILITY

In the event that any clause or provision of this Contract or any part thereof shall be declared invalid, void, or unenforceable by any court having jurisdiction, such invalidity shall not affect the validity or enforceability of the remaining portions of this Contract unless the result would be manifestly inequitable or unconscionable.

SECTION 30. COMPLETE CONTRACT

This Contract, when executed, together with all Schedules attached hereto or to be attached hereto, as provided for by this Contract shall constitute the entire Contract between both parties and this Contract may not be amended, modified, or terminated except by a written Contract signed by the parties hereto.

SECTION 31. FURTHER DOCUMENTS

The parties shall execute and deliver all documents and perform all further acts that may be reasonably necessary to effectuate the provisions of this Contract.

SECTION 32. APPLICABLE LAW

This Contract and the construction and enforceability thereof shall be interpreted under the laws of the State of Kansas.

SECTION 33. NOTICE

Any notice required or permitted hereunder shall be deemed sufficient if given in writing and delivered personally or sent by registered or certified mail or telefax (Fax), return receipt requested, postage prepaid, or delivered to a nationally recognized express mail service, charges prepaid, receipt obtained, to the address shown below or to such other persons or addresses as are specified by similar notice.

TO ESCO: **360 Energy Engineers**
 Attention: Joe Hurla
 730 New Hampshire, Ste. 203
 Lawrence, KS 66044

TO CUSTOMER: **City of Lawrence**
 Attention: Tom Markus
 6 E 6th Street
 Lawrence, KS 66044
 COPY TO:
 City of Lawrence
 Attention: Toni Ramirez Wheeler
 6 E 6th Street
 Lawrence, KS 66044

SECTION 34. CUSTOMER'S COMPLIANCE WITH FACILITIES MAINTENANCE CHECKLIST

Section 34.1 The parties acknowledge and agree that ESCO has entered into this Contract in reliance upon the prospect of earning compensation based on guaranteed energy savings in energy used at Premises, as set forth on Schedules C (**Energy Saving Guarantee**) and D (**Compensation to ESCO**), attached hereto and made a part hereof.

Section 34.2. The parties further acknowledge and agree that the said guaranteed energy savings would not likely be obtained unless certain procedures and methods of operation designed for energy conservation shall be implemented, and followed by Customer on a regular and continuous basis.

Section 34.3. Customer agrees that it shall adhere to, follow and implement the energy conservation procedures and methods of operation to be set forth on Schedule K (**Customer's Maintenance Responsibilities**), to be attached hereto and made a part hereof after Customer's approval.

Section 34.4. Customer agrees that ESCO shall have the right once a month, with prior notice, to inspect Premises to determine if Customer is complying, and shall have complied with its obligations as set forth above in Section 34.3. For the purpose of determining Customer's said compliance, the checklist to be set forth at Schedule L (**Facility Maintenance Checklist**) as completed and recorded by ESCO during its monthly inspections, shall be used to measure and record Customer's said compliance. Customer shall make the Premises available to ESCO for and during each monthly inspection, and shall have the right to witness each inspection and the recordation's on the checklist.

SECTION 35. HEADINGS

Headings and subtitles used throughout this Contract are for the purpose of convenience only, and no heading or subtitle shall modify or be used to interpret the text of any section.

SECTION 36. SPECIAL PROVISIONS

The signatures of the parties follow the attached Special Provisions, which Special Provisions are included as part of this Contract.

SECTION 37. MISCELLANEOUS

- 37.1 From each progress payment, the Customer shall retain ten percent (10%) until completion and acceptance of each Project identified in the Schedule of Values in accordance with Paragraph 2.d) of Schedule D.
- 37.2 Customer shall have the right to approve or deny any subcontractor.
- 37.3 ESCO agrees that its employees and the employees of its subcontractors shall refrain from the use of improper language at the location of the Project and it shall endeavor to not unduly impede or impair the ongoing operations of Customer's facilities or adjacent businesses.

SECTION 38. LIQUIDATED DAMAGES

ESCO acknowledges that Time is of the Essence and agrees that if ESCO fails to timely complete the project within the time set forth for Substantial Completion in the Contract for a subject facility, as may be amended pursuant to this Contract, the Customer will sustain extensive damages and loss as a result of such delay and failure. The Parties agree that the exact amount of such damages and loss is not readily ascertainable at the time of the execution of this Contract. Therefore, Customer and ESCO agree that, in the event ESCO fails to achieve Substantial Completion of the Work, Customer shall be entitled to retain or recover from ESCO, as liquidated damages and not as a penalty, the amount designated in the Contract for each subject facility per day for each day the Project is late beyond the Contract Time for Substantial Completion. The liquidated damage rate will continue to accrue until the actual date of Substantial Completion. The amount of liquidated damages assessed by Customer shall be deducted from any sums due ESCO and, in the event that such liquidated damages exceed amounts owed, ESCO shall promptly pay Customer, upon demand, the amount of such excess.

SECTION 39. ACCOUNTING RECORDS

ESCO shall keep full and detailed records and accounts related to the cost of the Work and exercise such controls as may be necessary for proper financial management under this Contract and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to Customer. Customer and the Customer's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, ESCO's records and accounts, including complete documentation supporting accounting entries, books, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, purchase orders, vouchers, memoranda and other data relating to this Contract. ESCO shall preserve these records for a period of three years after final payment, or for such longer period as may be required by law.

SECTION 40. GENERAL CONDITIONS (SCHEDULE N)

The Parties to this Contract acknowledge and agree that the General Conditions, Exhibit N, are incorporated herein by this reference. Further, ESCO acknowledges and agrees that all references in the General Conditions to the "State", "State of Kansas" or "Energy Division for the Kansas Corporation Commission, or related entities as referenced in the General Conditions in the capacity of a public owner shall be deemed to mean "the City of Lawrence" for purposes of this Contract.

IN WITNESS WHEREOF, and intending to be legally bound, the parties hereto subscribe their names to this Contract by their duly authorized officers on the date first above written.

ESCO:

_____ By _____ Date _____

Customer:

_____ By _____ Date _____

Approved by the Kansas Corporation Commission:

_____ By _____ Date _____

SCHEDULE A:

EQUIPMENT TO BE INSTALLED BY ESCO

1. Scope of Work

- a) The Projects identified in the following Sections of this Schedule are the entire Scope of Work to be performed as part of this Contract.

(1) Windows Replacements (City Hall):

- (a) Replace all existing window and framing systems at City Hall, excluding the atrium window system on the first floor

(2) Roofing System (Community Building and Fire Station #3):

- (a) Remove existing roofing system at the Community Building and replace with new. Sloped gymnasium portion of the roof will be partial tear off (membrane only).

- (b) Remove entire existing roofing system at Fire Station #3 and replace with new

(3) Roofing Top Layer (Community Health Building):

- (a) Install new roof membrane top layer over existing roof

(4) Solar PV (Fire Station #5):

- (a) Install a new 100 kW rooftop Solar PV system

(5) HVAC, Electrical, Controls and General Installations

(a) Community Health Building

- (i) Replace air-cooled chiller on roof
- (ii) Replace existing heating water boilers
- (iii) Replace air filtration system in six air handling units with electronic air filter cleaning systems to lower the required outside air levels
- (iv) Install a new DDC control system including new control valves at each VAV terminal with control valves original to the building's construction

(b) Arts Center

- (i) Replace the current air-cooled chiller on roof
- (ii) Install a new DDC control system
- (iii) Cleaning of coils and fan and hydronic balancing of theatre air handling unit
- (iv) Mitigate issue of insufficient cooling capacity in office work room 111A and office 112.

(c) Library

- (i) Expand existing DDC control system to include energy savings control strategies

(d) Outdoor Aquatic Center

- (i) Replace the existing pool water boiler
- (ii) Replace the existing air handler and condensing unit
- (iii) Install a new ductless mini-split to provide independent cooling to the concession stand

(e) Holcom Recreation Center

- (i) Install two new packaged HVAC systems for the gymnasium
- (ii) Remove boiler and install gas-fired duct furnaces for the non-gymnasium areas

- (iii) Install a new electric unit heater for storage area to replace hot water unit heater
 - (iv) Install a new gas unit heater in the mechanical room to replace hot water unit heater
 - (v) Add supplemental electric heat at building entry
- (f) Indoor Aquatic Center
 - (i) Replace two existing dehumidification units serving the Lap Pool
 - (ii) Remove roof-mounted pool boilers and install a new central plant boiler system in an existing mechanical room
 - (iii) Install a dedicated low-capture exhaust system in each pool area (lap pool and leisure pool)
 - (iv) Install variable frequency drive on Lap and Leisure Pool recirculation pumps
 - (v) Replace two pool water heaters and relocate new heaters to existing electrical closet off of pool equipment room
 - (vi) Replace heating water boiler for administration and lobby areas
 - (vii) Replace the condensing unit and evaporator coil for the VAV air handler
 - (viii) Replace corroded electrical panels, circuit breakers, and motor starters in pool equipment room
 - (ix) Add supplemental electric heat at building entry
 - (x) Customer shall provide a 14-day minimum shutdown period of both pools to perform this work.
- (g) City Hall
 - (i) Replace cabinet unit heaters in vestibules
 - (ii) Add intermittent occupancy setback functionality to select VAV terminal DDC controls
- (h) Solid Waste Division Office
 - (i) Replace ground-mounted packaged HVAC unit
 - (ii) Install web-based thermostat to replace existing traditional thermostat
- (i) Vehicle Maintenance Garage
 - (i) Install a dedicated ductless split system for server room
 - (ii) Install web-based thermostat to replace existing traditional thermostat
- (j) Fire Station #5
 - (i) Install a new DDC control system
- (k) Fire Station #4
 - (i) Install a new DDC control system
- (l) Fire Station #3
 - (i) Replace four packaged rooftop units
 - (ii) Install four web-based thermostats to replace existing traditional thermostats
- (m) Fire Station #2
 - (i) Replace three packaged rooftop units
 - (ii) Install four web-based thermostats to replace existing traditional thermostats
- (n) Airport Terminal
 - (i) Replace three HVAC split-systems (condensing units and furnaces)

- (ii) Install three web-based thermostats to replace existing traditional thermostats
- (o) New Hampshire Parking Garage
 - (i) Replace three wall-mounted, electric heat, packaged HVAC systems with gas heat packaged HVAC systems
 - (ii) Install gas piping to support gas heat
 - (iii) Install three web-based thermostats to replace existing traditional thermostats
- (p) Fire Training Center
 - (i) Install web-based thermostat to replace existing traditional thermostat
- (q) Airport Maintenance Hangar Office
 - (i) Install web-based thermostat to replace existing traditional thermostat
- (r) Streets Division Office
 - (i) Install web-based thermostat to replace existing traditional thermostat
- (s) Community Building
 - (i) Replace ten rooftop packaged heating and cooling units
- (t) East Lawrence Recreation Center
 - (i) Replace three rooftop packaged heating and cooling units
 - (ii) Add DDC temperature controls to existing entry cabinet unit heater
- (u) Prairie Park Nature Center
 - (i) Replace four split systems serving the main building
 - (ii) Install an energy-recovery ventilator to provide supplemental ventilation air
 - (iii) Replace existing main electrical distribution panel
- (6) New Baseball Field Lighting, Including New Poles (Holcom Baseball Fields)
- (7) New Outdoor Sports Lighting on Existing Poles
 - (a) Broken Arrow Park:
 - (i) Horseshoe Court
 - (b) Broken Arrow Park:
 - (i) Baseball Field
 - (c) Centennial Park
 - (i) Skate Park
 - (d) Chief Jim McSwain Park
 - (i) Basketball Court
 - (e) Deerfield Park
 - (i) Basketball Court/Skate Park
 - (f) Edgewood Park
 - (i) Bike Polo Hardcourt
 - (g) Hobbs Park

- (i) Basketball Court
- (h) Holcom Park
 - (i) Basketball/Tennis Court
- (i) Lyons Park
 - (i) Basketball/Tennis Court
 - (ii) Baseball Fields
- (j) Veterans Park
 - (i) Basketball Court
- (8) New Sports Lighting at the Clinton Softball Complex
- (9) New Outdoor Area Lighting (Public Works Maintained): The existing lighting fixtures shall be replaced as indicated in the scope of work table below:

CODE	SCOPE OF ITEM	Qty.
LEDCOBRA	Area Lighting to 1-lamp (COBRALED) - LED Cobra Head Fixture (400W Equivalent) - Include Photocell for Control	65
LEDAREAS	Area Lighting to 1-lamp (SHOELED) - LED Area Lighting , Small Output LED (250W Equivalent) - Include Photocell for Control	80
LEDAREAF	Area Lighting to 1-lamp (LEDAREAF) - LED Flood Light (1000W HPS Flood Light Equivalent)	9
PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light) 200W Equivalent	35
PT50LED	Area Lighting to 1-lamp (PLED50, 50W) - Pole Top LED (Hadco Light) 100W Equivalent	113

- (10) New Parks Area Lighting (Parks and Recreation Maintained): The existing lighting fixtures shall be replaced as indicated in the scope of work table below:

Broken Arrow Park - 2800 Louisiana St.
Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDCOBRA	Area Lighting to 1-lamp (COBRALED, 120W) - LED Cobra Head Fixture	2
2	LEDYARD	LED Area Lighting, Low Output LED (~15000 lm) to 1-lamp (YARDLED, 70W) - LED Yard Light Fixture with new Acrylic Reflector	3
3	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	4
4	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	5

Brook Creek Park - 1200 Brook St.
Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	3
2	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	3
3	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2

Burcham Park - 200 Indiana St.
Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	4

Centennial Park - 600 Rockledge Rd.
Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting , Small Output LED	8
2	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	3
3	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	5
4	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	12

Chief Jim McSwain Park - 1941 Haskell Ave.
Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	4
2	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting , Small Output LED	5

Clinton Park - 901 W. 5th St.
Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	8
2	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	3

Constant Park - 230 W. 6th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	5
2	LEDAREAF	Area Lighting to 1-lamp (FLED, 85W) - LED Area Flood Light	2

Dad Perry Park - 1200 Mont errey Way

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M20LEDSDM	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	9
2	LEDAREAF	Area Lighting to 1-lamp (FLED, 85W) - LED Area Flood Light	6
3	M40LEDSDM	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	4

Deerfield Park - 2801 W. Princeton Blvd.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	7
2	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting , Small Output LED	3
3	M40LEDSDM	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2

Eagle Bend Golf Parking Lot - 1250 E. 902 Rd.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M27LEDWVP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	4
2	M40LEDSDM	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	3

Edgewood Park - 1245 E. 15th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting , Small Output LED	13
2	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	8

Hand Park - 1040 Home Circle

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	2

Hobbs Park - 702 E. 11th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M40LEDSDM	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2
2	LEDAREAF	Area Lighting to 1-lamp (FLED, 85W) - LED Area Flood Light	8
3	LED COBRA	LED Area Lighting, Low Output LED (~15000 lm) to 1-lamp (COBRALED, 120W) - LED Cobra Head Fixture	2
4	LEDYARD	Area Lighting to 1-lamp (YARDLED, 70W) - LED Yard Light Fixture	2
5	M27LEDWVP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	3

Holcomb Park - 2700 W. 27th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M20LEDSDM	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	3
2	M27LEDWVP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	2
3	M34LEDWVP	Metal halide fixture to 1-lamp (LED34WP, 34W) - Install LED WallPack w/Photocell (~2500 lm)	2
4	M40LEDSDM	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	5

Japanese Friendship Garden - 1045 Massachusetts St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M40LEDSDM	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2
2	LEDBOLL	Area Lighting to 1-lamp (LEDB, 20W) - Bollard LED Light	3

John Taylor Park - 200 North 7th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	7
2	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting , Small Output LED	2
3	M40LEDSDM	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2

Ludlum Park - 2800 W. 9th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDCOBRA	Area Lighting to 1-lamp (COBRALED, 120W) - LED Cobra Head Fixture	2

Lyons Park - 700 North Lyon St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDAREAF	Area Lighting to 1-lamp (FLED, 85W) - LED Area Flood Light	4
2	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	3
3	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	2
4	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	3
5	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	2

Prairie Park - 2811 Kensington Rd.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting , Small Output LED	4
2	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	3
3	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	3

Rotary Arboretum - 5100 W. 27th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2

South Park - 1141 Massachusetts St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	25
2	E4LED	2-lamp, 8ft fluorescent fixture to 4-lamp (LED-4', 18W) - Convert to 4 x 4' LED tubes, remove ballast	3
3	LED65PAR38	Incandescent fixture to 1-lamp (LED11P, 11W) - LED equivalent to 65W Par38 Halogen	6
4	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	3
5	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	3
6	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2

Walnut Park - 211 N. 4th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	Area Lighting to 1-lamp (HADCO, 100W) - Pole Top LED (Hadco Light)	3

Youth Sports Complex - 4911 W. 27th St.

Scope of Work Summary

NO.	CODE	SCOPE OF ITEM	QTY.
1	M34LEDWP	Metal halide fixture to 1-lamp (LED34WP, 34W) - Install LED WallPack w/Photocell (~2500 lm)	2
2	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting , Small Output LED	42
3	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	2
4	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	9

(11) Building Lighting Retrofits and Replacements (All facilities): The existing lighting fixtures shall be retrofitted or replaced as indicated in the scope of work tables below:

Carnegie Buildings Scope of Work Summary

900 Vermont St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	2LEDG24	Compact Fluorescent to 2-lamp (LED12G, 12W) - Retrofit existing can with 2 G24 base LED (~2200 lm)	9
2	A3LED	4-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 4 lamps with 3 LED tubes, remove ballast	3
3	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	18
4	D1LED5	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4-T5HE, 15W) - Replace 4 lamps with 4 T5 LED tubes	12
5	FLEDSCDHO	2ft fluorescent fixture to 1-lamp (40W) - 2x2 Center Basket LED Recessed Troffer Fixture Replacement (~4000 lm) with perforated lens	55
6	FLEDSCDHO-EM	2ft fluorescent fixture to 1-lamp (40W) - 2x2 Center Basket LED Recessed Troffer Fixture Replacement (~4000 lm) with perforated lens and emergency backup driver	3
7	LED26G24	Incandescent fixture to 1-lamp (LED12G, 12W) - LED equivalent to 26W G24 CFL	4
8	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	5
9	LED65BR30	Incandescent fixture to 1-lamp (LED10B, 9.5W) - LED Equivalent to BR30 65W Incandescent lamp	35
10	LED75I	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	13
11	OCD	Install ceiling dual tech occupancy sensor	14

Fire Station 2 Scope of Work Summary
2128 Harper St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	2LEDG24	Compact Fluorescent to 2-lamp (LED12G, 12W) - Retrofit existing can with 2 G24 base LED (~2200 lm)	44
2	A2LED	4-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 4 lamps with 2 LED tubes, remove ballast	5
3	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	45
4	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	14
5	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	16
6	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	2
7	B3LED5	3-lamp, 3ft fluorescent fixture to 3-lamp (LED-3', 12W) - Replace 3 lamps with 3 LED 3' T5 tubes, remove ballast	28
8	LED75I	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	34
9	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	7
10	M70LED	Metal halide fixture to 1-lamp (LED24E, 24W) - Replace 70w MH bulb/ballast with LED equivalent (~3500 lm)	12
11	M75LEDWP	Metal halide fixture to 1-lamp (LED75WP, 75W) - Install LED WallPack w/Photocell (~8000 lm)	2

Fire Station 3 Scope of Work Summary
3708 W. 6th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	28
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	5
3	F2LED	2ft fluorescent fixture to 2-lamp (LED-2', 10W) - Replace existing lamps with 2 LED tubes, remove ballast	20
4	F3LED	2ft fluorescent fixture to 3-lamp (LED-2', 10W) - Replace existing lamps with 3 LED tubes, remove ballast	18
5	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	9

Fire Station 4 Scope of Work Summary
2121 Wakarusa Dr.

NO.	CODE	SCOPE OF ITEM	QTY.
1	1LEDG24	Compact Fluorescent to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	20
2	2LEDG24	Compact Fluorescent to 2-lamp (LED12G, 12W) - Retrofit existing can with 2 G24 base LED (~2200 lm)	38
3	B2LED	3-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 3 lamps with 2 LED tubes, remove ballast	3
4	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	40
5	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	11
6	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	5
7	LED197HB	High Bay Applications to 1-lamp (LED197HB, 197W) - Install new LED High Bay to Replace 400W MH	10
8	M34LEDWP	Metal halide fixture to 1-lamp (LED34WP, 34W) - Install LED WallPack w/Photocell (~2500 lm)	7
9	M45LEDWP	Metal halide fixture to 1-lamp (LED45WP, 45W) - Install LED WallPack w/Photocell (~3200 lm)	7

Fire Station 5 Scope of Work Summary
1911 Stewart Ave.

NO.	CODE	SCOPE OF ITEM	QTY.
1	1LEDG24	Compact Fluorescent to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	96
2	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	138
3	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	119
4	F1LED	2ft fluorescent fixture to 1-lamp (LED-2', 10W) - Replace existing lamps with 1 LED tubes, remove ballast	9
5	F3LED	2ft fluorescent fixture to 3-lamp (LED-2', 10W) - Replace existing lamps with 3 LED tubes, remove ballast	12
6	LED197HB	High Bay Applications to 1-lamp (LED197HB, 197W) - Install new LED High Bay to Replace 400W MH	21
7	LEDPAR20FLD	Incandescent fixture to 1-lamp (LEDPAR20FLD, 7W) - LED equivalent to 50W PAR20 Halogen Flood	40
8	M82LEDWP	Metal halide fixture to 1-lamp (LED82WP, 82W) - Install LED WallPack w/Photocell (~7500 lm)	9
9	M20LED5M	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	6
10	OCD	Install ceiling dual tech occupancy sensor	23

Fire Training Center Scope of Work Summary
1941 Haskell Ave.

NO.	CODE	SCOPE OF ITEM	QTY.
1	2LEDG24	Compact Fluorescent to 2-lamp (LED12G, 12W) - Retrofit existing can with 2 G24 base LED (~2200 lm)	2
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	36
3	F2LED	2ft fluorescent fixture to 2-lamp (LED-2', 10W) - Replace existing lamps with 2 LED tubes, remove ballast	4
4	HB9K	High Bay Applications to 1-lamp (LED74HB, 74W) - Install 9000 lumen High Bay LED Fixture	4
5	LED197HB	High Bay Applications to 1-lamp (LED197HB, 197W) - Install new LED High Bay to Replace 400W MH	8
6	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	2
7	LED75I	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	3
8	M82LEDWP	Metal halide fixture to 1-lamp (LED82WP, 82W) - Install LED WallPack w/Photocell (~7500 lm)	5
9	OCD	Install ceiling dual tech occupancy sensor	5

27th Street Maintenance Building Scope of Work Summary
4911 W. 27th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	9
2	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	4
3	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	55

Eagle Bend Clubhouse and Cart Barn Scope of Work Summary
1250 E. 902 Rd.

NO.	CODE	SCOPE OF ITEM	QTY.
1	1LEDG24	Compact Fluorescent to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	33
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	11
3	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	16

Community Health Building 1st Floor Scope of Work Summary
200 Maine St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	BLEDDIM	3-lamp, 4ft fluorescent fixture to 1-lamp (BLEDDIM, 52W) - Replace 3 lamps and ballast with equivalent dimmable LED retrofit kit	213
2	2B40LED	Compact Fluorescent to 2-lamp (B17led, 17W) - Retrofit existing fixture with 2 Biax 2' LED tubes	81
3	ALEDDIM	4-lamp, 4ft fluorescent fixture to 1-lamp (ALEDDIM, 59W) - Replace 4 lamps and ballast with equivalent dimmable LED retrofit kit	88
4	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	29
5	CLEDDIM	2-lamp, 4ft fluorescent fixture to 1-lamp (CLEDDIM, 30W) - Replace 2 lamps and ballast with equivalent dimmable LED retrofit kit	26
6	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	58
7	DLEDSTRIP	1-lamp, 4ft fluorescent fixture to 1-lamp (LEDSTRIP24, 24W) - 4' LED Surface Mount Strip Fixture Replacement (~2000 lum)	50
8	F2LED	2ft fluorescent fixture to 2-lamp (LED-2', 10W) - Replace existing lamps with 2 LED tubes, remove ballast	11
9	LED20MR11	Incandescent fixture to 1-lamp (LED20MR11, 3W) - LED equivalent to 20W halogen MR11	9
10	LED50MR16	Incandescent fixture to 1-lamp (LED50MR16, 8W) - LED equivalent to 50W halogen MR16	45
11	LED65BR30	Incandescent fixture to 1-lamp (LED10B, 9.5W) - LED Equivalent to BR30 65W Incandescent lamp	26
12	LED75i	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	38
13	LED9G23	Incandescent fixture to 1-lamp (LED9CFLG23, 3.5W) - LED equivalent to 9W G23 CFL	3
14	EM-LED	Emergency LED battery backup driver	4

Community Health Building 2nd Floor Scope of Work Summary
200 Maine St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	BLEDDIM	3-lamp, 4ft fluorescent fixture to 1-lamp (BLEDDIM, 52W) - Replace 3 lamps and ballast with equivalent dimmable LED retrofit kit	308
2	2B40LED	Compact Fluorescent to 2-lamp (B17led, 17W) - Retrofit existing fixture with 2 Biax 2' LED tubes	66
3	ALEDDIM	4-lamp, 4ft fluorescent fixture to 1-lamp (ALEDDIM, 59W) - Replace 4 lamps and ballast with equivalent dimmable LED retrofit kit	7
4	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	4
5	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	15
6	CLEDDIM	2-lamp, 4ft fluorescent fixture to 1-lamp (CLEDDIM, 30W) - Replace 2 lamps and ballast with equivalent dimmable LED retrofit kit	48
7	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	67
8	DLEDSTRIP	1-lamp, 4ft fluorescent fixture to 1-lamp (LEDSTRIP24, 24W) - 4' LED Surface Mount Strip Fixture Replacement (~2000 lum)	23
9	LED20MR11	Incandescent fixture to 1-lamp (LED20MR11, 3W) - LED equivalent to 20W halogen MR11	10
10	LED26G24	Incandescent fixture to 1-lamp (LED12G, 12W) - LED equivalent to 26W G24 CFL	7
11	LED50MR16	Incandescent fixture to 1-lamp (LED50MR16, 8W) - LED equivalent to 50W halogen MR16	36
12	LED65BR30	Incandescent fixture to 1-lamp (LED10B, 9.5W) - LED Equivalent to BR30 65W Incandescent lamp	101
13	LED75i	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	28
14	LED9G23	Incandescent fixture to 1-lamp (LED9CFLG23, 3.5W) - LED equivalent to 9W G23 CFL	2
15	M70LED	Metal halide fixture to 1-lamp (LED24E, 24W) - Replace 70w MH bulb/ballast with LED equivalent (~3500 lum)	5

Community Health Building 3rd Floor Scope of Work Summary
200 Maine St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	27
2	2B40LED	Compact Fluorescent to 2-lamp (B17led, 17W) - Retrofit existing fixture with 2 Biax 2' LED tubes	54
3	ALEDDIM	4-lamp, 4ft fluorescent fixture to 1-lamp (ALEDDIM, 59W) - Replace 4 lamps and ballast with equivalent dimmable LED retrofit kit	5
4	BLEDDIM	3-lamp, 4ft fluorescent fixture to 1-lamp (BLEDDIM, 52W) - Replace 3 lamps and ballast with equivalent dimmable LED retrofit kit	145
5	CLEDDIM	2-lamp, 4ft fluorescent fixture to 1-lamp (CLEDDIM, 30W) - Replace 2 lamps and ballast with equivalent dimmable LED retrofit kit	26
6	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	15
7	DLEDSTRIP	1-lamp, 4ft fluorescent fixture to 1-lamp (LEDSTRIP24, 24W) - 4' LED Surface Mount Strip Fixture Replacement (~2000 lum)	34
8	LED20MR11	Incandescent fixture to 1-lamp (LED20MR11, 3W) - LED equivalent to 20W halogen MR11	6
9	LED50MR16	Incandescent fixture to 1-lamp (LED50MR16, 8W) - LED equivalent to 50W halogen MR16	52
10	LED65BR30	Incandescent fixture to 1-lamp (LED10B, 9.5W) - LED Equivalent to BR30 65W Incandescent lamp	7
11	LED75i	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	128

Community Health Building Exterior Scope of Work Summary
200 Maine St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	LED26G24	Incandescent fixture to 1-lamp (LED12G, 12W) - LED equivalent to 26W G24 CFL	13
2	LED50MR16	Incandescent fixture to 1-lamp (LED50MR16, 8W) - LED equivalent to 50W halogen MR16	13
3	LEDAREAL	Area Lighting to 1-lamp (LEDAREAL, 157W) - LED Area Lighting, Low Output LED (~15000 lm)	15
4	M100LED-h2	Metal halide fixture to 1-lamp (LED45E, 45W) - Replace 100w MH bulb/ballast with LED equivalent (~4500 lm) - High Ceiling > 20 ft	5
5	M20LEDSDM	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH fixture (replace mh50)	2
6	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	3
7	M50LED	Metal halide fixture to 1-lamp (LED24E, 24W) - Replace 50w MH bulb/ballast with LED equivalent (~2000 lm)	5

Community Building Scope of Work Summary
115 W. 11th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	76
2	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	116
3	G4LED	U-tube, 2 ft fluorescent fixture to 4-lamp (LED-2', 10W) - Replace 2 lamps with 4 LED tubes, remove ballast	48
4	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	16
5	M45LEDFLD	Metal halide fixture to 1-lamp (LED45E, 45W) - Install 45w LED Floodlight w/Photocell (~5000 lm)	2
6	OCD	Install ceiling dual tech occupancy sensor	10

East Lawrence Recreation Center Scope of Work Summary
1245 E. 15th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	28
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	53
3	M45LEDWP	Metal halide fixture to 1-lamp (LED45WP, 45W) - Install LED WallPack w/Photocell (~3200 lm)	4
4	M70LED	Metal halide fixture to 1-lamp (LED24E, 24W) - Replace 70w MH bulb/ballast with LED equivalent (~3500 lm)	26
5	OCD	Install ceiling dual tech occupancy sensor	3

Holcom Recreation Center Scope of Work Summary
2700 W. 27th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	70
2	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	46
3	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	3
4	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	13
5	M200LED	Metal halide fixture to 1-lamp (LED45E, 45W) - Replace 200w MH bulb/ballast with LED equivalent (~7000 lm)	7
6	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	7
7	M70LED	Metal halide fixture to 1-lamp (LED24E, 24W) - Replace 70w MH bulb/ballast with LED equivalent (~3500 lm)	4
8	OCD	Install ceiling dual tech occupancy sensor	7

Lawrence Arts Center Scope of Work Summary
940 New Hampshire St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	192
2	1LEDG24	Recessed Lights to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	5
3	2LEDG24	Recessed Lights to 2-lamp (LED12G, 12W) - Retrofit existing can with 2 G24 base LED (~2200 lm)	159
4	B2LED	3-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 3 lamps with 2 LED tubes, remove ballast	19
5	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	192
6	LED75I	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	3
7	LEDSCONCESM	Incandescent fixture to 1-lamp (LEDSCONCE, 15W) - Small LED Wall Sconce	4

Library Scope of Work Summary
707 Vermont St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED5	2-lamp, 4ft fluorescent fixture to 2-lamp (T5LED-4', 15W) w/ powered ballast (2 lamps/ballast) - Replace 2 lamps with 2 LED T5-style ballast-compatible tubes	249
2	2LEDG24	Recessed Lights to 2-lamp (LED12G, 12W) - Retrofit existing can with 2 G24 base LED (~2200 lum)	4
3	A4LED5HO	4-lamp, 4ft fluorescent fixture to 4-lamp (LED54T5TUBE, 24W) w/ powered ballast (4 lamps/ballast) - Replace 3 lamps with 3 LED T5HO-style ballast-compatible tubes	37
4	B3LED5	3-lamp, 4ft fluorescent fixture to 3-lamp (T5LED-4', 15W) w/ powered ballast (1.5 lamps/ballast) - Replace 3 lamps with 3 LED T5-style ballast-compatible tubes	93
5	C2LED5HO	2-lamp, 4ft fluorescent fixture to 2-lamp (T5LEDHO-4', 24W) w/ powered ballast (2 lamps/ballast) - Replace 2 lamps with 2 LED T5HO-style ballast-compatible tubes	81
6	D1LED5	1-lamp, 4ft fluorescent fixture to 1-lamp (T5LED-4', 15W) - Replace 1 lamp with 1 LED T5-style ballast-compatible tubes	103
7	F4LED5	2ft fluorescent fixture to 4-lamp (T5LED-2', 8W) w/ powered ballast (2 lamps/ballast) - Replace 4 lamps with 4 LED T5-style ballast-compatible tubes	41
8	FLED5	2ft fluorescent fixture to 1-lamp (T5LED-2', 8W) w/ powered ballast (1 lamps/ballast) - Replace 2 lamps with 2 LED T5-style ballast-compatible tubes	54

New Hampshire Parking Garage Scope of Work Summary
935 New Hampshire St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDBOLL	Area Lighting to 1-lamp (LEDB, 20W) - Bollard LED Light	10
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	18
3	LEDAREAL	Area Lighting to 1-lamp (LEDAREA3, 157W) - LED Area Lighting, Low Output LED (~15000 lm)	3
4	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting, Small Output LED	14
5	LEDPARKING	Metal halide fixture to 1-lamp (LedParking, 56W) - New LED Fixtures for Parking Garage	168
6	M40LED5M	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	11
7	M45LEDWP	Metal halide fixture to 1-lamp (LED45WP, 45W) - Install LED WallPack w/Photocell (~3200 lm)	11

Indoor Aquatic Center Scope of Work Summary
4706 Overland Dr.

NO.	CODE	SCOPE OF ITEM	QTY.
1	M300LED	Metal halide fixture to 1-lamp (LED100E, 100W) - Replace 300w MH bulb/ballast with LED equivalent (~10000 lm)	55
2	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	66
3	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	147
4	LED100I	Incandescent fixture to 1-lamp (LED18A, 18W) - LED Equivalent to A-type 100W Incandescent lamp	11
5	LED18G24	Incandescent fixture to 1-lamp (LED7G, 7W) - LED equivalent to 18W G24 CFL	2
6	LED26G24	Incandescent fixture to 1-lamp (LED12G, 12W) - LED equivalent to 26W G24 CFL	42
7	LED75I	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	3
8	LEDNATP	Metal halide fixture to 1-lamp (LEDNATWP, 90W) - Pendant Mount LED Fixture	33
9	LEDNATWP	Metal halide fixture to 1-lamp (LEDNATWP, 127W) - Natatorium Wall Pack LED Fixture	8
10	M200LED	Metal halide fixture to 1-lamp (LED45E, 45W) - Replace 200w MH bulb/ballast with LED equivalent (~7000 lm)	4
11	OCD	Install ceiling dual tech occupancy sensor	6

Union Pacific Depot Scope of Work Summary
402 N. 2nd St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	LED65BR30	Incandescent fixture to 1-lamp (LED10B, 9.5W) - LED Equivalent to BR30 65W Incandescent lamp	33
2	2LED18G24	Recessed Lights to 2-lamp (LED7G, 7W) - LED equivalent to 2 bulb 18W G24 CFL	31
3	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	3
4	F2LED	2ft fluorescent fixture to 2-lamp (LED-2', 10W) - Replace existing lamps with 2 LED tubes, remove ballast	3
5	LED75I	Incandescent fixture to 1-lamp (LED13A, 13.5W) - LED Equivalent to A-type 75W Incandescent lamp	14
6	LEDAREAL	Area Lighting to 1-lamp (LEDAREA3, 157W) - LED Area Lighting, Low Output LED (~15000 lm)	4
7	M100LED	Metal halide fixture to 1-lamp (LED45E, 45W) - Replace 100w MH bulb/ballast with LED equivalent (~4500 lm)	12
8	M200LED	Metal halide fixture to 1-lamp (LED45E, 45W) - Replace 200w MH bulb/ballast with LED equivalent (~7000 lm)	4
9	M300LED	Metal halide fixture to 1-lamp (LED100E, 100W) - Replace 300w MH bulb/ballast with LED equivalent (~10000 lm)	3
10	M45LEDFLD	Metal halide fixture to 1-lamp (LED45E, 45W) - Install 45w LED Floodlight w/Photocell (~5000 lm)	7

Solid Waste Office Scope of Work Summary
1140 Haskell Ave.

NO.	CODE	SCOPE OF ITEM	QTY.
1	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	14
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	20
3	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	3

Parks and Rec Administration Building Scope of Work Summary
1141 Massachusetts St.

No.	Code	Scope of Item	Qty.
1	C2LED5	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 15W) - Replace 2 lamps with 2 T5-STYLE LED tubes, RETAIN BALLAST	65
2	1LEDG24	Recessed Lights to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	9
3	F4LED	2ft fluorescent fixture to 4-lamp (LED-2', 10W) - Replace existing lamps with 4 LED tubes, remove ballast	14
4	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	2
5	OCD	Install ceiling dual tech occupancy sensor	10

Prairie Park Nature Center Scope of Work Summary
2730 Harper St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	LED100I	Incandescent fixture to 1-lamp (LED18A, 18W) - LED Equivalent to A-type 100W Incandescent lamp	7
2	2LEDG24	Recessed Lights to 2-lamp (LED12G, 12W) - Retrofit existing can with 2 G24 base LED (~2200 lm)	3
3	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	5
4	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	70
5	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	4
6	LED65BR30	Incandescent fixture to 1-lamp (LED10B, 9.5W) - LED Equivalent to BR30 65W Incandescent lamp	16
7	M20LEDSP	Metal halide fixture to 1-lamp (LED20S, 20W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh50)	7
8	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	3

Outdoor Aquatic Center Scope of Work Summary
727 Kentucky St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	63
2	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting, Small Output LED	33
3	LEDPEND	High Bay Applications to 1-lamp (LEDPHO, 78W) - Install new LED Pendant Fixture	2
4	M40LEDSP	Metal halide fixture to 1-lamp (LED40S, 40W) - Install Surface Mount LED Fixture to Replace MH Fixture (replace mh100)	2
5	M45LEDWP	Metal halide fixture to 1-lamp (LED45WP, 45W) - Install LED WallPack w/Photocell (~3200 lm)	2
6	M70LED	Metal halide fixture to 1-lamp (LED24E, 24W) - Replace 70w MH bulb/ballast with LED equivalent (~3500 lm)	2

Vehicle Maintenance Garage Scope of Work Summary
1141 Haskell Ave.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	89
2	A3LED	4-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 4 lamps with 3 LED tubes, remove ballast	45
3	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	2
4	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	3
5	HB13K	High Bay Applications to 1-lamp (LED118HB, 118W) - Install 13000 lumen High Bay LED Fixture	36
6	LED197HB	Metal halide fixture to 1-lamp (LED197HB, 197W) - Install new LED High Bay to Replace 400W MH	2
7	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	2
8	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	2
9	M82LEDWP	Metal halide fixture to 1-lamp (LED82WP, 82W) - Install LED WallPack w/Photocell (~7500 lm)	5

Street Division Office + Red Barn Scope of Work Summary
1120 Haskell Ave.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	34
2	A4LED	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4', 18W) - Replace 4 lamps with 4 LED tubes, remove ballast	46
3	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4', 18W) - Replace 1 lamp with 1 LED tube, remove ballast	4
4	F3LED	2ft fluorescent fixture to 3-lamp (LED-2', 10W) - Replace existing lamps with 3 LED tubes, remove ballast	2
5	F4LED	2ft fluorescent fixture to 4-lamp (LED-2', 10W) - Replace existing lamps with 4 LED tubes, remove ballast	2
6	LED60I	Incandescent fixture to 1-lamp (LED09A, 9W) - LED Equivalent to A-type 60W Incandescent lamp	3
7	LEDAREAR	Area Lighting to 1-lamp (LEDAREAS, 264W) - LED Area Lighting, Regular Output LED (~25000 lm)	4
8	M27LEDWP	Metal halide fixture to 1-lamp (LED27WP, 27W) - Install LED WallPack w/Photocell (~1500 lm)	3
9	M45LEDFLD	Metal halide fixture to 1-lamp (LED45E, 45W) - Install 45w LED Floodlight w/Photocell (~5000 lm)	9
10	M75LEDWP	Metal halide fixture to 1-lamp (LED75WP, 75W) - Install LED WallPack w/Photocell (~8000 lm)	2

Riverfront Garage and Surface Lot Scope of Work Summary
124 E. 6th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	PG1L	Parking garage 4ft fluorescent fixture to 1-lamp (LED24T5, 24W) - Replace 1 lamp with 1 LED T5 tube, remove ballast	39
2	PG2L	Parking garage 4ft fluorescent fixture to 2-lamp (LED24T5, 24W) - Replace 2 lamp with 2 LED T5 tube, remove ballast	62
3	LEDAREAL	Area Lighting to 1-lamp (LEDAREAS, 157W) - LED Area Lighting, Low Output LED (~15000 lm)	13
4	M200LED	Metal halide fixture to 1-lamp (LED45E, 45W) - Replace 200w MH bulb/ballast with LED equivalent (~7000 lm)	18

Salt Domes and Wakarusa Fuel Station Scope of Work Summary
1128 Haskell and 1901 Wakarusa Dr.

NO.	CODE	SCOPE OF ITEM	QTY.
1	LEDAREAS	Area Lighting to 1-lamp (SHOELED, 87W) - LED Area Lighting, Small Output LED	14
2	LEDAREAL	Area Lighting to 1-lamp (LEDAREAS, 157W) - LED Area Lighting, Low Output LED (~15000 lm)	3
3	M300LED	Metal halide fixture to 1-lamp (LED100E, 100W) - Replace 300w MH bulb/ballast with LED equivalent (~10000 lm)	3
4	M82LEDWP	Metal halide fixture to 1-lamp (LED82WP, 82W) - Install LED WallPack w/Photocell (~7500 lm)	5

North Lawrence Pump Stations Scope of Work Summary
732 N. 2nd St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	6
2	M82LEDWP	Metal halide fixture to 1-lamp (LED81WP, 81W) - Install LED WallPack w/Photocell (~6500 lm)	3

Union Pacific Depot Underpass Scope of Work Summary
402 N. 2nd St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	M81LEDWP	Metal halide fixture to 1-lamp (LED82WP, 82W) - Install LED WallPack w/Photocell (~7500 lm)	9

Parks and Rec Buildings Shop Scope of Work Summary
1050 E. 11th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED-H2	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast - High Ceiling > 20 ft -	61
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	14

Parking, Transit, and Animal Control Office Scope of Work Summary
935 New Hampshire St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	B3LED	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4', 18W) - Replace 3 lamps with 3 LED tubes, remove ballast	51
2	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4', 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	9
5	OCD	Install ceiling dual tech occupancy sensor	10

City Hall Ground Floor Scope of Work Summary
6 E. 6th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	BLEDRCSD	3-lamp, 4ft fluorescent fixture to 1-lamp (LED50R, 50W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~5000 lm)	25
3	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4", 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	7
4	CLEDRCSD	2-lamp, 4ft fluorescent fixture to 1-lamp (LED42R, 42W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~3500 lm)	46
5	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4", 18W) - Replace 1 lamp with 1 LED tube, remove ballast	3
6	G2LED	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit	3
7	GLEDRCSD	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit with Emergency Backup Driver	7
8	LED26G24	Incandescent fixture to 1-lamp (LED12G, 12W) - LED equivalent to 26W G24 CFL	7

City Hall First Floor Scope of Work Summary
6 E. 6th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED4", 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	4
2	CLEDRCSD	2-lamp, 4ft fluorescent fixture to 1-lamp (LED42R, 42W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~3500 lm)	5
3	BLEDRCSD	3-lamp, 4ft fluorescent fixture to 1-lamp (LED50R, 50W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~5000 lm)	27
4	GLEDRCSD	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit with Emergency Backup Driver	3
5	G2LED	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit	26

City Hall Second Floor Scope of Work Summary
6 E. 6th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	1LEDG24	Recessed Lights to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	8
2	BLEDRCSD	3-lamp, 4ft fluorescent fixture to 1-lamp (LED50R, 50W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~5000 lm)	30
3	CLEDRCSD	2-lamp, 4ft fluorescent fixture to 1-lamp (LED42R, 42W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~3500 lm)	29
4	G2LED	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit	10
5	GLEDRCSD	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit with Emergency Backup Driver	12

City Hall Third Floor Scope of Work Summary
6 E. 6th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED4", 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	5
2	BLEDRCSD	3-lamp, 4ft fluorescent fixture to 1-lamp (LED50R, 50W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~5000 lm)	26
3	CLEDRCSD	2-lamp, 4ft fluorescent fixture to 1-lamp (LED42R, 42W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~3500 lm)	33
4	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4", 18W) - Replace 1 lamp with 1 LED tube, remove ballast	3
5	G2LED	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit	19
6	GLEDRCSD	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit with Emergency Backup Driver	5

City Hall Fourth Floor Scope of Work Summary
6 E. 6th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED	2-lamp, 4ft fluorescent fixture to 2-lamp (LED4", 18W) - Replace 2 lamps with 2 LED tubes, remove ballast	3
2	1LEDG24	Recessed Lights to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	4
3	BLEDRCSD	3-lamp, 4ft fluorescent fixture to 1-lamp (LED50R, 50W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~5000 lm)	39
4	CLEDRCSD	2-lamp, 4ft fluorescent fixture to 1-lamp (LED42R, 42W) - DIMMABLE 2x4 LED Recessed Troffer Retrofit Kit (~3500 lm)	21
5	D1LED	1-lamp, 4ft fluorescent fixture to 1-lamp (LED-4", 18W) - Replace 1 lamp with 1 LED tube, remove ballast	2
6	G2LED	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit	5
7	GLEDRCSD	U-tube, 2 ft fluorescent fixture to 1-lamp (LED, 20W) - DIMMABLE 2x2 LED Recessed Troffer Retrofit Kit with Emergency Backup Driver	9

Downtown Parking Lots and Canopy Lights Scope of Work Summary
800 Vermont St. Parking Lot 3 and 900 Vermont St. Parking Lot 5

NO.	CODE	SCOPE OF ITEM	QTY.
1	PTLED	LED Area Lighting, Regular Output LED to 1-lamp (HADCO50, 50W) - Pole Top LED (Hadco Light)	14
2	PTLED-POLE	New 10' cast aluminum pole and base with access cover	14
3	M7LEDWP	Metal halide fixture to 1-lamp (LED7WP, 7W) - Install Small LED WallPack	26

Sports Pavillion Scope of Work Summary
100 Rock Chalk Lane

NO.	CODE	SCOPE OF ITEM	QTY.
1	C2LED5	2-lamp, 4ft fluorescent fixture to 2-lamp (LED-4-T5HE, 15W) - Replace 2 lamps with 2 T5 LED tubes	115
2	1LEDG24	Recessed Lights to 1-lamp (LED12G, 12W) - Retrofit existing can with 1 G24 base LED (~1100 lm)	9
3	4T5HBLED	High Bay Applications to 4-lamp (T5HBLED, 24W) - Retrofit 4 T5 High Bays with T5 LED Tubes	101
4	6T5HBLED	High Bay Applications to 6-lamp (T5HBLED, 24W) - Retrofit 6 T5 High Bays with T5 LED Tubes	384
5	6T5LED	High Bay Applications to 6-lamp (LED-4-T5HE, 15W) - Retrofit 6 T5 with T5 LED Tubes	5
6	A4LED5	4-lamp, 4ft fluorescent fixture to 4-lamp (LED-4-T5HE, 15W) - Replace 4 lamps with 4 T5 LED tubes	62
7	B3LED5	3-lamp, 4ft fluorescent fixture to 3-lamp (LED-4-T5HE, 15W) - Replace 3 lamps with 3 T5 LED tubes	21

East Lawrence Rec Center Gymnasium Scope of Work Summary
1245 E. 15th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	6T5HBLED	High Bay Applications to 6-lamp (T5HBLED, 24W) - Retrofit 6 T5 High Bays with T5 LED Tubes	32

Holcom Rec Center Gymnasium Scope of Work Summary
2700 W. 27th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	6T5HBLED	High Bay Applications to 6-lamp (T5HBLED, 24W) - Retrofit 6 T5 High Bays with T5 LED Tubes	21

Community Building Gymnasium Scope of Work Summary
115 W. 11th St.

NO.	CODE	SCOPE OF ITEM	QTY.
1	6T5HBLED	High Bay Applications to 6-lamp (T5HBLED, 24W) - Retrofit 6 T5 High Bays with T5 LED Tubes	30

NOTE: Lighting lamp wattages and fixture descriptions may vary based on final subcontractor submittals approved by ESCO.

(12) Building and Area Lighting Control System Installations:

- (a) Lighting occupancy sensors shall be installed at City Hall and the Community Health Building to provide occupancy control.
- (b) Timer controls shall be added to sports court lighting at the following locations:
 - (i) Broken Arrow Park, 2800 Louisiana St, Horseshoe Court
 - (ii) Centennial Park, 600 Rockledge Rd., Skate Park
 - (iii) Chief Jim McSwain Park, 1941 Haskell Ave, Basketball Court
 - (iv) Deerfield Park, 2801 W Princeton Blvd, Basketball Court with adjacent skate park
 - (v) Edgewood Park, (SLKBP Hardcourt) 1728 Maple Ln, Bike Polo Hardcourt
 - (vi) Hobbs Park, 702 E. 11th St., Basketball Court
 - (vii) Holcom Park, 2700 W 27th St, Basketball Court
 - (viii) Holcom Park, 2700 W 27th St, Tennis Court
 - (ix) Lyons Park, 700 North Lyons Street, Basketball Court with adjacent tennis courts

(13) Building Weatherization Projects:

- (a) Building weatherization shall be performed on the following buildings to include weather-stripping, sealants and sweeps on exterior windows, sidelights, doors and general envelope for energy conservation purposes.
 - (i) Community Health Building, 200 Maine St.
 - (ii) Indoor Aquatic Center, 4706 Overland Dr.
 - (iii) Eagle Bend Clubhouse, 1250 East 902 Road
 - (iv) Airport Terminal, 1920 Airport Rd.
 - (v) Airport Maintenance Facility, 1920 Airport Rd.
 - (vi) Fire/Med #5, 1911 Stewart Ave.
 - (vii) Fire/Med #4, 2121 Wakarusa Dr.
 - (viii) Fire/Med #3, 3708 W. 6th St.
 - (ix) Fire and Rescue Training, 1941 Haskell Ave. #5
 - (x) Fire/Med #2, 2128 Harper St.
 - (xi) Parking/AnimalControl/Transit, 935 New Hampshire St.
 - (xii) Lawrence Arts Center, 940 New Hampshire St.
 - (xiii) City Hall, 6 E. 6th St.
 - (xiv) Union Pacific Depot, North Lawrence

- (xv) East Lawrence Rec Center, 1245 East 15th Street
- (xvi) Prairie Park Nature Center, 2730 Harper St.
- (xvii) South Park Admin Office, 1141 Massachusetts St.
- (xviii) Community Building, 115 West 11th Street
- (xix) Holcom Park Rec Center, 2700 West 27th Street
- (xx) Solid Waste Division, 1140 Haskell
- (xxi) Street Division Office, 1120 Haskell
- (xxii) Library, 707 Vermont St.
- (xxiii) Sports Pavilion, 100 Rock Chalk Ln.
- (xxiv) Carnegie Building, 200 W. 9th St.

2. Scope of Work Exclusions:

a) General

- (1) Sales taxes are excluded from the project. Owner will assist ESCO in securing project exemption certificate.
- (2) Abatement of asbestos and other hazardous materials are not included in the scope of work. This work is to be performed under a separate contract by the Owner in a timely manner.
- (3) Temporary conditioning of occupied spaces is excluded. Existing HVAC equipment is intended to be kept in operation to provide conditioning of spaces where possible.

b) Mechanical, Electrical and Controls

- (1) DDC Controls Installations:
 - (a) Existing control devices and wiring deemed functional may be used with new DDC control systems
 - (b) Expansion of fire panels to accommodate added points.
- (2) Testing, adjusting and balancing of airflows for one-for-one unitary heating and cooling equipment replacements.
- (3) Future upgrades to existing building electrical service required by the utility provider.
- (4) IT infrastructure and IT support:
 - (a) Project to use existing data architecture in place, owner to provide IT support to assist in connection of controls remote access interface.
 - (b) Temporary moving and resetting of furnishings and other city-owned items needed to perform work.

c) Lighting

- (1) All existing exit signs
- (2) Incandescent fixtures on dimmers
- (3) Incandescent fixtures in decorative applications
- (4) Fixtures where heat, fixture size, or photometrics prevent LED application
- (5) Circline fluorescents
- (6) 1', 3' and 6' fluorescents
- (7) Task lighting on modular furniture
- (8) Black light and aquarium lighting
- (9) Lighting in showcases and cabinets

- (10) Theatrical lighting
- (11) Lighting designed and intended to illuminate art work, museum artifacts, or other objects requiring special application lighting
- d) Windows
 - (1) Window blinds and other treatments are excluded from City Hall window project
- e) Roofing
 - (1) Replacement of any defective roofing items which are hidden conditions, including wood nailer, insulation, and metal deck. Repair of these items will be billed to the client through change orders and paid for out of the project contingency budget.

SCHEDULE B:

DESCRIPTION OF PREMISES

1. Buildings Included:

Building	Area	Area	Comments
Community Health Building	200 Maine St.	87,300	
Indoor Aquatic Center	4706 Overland Dr.	43,200	
Library	707 Vermont St.	85,000	
Eagle Bend Clubhouse	1250 East 902 Road	3,000	
Airport Terminal	1920 Airport Rd.	7,500	
Airport Maintenance Facility	1920 Airport Rd.	10,500	
Airport Community Hangar	1920 Airport Rd.	15,000	
Fire/Med #5	1911 Stewart Ave.	25,549	
Fire/Med #4	2121 Wakarusa Dr.	10,918	
Fire/Med #3	3708 W. 6th St.	7,000	
Fire and Rescue Training	1941 Haskell Ave. #5	6,544	
Fire/Med #2	2128 Harper St.	11,110	
Parking/AnimalControl/Transit	935 New Hampshire St.	2,300	
Lawrence Arts Center	940 New Hampshire St.	55,000	
City Hall	6 E. 6th St.	27,828	
Carnegie Building	9th & Vermont	12,000	
Union Pacific Depot	402 N. 2nd St.	5,000	
East Lawrence Rec Center	1245 East 15th Street	18,000	
Prairie Park Nature Center	2730 Harper St.	5,500	
South Park Admin Office	1141 Massachusetts St.	4,850	
Community Building	115 West 11th Street	30,000	
Holcom Park Rec Center	2700 West 27th Street	19,500	
Sports Pavilion	100 Rock Chalk Lane	181,000	
Solid Waste Division	1140 Haskell	2,669	
Street Division Office	1120 Haskell	3,152	
YSI Sports Complex (Buildings)	W. 27 th	3,300	
27th St. Maintenance Building	W. 27 th	5,000	
Airport Hangar A	1920 Airport Rd.	12,000	
Airport Hangar B	1920 Airport Rd.	12,000	
Airport Hangar C	1920 Airport Rd.	12,000	

New Hampshire Parking Garage	935 New Hampshire	127,500	
Riverfront Parking Garage	Riverfront Plaza	136,000	
Outdoor Aquatic Center	727 Kentucky St.	6,300	
Vehicle Maintenance Garage	1141 Haskell	14,500	
North Lawrence Pump Station	734 N. 2nd St	580	
Street Division Salt Dome - Wakarusa	Wakarusa Drive	3,000	
Street Division Salt Dome - Haskell	1128 Haskell	3,000	
Street Division - Red Barn	1120 Haskell	7,000	
Parks & Rec Maintenance	1050 E. 11th Street	6,905	
Total Square Footage		1,028,505	

2. Detailed description of the existing premises, including equipment currently in place at the time of the contract, can be found in the Investment Grade Audit Report submitted to the City of Lawrence under separate cover.

SCHEDULE D:

COMPENSATION TO ESCO

Total compensation from Customer to ESCO shall be \$10,937,472. Details of the components of this compensation and other program-related fees is provided on the following page.

1. CHANGES IN THE CONTRACT SUM:

- a) Any overage in the cost of the Scope of Work in SCHEDULE A (EQUIPMENT TO BE INSTALLED BY ESCO) shall be the responsibility of ESCO.
- b) Changes to the contract sum are warranted for, but are not limited to: Hazardous materials, additions or modifications to the Scope of Work, and Differing Site Conditions. All additional costs associated with these items shall be the responsibility of Customer.

2. PAYMENT PROCEDURES

- a) Project Mobilization: The initial Application for Payment shall include all project development and engineering expenses, as well as 10 percent of the remaining total compensation to allow for mobilization of ESCO and subcontractors.
- b) Progress Payments: ESCO shall provide a monthly Application for Payment to Customer for work completed during the previous month. Customer shall make payment in the manner and within the time provided.
- c) Invoice Notification: The Application for Payment will be emailed to the City of Lawrence Sustainability Director at:

ehorn@lawrenceks.org

Customer will have 30 days to review and process invoices for work completed.

- d) Until the Project is complete, as identified as a line item in the Schedule of Values, Customer will pay ninety percent (90%) of the amount due to ESCO on account of progress payments. This 10% retention shall be paid in conjunction with Acceptance of Project Completion for each Project identified in the Schedule of Values, which shall not be unduly withheld.
- e) Schedule of Values: ESCO will prepare and submit a complete schedule of values along with initial Application for Payment. Projects listed as line items in the Schedule of Values will be treated as individual projects for the purposes of Progress Payments, Project Completion, and withholding of retention amounts.
- f) Final payment application: After completing all project closeout requirements, ESCO will submit final Application for Payment with supporting documentation not previously submitted and accepted, including, but not limited, to evidence that each item has been completed or otherwise resolved from the Customer's Punch List. Customer will perform the final inspection as called for after being notified of Project Completion by ESCO.
- g) Failure of Payment: If the Customer does not pay ESCO within seven days after the date established, then ESCO may, upon written notice to the Customer, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the ESCO'S reasonable costs of shut-down, delay and start-up, plus interest.

Comprehensive Project Pricing Details

City of Lawrence Energy Efficiency Project

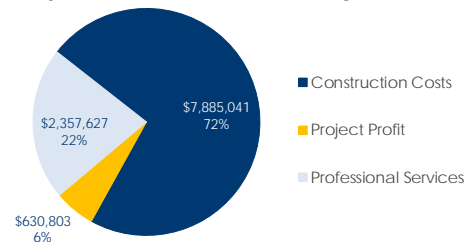
Construction Cost (As Defined By FCIP)	Cost	Cost %	Utility Savings	Maint. Savings	Total Savings	Payback
Community Health: Replace Chiller with Premium Efficiency Unit	\$147,907	1.4%	\$18,884	\$18,497	\$37,381	4.0
City Hall: Replace Cabinet Heaters	\$13,028	0.1%	\$2,949	\$113	\$3,062	4.3
City-Wide: Building LED Retrofits, Replacements & Controls	\$1,027,338	9.4%	\$165,858	\$35,893	\$201,751	5.1
Lawrence Arts Center: Replace Chiller with Premium-Efficiency Unit	\$130,695	1.2%	\$8,230	\$10,455	\$18,685	7.0
Public Works: Pole Lighting Upgrades - Downtown, Parking Lots, etc.	\$269,120	2.5%	\$30,315	\$3,947	\$34,262	7.9
City-Wide: Building Weatherization	\$102,762	0.9%	\$13,068	\$0	\$13,068	7.9
City Wide: HVAC Controls Upgrades, Additions and Optimization	\$781,166	7.2%	\$76,766	\$3,771	\$80,537	9.7
Solid Waste Office: Replace Packaged Unit	\$13,133	0.1%	\$976	\$357	\$1,333	9.9
Airport Terminal: Split System HVAC Replacements	\$21,244	0.2%	\$970	\$1,064	\$2,034	10.4
Parks and Rec: Area Lighting in Parks	\$210,729	1.9%	\$16,967	\$2,389	\$19,356	10.9
Community Health: Install Electronic Air Cleaner Filtration	\$67,855	0.6%	\$5,149	\$804	\$5,953	11.4
Indoor Aquatic Center: Energy & Indoor Air Quality Improvements	\$1,240,383	11.4%	\$71,070	\$22,805	\$93,875	13.2
Fire Station #5: Solar Power Installation	\$170,041	1.6%	\$12,583	\$0	\$12,583	13.5
Fire Station #2: Replace Outdated Rooftop Units	\$31,586	0.3%	\$748	\$696	\$1,444	21.9
Fire Station #3: Replace Aging Rooftop Units	\$41,188	0.4%	\$738	\$1,081	\$1,819	22.6
East Lawrence Rec Center: Replace Outdated Packaged Units	\$108,799	1.0%	\$2,138	\$1,978	\$4,116	26.4
City Hall : Replace Windows	\$244,530	2.2%	\$5,556	\$3,522	\$9,078	26.9
Community Health: Replace Boilers	\$190,547	1.8%	\$0	\$5,282	\$5,282	36.1
Holcom Recreation Center: New Packaged HVAC System	\$269,491	2.5%	\$5,279	\$1,436	\$6,715	40.1
Community Building: Replace Aging Packaged Units	\$278,031	2.6%	\$3,051	\$3,634	\$6,685	41.6
Outdoor Aquatic Center: Boiler Replacement	\$50,430	0.5%	\$0	\$1,181	\$1,181	-
Parks and Rec: Sports Field Lighting	\$908,112	8.4%	\$6,981	\$6,259	\$13,240	-
Outdoor Aquatic Center: HVAC System Renovations	\$32,919	0.3%	\$285	\$227	\$512	-
New Hampshire Parking Garage: Replace HVAC Units with Gas Heat	\$35,179	0.3%	\$72	\$462	\$534	-
Prairie Park: HVAC System Upgrade	\$112,137	1.0%	\$0	\$1,419	\$1,419	-
Fire Station #3: Replace Roof	\$90,999	0.8%	\$276	\$432	\$708	-
Community Health: Replace Roof	\$196,314	1.8%	\$307	\$0	\$307	-
Holcom Rec Center: Sports Field Lighting and New Poles	\$673,425	6.2%	\$970	\$0	\$970	-
Community Building: Replace Roof	\$198,336	1.8%	\$116	\$0	\$116	-
Vehicle Maintenance Office: Add Ductless Mini Split for Server Room	\$4,711	0.0%	\$0	\$0	\$0	-
Payment & Performance Bonds	\$222,906	2.0%	-	-	-	-
	\$7,885,041	72.5%	\$450,302	\$127,704	\$578,006	13.6

Professional Services	Cost	%
Engineering & Design	\$607,148	5.6%
Construction Management	\$630,803	5.8%
Advanced Commissioning	\$173,471	1.6%
Measurement & Verification	\$228,666	2.1%
Program Management & Administration	\$236,551	2.2%
General Overhead	\$480,988	4.4%
Project Profit	\$630,803	5.8%

Fixed Project Implementation Cost: **\$10,873,472**

Additional Program Costs	Cost
Facility Conservation Improvement Program	\$95,687
Investment Grade Audit	\$64,000
Anticipated Cost of Financing	\$255,000

Project financial summary



Total Project Amount Financed

\$11,288,159

APPLICATION AND CERTIFICATION FOR PAYMENT

TO: Willdan Energy Solutions d.ba. 360 Energy Engineers 730 New Hampshire, Suite 203 Lawrence, Kansas 66044	PROJECT: [Project Name] [Project Address] [Project City, State, Zip]	APPLICATION NO: 1 PERIOD TO: [XX/XX/XXXX] PROJECT NO.: PXXXXX CONTRACT NO.: PXXXXX-XX CONTRACT DATE: [XX/XX/XXXX]
FROM CONTRACTOR: [Contractor Name] [Contractor Address] Contractor City, State, Zip]		

APPLICATION FOR PAYMENT SUMMARY

Refer to continuation sheets attached for detailed breakdown.

1. ORIGINAL CONTRACT SUM	\$	\$0
2. Net change by Change Orders	\$	\$0
3. CONTRACT SUM TO DATE <i>(Line 1 ± 2)</i>	\$	\$0
4. TOTAL COMPLETED & STORED TO DATE <i>(Column G on attached continuation sheet)</i>	\$	\$0
5. RETAINAGE:		
a. 10% % of Completed Work	\$	\$0
b. 10% % of Stored Materials	\$	\$0
TOTAL RETAINAGE <i>(Line 5a + 5b)</i>	\$	\$0
6. TOTAL COMPLETED LESS RETAINAGE <i>(Line 4 Less Line 5 Total)</i>	\$	\$0
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT <i>(Line 6 from prior Certificate)</i>	\$	\$0
8. CURRENT PAYMENT DUE	\$	\$0
9. BALANCE TO FINISH, INCLUDING RETAINAGE <i>(Line 3 less Line 6)</i>	\$	\$0

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Changes from previous applications:	\$0.00	\$0.00
Changes from This application:	\$0.00	\$0.00
TOTALS	\$0.00	\$0.00
NET CHANGES by Change Order	\$0.00	

WAIVER AND RELEASE OF LIEN

Upon receipt by the undersigned of a check from 360 Energy Engineers, LLC. in the sum of
\$ -

, and when the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to the following extent:

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from 360 Energy Engineers, and that current payment shown herein is now due. In consideration of payments received and upon receipt of payment for this application, Contractor does hereby:

- (1) Waive and release any and all liens or right of liens on account of any materials or labor furnished through the date of this application;
- (2) Release and forever discharge 360 Energy Engineers from all debts, claims, demands, causes of action of any kind arising out of or in connection with Contractor's work through the date of this application; and
- (3) Indemnify and hold 360 Energy Engineers harmless from any liability and agrees to reimburse 360 Energy Engineers for all its costs, and reasonable attorney fees 360 Energy Engineers incurs due to any claims hereafter made in connection with this Contractor's work on this project through the date of this application.

CONTRACTOR:

SIGNED: _____ DATE: _____

APPLICATION AND CERTIFICATION FOR PAYMENT

APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

APPLICATION NO: 1

PERIOD TO: [XX/XX/XXXX]

PROJECT NO.: PXXXXX

CONTRACT NO.: PXXXXX-XX

CONTRACT DATE: [XX/XX/XXXX]

[illegible]

SCHEDULE E:

BASELINE ENERGY CONSUMPTION

The baseline is that set of parameters that describes both the energy consumed in the Baseline Year and the conditions that caused that consumption to occur. An accurate measurement of Baseline is necessary to facilitate accurate measurement and verification of the Energy Savings Guarantee. This set of parameters includes utility consumption and demand data, weather, building physical and thermal properties, energy consuming equipment and system parameters, space temperature setpoints and schedules, facility use and occupancy schedules, and other information as may be necessary to describe the base year conditions.

This Schedule demonstrates the calculated Baseline for the Customer's Premises. This Baseline shall be used to determine whether Actual Energy Savings exceeds or falls short of the Energy Savings Guarantee.

1. Lighting Retrofits (select buildings and exterior applications): Retrofit existing lighting systems with more efficient LED lamps and fixtures. Savings will result from reduced fixture power consumption. Operating hours are not affected by this ECM.
 - a) M&V Option: IPMVP Option A – Partially Measured Retrofit Isolation
 - b) Applicable Interior Lighting ECMs: The following facilities will utilize this M&V methodology for the purposes of measuring interior lighting energy savings.
 - (1) Eagle Bend Clubhouse
 - (2) Airport Maintenance Facility
 - (3) Airport GUTS Hangar
 - (4) Carnegie Building
 - (5) Union Pacific Depot
 - (6) South Park Administrative Office
 - (7) Solid Waste Division
 - (8) Street Division Office
 - (9) Sports Pavilion
 - (10) 27th Street Maintenance Building
 - (11) Airport Community Hangar
 - (12) Airport Hangar A
 - (13) Airport Hangar B
 - (14) Airport Hangar C
 - (15) New Hampshire Parking Garage
 - (16) Riverfront Parking Garage
 - (17) North Lawrence Pump Station
 - (18) Street Division Salt Dome – Wakarusa
 - (19) Street Division Salt Dome – Haskell
 - (20) Street Division – Red Barn
 - (21) Parks & Rec Maintenance Building
 - c) Applicable Outdoor Lighting ECMs: The following facilities will utilize this M&V methodology for the purposes of measuring outdoor lighting energy savings.
 - (1) Holcum Ball Fields: New Baseball Field Lighting

- (2) New Outdoor Sports Lighting on Existing Poles
 - (3) Broken Arrow Park: Horseshoe Court
 - (4) Broken Arrow Park: Baseball Field
 - (5) Centennial Park: Skate Park
 - (6) Chief Jim McSwain Park: Basketball Court
 - (7) Deerfield Park: Basketball Court/Skate Park
 - (8) Edgewood Park: Bike Polo Hardcourt
 - (9) Hobbs Park: Basketball Court
 - (10) Holcom Park: Basketball/Tennis Court
 - (11) Lyons Park: Basketball/Tennis Court and Baseball Fields
 - (12) Veterans Park: Basketball Court
 - (13) Youth Sports Center Facilities and Clinton Softball Complex: New Sports Lighting
 - (14) New Outdoor Area Lighting (Public Works Maintained)
 - (15) New Parks Area Lighting
- d) Energy Baseline Development: During the Detailed Energy Survey, which took place during the summer of 2016, a series of comprehensive lighting audits were completed. Inventories of fixture counts, types, and circuits were made. The information gathered during the lighting audit is provided in the ECM write up in the IGA Report and Appendix. Additional measurements will be performed during construction prior to installing new lighting systems. The data includes:
- (1) Lamp types
 - (2) Light levels (foot candles) measured at desk height in the approximate center of the space, where measurement was feasible (appendix)
 - (3) Sampling of electricity demand (kW) spot measurements for each electrically significant fixture configuration in accordance with the FEMP M&V Guidelines to provide 80% confidence and 20% precision (Appendix)
 - (4) Burn hours based on building operating hours and space types (Appendix)
 - (5) Areas where upgrades were not needed (Appendix)
 - (6) Areas that were grossly over-lit or under-lit (Appendix)
- e) Baseline Energy Consumption: Samples of the most common fixture types will be measured to determine the fixture power consumption under actual operating conditions.
- (1) Fixture Energy Consumption:

$$LCB = \sum \text{Pre-Retrofit System Consumption}$$
 Where,

$$\sum \text{Pre-Retrofit System Consumption} = \sum (\text{Measured Fixture Watts} \times \text{Annual Operating Hours})$$

$$LCB = \text{Lighting Baseline Electrical Consumption (Lighting specific, Includes interior and exterior lighting)}$$
 - (2) Fixture Power Demand:

$$LDB = \sum \text{Pre-Retrofit System Power} \times 12 \text{ months}$$
 Where,

$$\sum \text{Pre-Retrofit System Power} = \sum (\text{Measured Fixture Watts} \times \text{Diversity Factor})$$

LDB = Annual Lighting Baseline Electrical Demand (Lighting specific, Includes interior and exterior lighting)

Diversity Factor = Percentage of time the fixtures are on when the peak demand is set (stipulated)

- (3) Air Conditioning Consumption: Electrical consumption associated with the cooling load generated from lighting.

$$ACB (kWh) = \frac{LCB}{COP}$$

Where,

ACB = Baseline air conditioning electrical consumption associated with lighting

COP = Coefficient of Performance of the cooling system (assumed)

- (4) Air Conditioning Demand: Electrical demand associated with the cooling load generated from lighting.

$$ADB (kW) = \frac{LDB \times No. Cooling Months}{12 \frac{months}{yr} \times COP}$$

Where,

ADB = Annual baseline air conditioning electrical demand associated with lighting

COP = Coefficient of Performance of the cooling system (assumed)

- (5) Heating Fuel Baseline: Heating fuel consumption offset by the heat contributed to the space from lighting.

$$HCB (therms) = \frac{LCB \times No. Heating Months \times 3412 Btu/kWh}{12 \frac{months}{yr} \times 100,000 \frac{Btu}{Therm} \times Heating Efficiency}$$

Where,

HCB = Baseline lighting contribution space heat that offsets heating system load

Heating Efficiency = Efficiency of the heating system (assumed)

- (6) Stipulated Variables:

- (a) Annual Operating Hours – Run hours for light fixtures will not be measured; operating hours are based on typical hours of occupancy for each space type. See next section for details.
 - (b) Demand Factor – Demand Factor is stipulated based on typical probabilities that a given room type will be illuminated when the building's peak demand is set for each month.
 - (c) Coefficient of Performance of the cooling system – Published efficiency data is used for cooling systems in each building. Impact of this variable does not justify the cost to measure.
 - (d) Heating System Efficiency – Published efficiency data is used for heating systems in each building. Impact of this variable does not justify the cost to measure
 - (e) Run hours for light fixtures will not be measured; operating hours are based on typical hours of occupancy for each space type.
- f) Baseline Measurements and Sample Sizes: Baseline measurements will be performed during the Construction and Installation Period prior to modifying, retrofitting or replacing the lighting systems being measured. Quantities and locations of measurements will be determined utilizing the IPMVP Guidelines for Partially Measured Retrofit Isolation. Sample sizes shall meet a confidence of at least 80% and a precision of 20%.
2. Larger Building Facility-Wide Energy Improvements: Energy savings for all energy conservation measures, and their interactive effects, in the buildings listed below will be measured at the buildings' main electric and gas meters ("Guarantee Meters"). These Guarantee Meters account for all energy use of these facilities.

Table 1 – Buildings Covered by Guarantee Meters

Building	Area	Comments
Community Health Building	87,300	
Indoor Aquatic Center	43,200	
Library	85,000	
Airport Terminal	7,500	
Fire/Med #5	25,549	
Fire/Med #4	10,918	
Fire/Med #3	7,000	
Fire and Rescue Training	6,544	
Fire/Med #2	11,110	
Parking/Animal Control/Transit	2,300	
Lawrence Arts Center	55,000	
City Hall	27,828	
East Lawrence Rec Center	18,000	
Prairie Park Nature Center	5,500	
Community Building	30,000	
Holcom Park Rec Center	19,500	
Vehicle Maintenance Garage	14,500	

a) Definition of Baseline:

The baseline is that set of parameters that describes both the energy consumed in the Baseline Year and the conditions that caused that consumption to occur. This set of parameters includes utility consumption, facility use information, weather data and other information as may be necessary to describe the base year conditions. Customer agrees to accept modifications to this baseline, as outlined in SCHEDULE F (SAVINGS MEASUREMENT & CALCULATION FORMULAE; METHODOLOGY TO ADJUST BASELINE), that are necessary to account for changes in the facilities and their use which may have occurred prior to the execution of this agreement but come to the attention of ESCO after the execution of this agreement or.

The Baseline Year is the time period of time which establishes the pre-retrofit conditions used as the point of reference for determining guaranteed savings. The guarantee period is any one or more billing periods during the term of the guarantee during which guaranteed savings are measured.

b) Energy Baseline Development: A detailed energy and facility survey was performed for each building during the summer of 2016. Baseline parameters, including utility consumption, facility use information, equipment inventory and weather data were obtained. Baseline parameters related to utilities and building operation are outlined below. Inventories of all existing energy consuming equipment are provided in the ECM write up in the IGA Report.

a) Guarantee Meters: The following meters will be used to measure actual energy consumption for both the Baseline Year and guarantee periods:

Building	Meter Number	Utility Co.	Rate	Units
Community Health Building	13400186	Westar	Medium General Service	kWh, kW
	BHE129148	Black Hills	Standard	Therm
Indoor Aquatic Center	13400121	Westar	Medium General Service	kWh, kW
	NGM719678	Black Hills	Standard	Therm
Library	13424526	Westar	Small General Service	kWh, kW

Airport Terminal	01852961	Westar	Small General Service	kWh, kW
	93085	Black Hills	Standard	Therm
Fire/Med #5	13089928	Westar	Small General Service	kWh, kW
	NGM963606	Black Hills	Standard	Therm
Fire/Med #4	13400057	Westar	Small General Service	kWh, kW
	BHE283783	Black Hills	Standard	Therm
Fire/Med #3	13102301	Westar	Small General Service	
	NGM870479	Black Hills	Standard	Therm
Fire and Rescue Training	13299810	Westar	Small General Service	kWh, kW
	NGM917844	Black Hills	Standard	Therm
Fire/Med #2	13089868	Westar	Small General Service	kWh, kW
	BHE283780	Black Hills	Standard	Therm
Parking/Animal Control/Transit	13446167	Westar	Small General Service	kWh, kW
	13446019	Westar	Small General Service	Therm
Lawrence Arts Center	13089925	Westar	Small General Service	kWh, kW
	NGM779958	Black Hills	Standard	Therm
City Hall	13089817	Westar	Small General Service	kWh, kW
	BHE266789	Black Hills	Standard	Therm
East Lawrence Rec Center	13446658	Westar	Small General Service	kWh, kW
	643602	Black Hills	Standard	Therm
Prairie Park Nature Center	14534189	Westar	Small General Service	kWh, kW
	272937	Black Hills	Standard	Therm
Vehicle Maintenance Garage	13400045	Westar	Small General Service	kWh, kW
	35062	Black Hills	Standard	Therm

- b) **Baseline Period:** The baseline period is any consecutive 12-month period within the 24-month period immediately preceding the Construction Period. This period will be selected by ESCO and presented to the customer with the first savings report or within 180 days of Project Completion, whichever comes first.
- c) **Weather Source:** Data used for weather conditions will be Daily High-Low Temperatures obtained from the National Weather Service Station at KS, Topeka Forbes Field (KFOE). In the event the specified weather station is de-activated, weather data will be collected from the nearest weather station with suitable observations. If the data source becomes unavailable or a superior source is identified, ESCO may select an alternative data source with Customer's approval.
- d) **Baseline Building Operation:** The following provides a documentation of the use and operational parameters of each building during the Baseline Year. These descriptions are intended to provide a basic description of some, not all, of the conditions that caused that Baseline Consumption to occur. Material Changes in these conditions, along with others, can be used as causes for adjustment to the baseline as described in SCHEDULE F (SAVINGS MEASUREMENT & CALCULATION FORMULAE; METHODOLOGY TO ADJUST BASELINE) of this Contract.

(1) Annual Calendar

Building	Week Days	Saturdays	Sundays	Holidays/ Exceptions
Community Health Building	Occupied	Unoccupied	Unoccupied	Unoccupied
Indoor Aquatic Center	Occupied	Occupied	Occupied	Unoccupied

Library	Occupied	Occupied	Occupied	Unoccupied
Airport Terminal	Occupied	Occupied	Occupied	Unoccupied
Fire/Med #5	Occupied	Occupied	Occupied	Occupied
Fire/Med #4	Occupied	Occupied	Occupied	Occupied
Fire/Med #3	Occupied	Occupied	Occupied	Occupied
Fire and Rescue Training	Intermittent	Intermittent	Unoccupied	Unoccupied
Fire/Med #2	Occupied	Occupied	Occupied	Occupied
Parking/Animal Control/Transit	Occupied	Unoccupied	Unoccupied	Unoccupied
Lawrence Arts Center	Occupied	Occupied	Occupied	Unoccupied
City Hall	Occupied	Unoccupied	Unoccupied	Unoccupied
East Lawrence Rec Center	Occupied	Occupied	Occupied	Unoccupied
Prairie Park Nature Center	Occupied	Occupied	Occupied	Unoccupied
Community Building	Occupied	Occupied	Occupied	Unoccupied
Holcom Park Rec Center	Occupied	Occupied	Occupied	Unoccupied
Vehicle Maintenance Garage	Occupied	Unoccupied	Unoccupied	Unoccupied

Annual Day Definitions:

Weekday:	Monday through Friday except Holidays
Saturdays:	Saturdays except Holidays
Sundays:	Sundays except Holidays
Exceptions/Holidays:	Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Day After Thanksgiving, Christmas, New Year's Day, or other day scheduled closed

(2) Occupancy Schedules for each building

Building/Space Types	Work Day	Saturday	Sunday	Holiday
Community Health Building	8:00 am – 5:00 pm	Unoccupied	Unoccupied	Unoccupied
Indoor Aquatic Center	5:15 am – 8:45 pm	9 am – 8:45 pm	1 pm – 5:45 pm	Unoccupied
Library	9:00 am – 9:00 pm	9:00 am – 6:00 pm	12:00 pm – 8:00 pm	Unoccupied
Airport Terminal	6:00 am – 9:00 pm	6:00 am – 9:00 pm	6:00 am – 9:00 pm	Unoccupied
Fire/Med #5	24 hrs	24 hrs	24 hrs	24 hrs
Fire/Med #4	24 hrs	24 hrs	24 hrs	24 hrs
Fire/Med #3	24 hrs	24 hrs	24 hrs	24 hrs
Fire and Rescue Training	Intermittent	Intermittent	Intermittent	Intermittent
Fire/Med #2	24 hrs	24 hrs	24 hrs	24 hrs
Parking/Animal Control/Transit	8:00 am – 5:00 pm	Unoccupied	Unoccupied	Unoccupied
Lawrence Arts Center	9:00 am – 9:00 pm	9:00 am – 9:00 pm	9:00 am – 5:00 pm	Unoccupied
City Hall	8:00 am – 5:00 pm	8:00 am – 5:00 pm	Unoccupied	Unoccupied
East Lawrence Rec Center	7:00 am – 9:00 pm	10:00 am – 6:00 pm	10:00 am – 6:00 pm	Unoccupied
Prairie Park Nature Center	9:00 am – 5:00 pm	9:00 am – 5:00 pm	1:00 am – 4:00 pm	Unoccupied
Community Building	7:00 am – 9:00 pm	10:00 am – 6:00 pm	Unoccupied	Unoccupied

Holcom Park Rec Center	7:00 am – 9:00 pm	10:00 am – 6:00 pm	1:00 pm – 6:00 pm	Unoccupied
Vehicle Maintenance Garage	6:00 am – 5:00 pm	Unoccupied	Unoccupied	Unoccupied

(3) Energy Consuming Equipment Use: HVAC systems generally come on an hour before the space served is occupied. The equipment is scheduled off at the end of the occupied period. Other energy consuming equipment follow occupancy schedules.

e) Baseline Energy Consumption (or Demand):

Baseline Energy Consumption = \sum Tracked Utility Meters' Consumption \pm Baseline Adjustments

f) Basis for Adjustment: Savings are to be reported as “cost avoidance,” under reporting period conditions. Baseline period energy will be adjusted to reporting period conditions, using the following IPMVP equation:

Baseline Adjustment = $\sum \pm$ Routine Adjustment to reporting period conditions \pm Non-Routine Adjustments to reporting-period conditions

Where:

Routine Adjustments include, but are not limited to, weather and billing period length

Non-Routine Adjustments include changes in key conditions from the baseline period to the reporting period, including, but no limited to, occupancy; hours of operation; changes to building function and use; changes to operation, capacity or quantity of equipment or systems within the facility; and additions to the building.

g) Baseline Measurements: Monthly utility consumption and demand will be obtained from the utility bills for the Guarantee Meters.

3. Smaller Building Facility-Wide Energy Improvements: Energy savings for all energy conservation measures, and their interactive effects, in the buildings listed below will be determined using calibrated computer simulation models. Computer simulation is a powerful tool that allows an experienced user to model the building and mechanical systems in order to predict building energy use both before and after the installation of energy conservation measures.

Table 2 – Buildings Utilizing Calibrated Computer Simulation

Building	Area	Comments
Solid Waste Division Office	2,669	
Street Division Office	3,152	

a) M&V Option: IPMVP Option D – Calibrated Simulation. Option D was selected because multiple energy conservation measures (ECMs) are included in the project, and may have interactive effects.

b) Simulation Program: The software that will be utilized to develop a calibrated simulation of the Customer's Premises during the baseline as well as simulating the effect of the Energy Conservation Opportunities (ECMs) implemented by ESCO will be eQUEST (Quick Energy Simulation Tool), a Department of Energy (DOE) supported program common in the industry.

c) Definition of Baseline:

The baseline is that set of modeled parameters that describes both the energy consumed in the Baseline Year and the conditions that caused that consumption to occur. This set of parameters includes building physical and thermal properties, energy consuming equipment and system parameters, space temperature setpoints and schedules, facility use and occupancy schedules, and other information as may be necessary to simulate base year conditions.

The Baseline Year is the time period of time which establishes the pre-retrofit conditions used as the point of reference for determining guaranteed savings. The guarantee period is any one or more billing periods during the term of the guarantee during which guaranteed savings are measured.

- d) **Energy Baseline Development:** A detailed energy and facility survey was performed for each building during the summer of 2016. Baseline parameters, including physical properties of the facility, equipment and system types and efficiencies, and control sequences were obtained and will be used to construct a computer energy simulation. This model, using actual weather data, will be calibrated to match actual utility usage during the baseline period. Once calibrated, the model will be run with TMY3 (Typical Meteorological Year) weather data to reflect an average year's weather. The month-by-month energy use and demand output of this model will be used for the Baseline Energy Consumption for the purposes of calculating energy savings. Some of the baseline parameters that will be used in the model are outlined below.

- (1) **Calibration Meters:** The following meters will be used to calibrate the baseline model.

Building & Meter	Meter Number	Account Number	Utility Co.	Rate	Units
Solid Waste Division Office	13299827	5232816040	Westar	Small General Service	kWh, kW
Solid Waste Division Office	BHE194113	5597685688	Black Hills	Standard	Therm
Street Division Office	13410383	370443388	Westar	Small General Service	kWh, kW
Street Division Office	84419	554575374	Black Hills	Standard	Therm

- (2) **Baseline Period:** The baseline period is any consecutive 12-month period within the 24-month period immediately preceding the Construction Period. This period will be selected by ESCO and presented to the customer with the savings report.
- (3) **Baseline Weather:** Baseline weather data is input into the Calibrated Baseline Energy Model for the purpose of comparing the model's resulting baseline energy consumption with actual utility bills. TMY3 (Typical Meteorological Year) weather data is then used in the model to arrive at a baseline energy consumption that reflects and typical year's weather.

- e) **Baseline Building Operation:** The following provides a documentation of the use and operational parameters of each building during the Baseline Year. These descriptions are intended to provide a basic description of some, not all, of the conditions that caused that Baseline Consumption to occur. Material Changes in these conditions, along with others, can be used as causes for adjustment to the baseline as described in SCHEDULE F (SAVINGS MEASUREMENT & CALCULATION FORMULAE; METHODOLOGY TO ADJUST BASELINE) of this Contract.

- (1) **Annual Calendar**

	Week Days	Saturdays	Sundays	Holidays/ Exceptions
Solid Waste Division Office	Occupied	Unoccupied	Unoccupied	Unoccupied
Street Division Office	Occupied	Unoccupied	Unoccupied	Unoccupied

Annual Day Definitions:

Weekday:	Monday through Friday except Holidays
Saturdays:	Saturdays except Holidays
Sundays:	Sundays except Holidays
Exceptions/Holidays:	Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Day After Thanksgiving, Christmas, New Year's Day, or other day scheduled closed

- (2) **Occupancy Schedules for each building**

Building/Space Types	Work Day	Saturday	Sunday	Holiday
Solid Waste Division Office	6:00 am – 4:00 pm	Unoccupied	Unoccupied	Unoccupied
Street Division Office	6:00 am – 4:00 pm	Unoccupied	Unoccupied	Unoccupied

- (3) Energy Consuming Equipment Use: HVAC systems generally come on an hour before the space served is occupied. The equipment is scheduled off at the end of the occupied period. Other energy consuming equipment follow occupancy schedules.
- (4) Baseline Calibration: Calibration of the baseline is achieved by verifying that the simulation model reasonably predicts the energy use of the facility during the Baseline Period. This is performed by comparing model results that reflect the building(s) to a set of utility bills for the Baseline Period, including consumption and demand. Main steps in the simulation and calibration process are listed below:
 - (a) Baseline building parameters, including building geometry, envelope, HVAC systems, etc. are input and documented.
 - (i) Parameters were gathered from facility walkthroughs, interviews with facilities staff and administration, and building blueprints.
 - (b) Initial simulation output is checked with standard indices for building performance to confirm model is reasonable.
 - (c) Energy and demand results of the model are compared with baseline metered data, on a monthly basis.
 - (d) Input data is revised and additional simulations are performed until the simulation closely matches (less than 15% total deviation) the facility's baseline.
 - (e) Once calibrated, the model will be run with TMY3 (Typical Meteorological Year) weather data to reflect an average year's weather.
- f) Baseline Energy Consumption (or Demand): The month-by-month energy use and demand output of the Calibrated Baseline Model run with TMY3 weather.
- g) Baseline Measurements: Monthly utility consumption and demand will be obtained from the utility bills for the utility meters used to calibrate the baseline energy model.

SCHEDULE F:

SAVINGS MEASUREMENT & CALCULATION FORMULAE; METHODOLOGY TO ADJUST BASELINE

1. Savings Measurement (IPMVP Option A):

International Performance Measurement and Verification Protocol Option A verification techniques measure savings at a system level where key performance factors (e.g., lighting fixture power) or operational factors (e.g., lighting fixture utilization) can be measured during the baseline and post-installation periods. Any factor not measured is estimated based on assumptions, analysis of historical data, or manufacturer's data.

Quantities and locations of measurements will be determined utilizing the IPMVP Guidelines for Partially Measured Retrofit Isolation. Sample sizes shall meet a confidence of at least 80% and a precision of 20%.

a) Lighting Energy Savings:

$$LCS(kWh) = LCB - LCP$$

Where,

LCB = Baseline lighting consumption (kWh)

LCP = Proposed lighting consumption (kWh)

$$LCB = FWB \times OPHRS / 1,000$$

$$LCP = FWP \times OPHRS / 1,000$$

FWB = Baseline Fixture Watts (measured parameter)

FWP = Post-retrofit Fixture Watts (measured parameter)

OPHRS = Fixture Annual Operating Hours (stipulated values)

b) Lighting Demand Savings:

$$LDS(kW) = LDB - LDP$$

Where,

LDB = Baseline lighting demand (kW)

LDP = Proposed lighting demand (kW)

$$LDB = FWB / 1,000$$

$$LDP = FWP / 1,000$$

FWB = Baseline Fixture Watts (measured parameter)

FWP = Post-retrofit Fixture Watts (measured parameter)

c) AC Consumption Savings

$$ACS(kWh) = ACB - ACP$$

Where,

ACB = Baseline air conditioning consumption associated with lighting (kWh)

ACP = Proposed air conditioning consumption associated with lighting (kWh)

$$ACB (kWh) = \frac{LCB}{COP}$$

$$ACP (kWh) = \frac{LCP}{COP}$$

LCB = Baseline lighting consumption (kWh)

LCP = Proposed lighting consumption (kWh)

COP = Coefficient of Performance of the cooling system (assumed)

d) AC Demand Savings

$$ADS(kWh) = ADB - ADP$$

Where,

ACB = Baseline air conditioning consumption associated with lighting (kWh)

ACP = Proposed air conditioning consumption associated with lighting (kWh)

$$ADB (kW) = \frac{LDB \times No. Cooling Months}{12 \frac{months}{yr} \times COP}$$

$$ADP (kWh) = \frac{LDP \times No. Cooling Months}{12 \frac{months}{yr} \times COP}$$

LDB = Baseline annual lighting demand (kW)

LDP = Proposed annual lighting demand (kW)

COP = Coefficient of Performance of the cooling system (assumed)

e) Heating Fuel Savings

$$HCS(kWh) = HCB - HCP$$

Where,

HCB = Baseline lighting contribution space heat that offsets heating system load

HCP = Proposed lighting contribution space heat that offsets heating system load

$$HCB (therms) = \frac{LCB \times No. Heating Months \times 3412 Btu/kWh}{12 \frac{months}{yr} \times 100,000 \frac{Btu}{Therm} \times Heating Efficiency}$$

$$HCP (therms) = \frac{LCP \times No. Heating Months \times 3412 Btu/kWh}{12 \frac{months}{yr} \times 100,000 \frac{Btu}{Therm} \times Heating Efficiency}$$

LCB = Baseline lighting consumption (kWh)

LCP = Proposed lighting consumption (kWh)

Heating Efficiency = Efficiency of the heating system (assumed)

2. IPMVP Option C - Energy Savings Measurement at Utility Meter:

International Performance Measurement and Verification Protocol Option C verification techniques measure savings by comparing the post-retrofit overall energy use in a building or facility with pre-retrofit energy baselines.

Energy Savings = Baseline Energy Usage (including any adjustments) – Guarantee Period Consumption

Where:

Guaranteed Period Consumption = \sum Tracked Utility Meters

Baseline Energy Usage = Historical energy consumption and demand, modified over time to account for changes to the facility, operation, and weather

Guarantee Period Consumption = Post-retrofit energy consumption and demand from Customer utility meters

3. Determination of Dollars Saved

Total Annual \$ Savings = \sum (Energy/Demand/Water Savings x Contractual Energy/Demand Rates)

Where:

Contractual Energy Rates = Utility rates defined in SCHEDULE C (ENERGY SAVINGS GUARANTEE)

4. Causes for Adjustment to the Baseline: Implicit in the IPMVP Option C measurement option is the necessity of identifying and accounting for the effects of changes to the facilities and conditions during the measurement period that are beyond the scope of the measures installed. During the measurement and verification period, all variables must have their energy impact accounted for if the true savings from the energy conservation measure is to be assessed. Following is a partial list of changes that will lead to adjusting the Baseline Energy Consumption:

- a) building additions
- b) changes in operating hours
- c) remodeling projects
- d) changes in usage patterns
- e) equipment replacements

In the event that any change is made to the Customer's Premises that will impact energy consumption, Customer shall notify ESCO in writing of such change within 30 days. ESCO will utilize existing building models used to calculate Baseline Energy Consumption to update that Baseline Energy Consumption and determine the impact that any such change will have on Actual Energy Savings and present Customer a written analysis of the effects of the changes. Changes that are long-term or permanent will be reflected in a change to the Baseline Energy Consumption. Temporary changes that affect energy use will be calculated and added to the corresponding month(s) Actual Energy Savings.

Any changes made by ESCO to the Baseline Energy Consumption or saving calculations shall be presented to Customer for approval. Customer shall have 30 days to protest recommended modifications in writing, after which time change will be considered accepted. If Customer protests any recommended modifications, Customer and ESCO will work together to establish mutually acceptable modifications based on accurate building models showing the impact of changes to facilities.

Weather normalization will be employed to ensure that the impact of actual weather conditions is eliminated from the Energy Savings Guarantee calculations. Normalization shall not be utilized to the benefit of either Customer or ESCO, but shall be used solely for the purpose of accurately accounting for the impact on Actual Energy Savings of the Scope of Work implemented in conjunction with this Contract.

5. Measurement and Adjustments Methodology:

- a) Adjusted Baseline Year consumption is calculated as follows for each fuel type:

Adjusted Base Year Consumption = Weather Independent Consumption + Weather Dependent Consumption + Offset + Use and Modification Adjustments

or

$Q = C_D \times (T_i - T_{i-1}) + C_H \times HDD_i + C_C \times CDD_i + O_i \pm \sum M_i = E_b$ (electric usage)

$Q = C_D \times (T_i - T_{i-1}) + C_H \times HDD_i + C_C \times CDD_i + O_i \pm \sum M_i = NG_b$ (natural gas usage)

Where:

Q = adjusted base year consumption

C_D = a constant representing units of consumption per billing period day as calculated by model

T_i = ending date of current billing period

T_{i-1} = ending date of previous billing period

C_H = a constant representing units of consumption per heating degree day as calculated by model

HDD_i = heating degree days in the current billing period

C_C = a constant representing units of consumption per cooling degree day as calculated by model

CDD_i = cooling degree days in the current billing period

O_i = offset for the current billing period

M_i = other adjustments for the current billing period

- b) Adjusted base year demand is calculated with a slightly different formula as follows:

Adjusted Base Year Demand = Weather Independent Demand + Weather Dependent Demand + Offset + Use and Modification Adjustments

or

$$D_b = D_D \times (T_i - T_{i-1}) + D_H \times HDD_i / (T_i - T_{i-1}) + D_C \times CDD_i / (T_i - T_{i-1}) + O_i \pm \sum M_i$$

Where:

D_b = adjusted base year demand

D_D = a constant representing units of demand per billing period day as calculated by model

D_H = a constant representing units of demand per heating degree day as calculated by model

D_C = a constant representing units of demand per cooling degree day as calculated by model

- (1) Weather Independent Consumption: Because utility meters are not always read on the same day of the month, the number of days in a meter's billing period frequently varies. The term, $C_D \times (T_i - T_{i-1})$, in the above equation is used to account for this difference, where $T_i - T_{i-1}$, gives the number of days in the guarantee year billing period. Thus, Weather Independent Consumption is the consumption per day times the number of days in the guarantee year billing period. The approach is identical for demand, except that the term D_D is substituted for C_D .
- (2) Weather Dependent Consumption: Change in weather between the base year and guarantee year periods is accounted for with the term, $C_H \times HDD_i + C_C \times CDD_i$. Weather Dependent Consumption is consumption per degree-day times the number of degree-days in the guarantee year billing period. The balance point temperatures used as the basis of degree day calculations shall be those that result in the best statistical fit, or highest R^2 value. If the R^2 value is lower than 0.65, the meter shall not be weather normalized.

Demand is treated similarly. The exception being that degree-days per day is substituted for total degree-days. This provides a measure of average daily weather intensity.

- (3) Offset: Offset is that portion of the energy consumption that cannot be accounted for with the Weather Independent and Weather Dependent consumption. It is mostly attributable to seasonal changes in facility use such as summer shutdown and holidays. An Offset figure is defined for each billing period in the base year. Since the guarantee period may overlap two or more base year billing periods, the guarantee period offset will be the weighted average of the base year offset for the corresponding guarantee year period. Offset for the guarantee period is determined with this equation:

$$O_i = O_1 \times dG_1/dB_1 + O_2 \times dG_2/dB_2 + \dots O_n \times dG_n/dB_n$$

Where:

O_i = current guarantee period offset

O_1 = base year period 1 offset

O_2 = base year period 2 offset

O_n = base year period n offset

dG_1 = days in guarantee period that overlap base year period 1

dG_2 = days in guarantee period that overlap base year period 2

dG_n = days in guarantee period that overlap base year period n

dB_1 = days in base year period 1

dB_2 = days in base year period 2

dB_n = days in base year period n

n = number of base year periods overlapped by guarantee year period

c) Other Adjustments:

Additional adjustments to the base year may be made to compensate for Material Changes. The total adjustment for any given period will be determined with this equation:

$$M_i = Adj_1 + Adj_2 + \dots Adj_n$$

Where:

Adj_1 , Adj_2 and Adj_n are all of the adjustments determined to be necessary for the guarantee period. The sign of the adjustment will be positive when the change will cause an increase in energy and the sign of the adjustment will be negative when the change will cause a decrease in energy. ESCO will provide an explanation of the derivation of these adjustments to Customer.

6. Adjustments Methodology for Material Changes

For Adjustments presented, as defined in SECTION 16 (MATERIAL CHANGES) of the Contract, the following procedure shall be followed:

- a) Customer will notify ESCO of planned changes in building use or function.
- b) ESCO and Customer will review the changes planned and determine if these changes are likely to cause a change in energy use that would exceed the threshold limits defined in SECTION 16 (MATERIAL CHANGES). If the expected changes are less than the threshold, the effect will be ignored and no adjustment will be used.
- c) If the changes are expected to raise or lower energy consumption more than the threshold limits defined in SECTION 16 (MATERIAL CHANGES), the building will be sub-metered by Customer for both pre- and post-use change periods until the effect on energy has been determined.

For changes to existing buildings that are metered, a linear regression will be performed to correlate heating- and cooling-degree days to the pre-change period's energy usage for the building, similar to the procedure performed to adjust the base year for weather. The post-change heating- and cooling-degree days will then be applied to the pre-change regression equation to determine what the post-change period's use would have been if no change had occurred. The difference between this use and the period's actual use will be, whether positive or negative, used as the adjustment, shown as term " M " in the equations in the Measurement and Adjustments Methodology section in this Schedule.

If entire effect of the change is independently sub-metered, such as the addition of a building on an existing utility service, the sub-metered energy use for that building for each guarantee period will be used to determine the baseline adjustment, shown as term " M " in the equations in the Measurement and Adjustments Methodology section in this Schedule.

If the method for determining adjustment described in the previous paragraph is agreed to be not appropriate or too complex for a specific adjustment by the Customer and ESCO, Customer and ESCO will develop a separate measurement and verification (M&V) plan to track the effect of the building change.

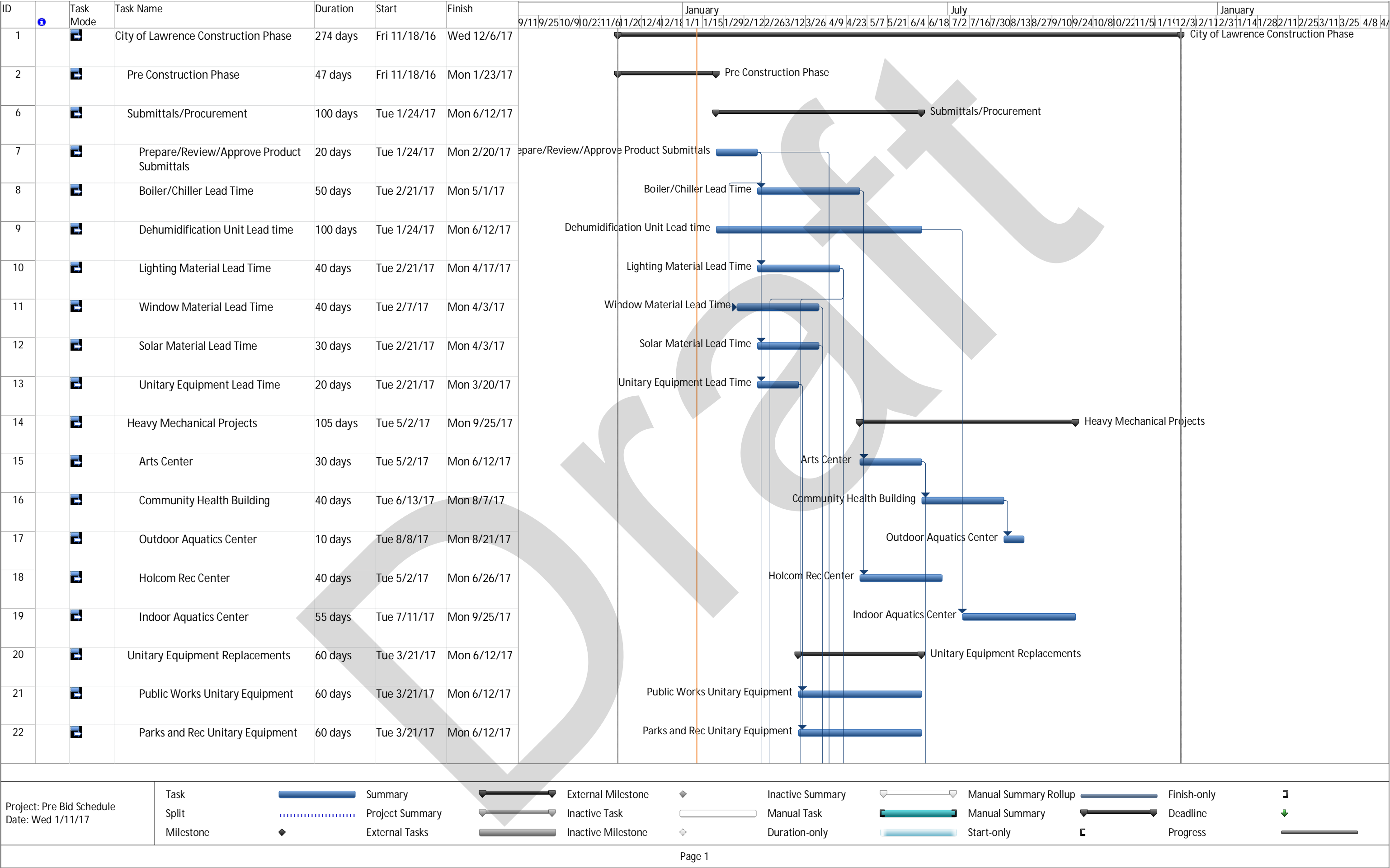
- d) If the changes occur at a time when the impact would affect a fraction of that year's energy use for an existing building or system, the procedure described in the previous section will be performed separately for the year in which the change occurred and the subsequent year to accurately account for the effect of the change in both years. The subsequent year's adjustment will then be used for all future years.

The TMY3 weather data set will be for the weather station defined in SCHEDULE E (BASELINE ENERGY CONSUMPTION) or closest station. Methodology used to normalize consumption is defined in Section 6 - 6.Measurement and Adjustments Methodologies above in this Schedule.

SCHEDULE G:

CONSTRUCTION AND INSTALLATION SCHEDULE

1. A preliminary, indicative schedule has been included on the following pages. This schedule has been prepared by ESCO to reflect the overall anticipated timeline and does not include input from Customer, subcontractors, equipment vendors or other relevant parties. Both ESCO and Customer agree that this schedule is non-binding.
2. A detailed schedule will be developed soon after contract signing and utilized by the ESCO Construction Manager to work with Customer's staff in scheduling day-to-day activities associated with implementing this project. It will also reflect the scheduling and availability of equipment to be installed and the subcontractors who will perform work on ESCO's behalf. This schedule will provide long-term outlooks and major milestones while a three-week look ahead will provide more accuracy and be updated on a regular basis to keep the Customer informed on the detailed construction progress and forecast.

External MilestoneInactive TaskInactive MilestoneInactive SummaryManual TaskDuration-onlyManual Summary RollupManual SummaryStart-onlyFinish-onlyDeadlineProgress

Page 1

ID	Task Mode	Task Name	Duration	Start	Finish	January																																															
						9/11	9/25	10/9	10/23	11/6	11/20	12/4	12/18	1/1	1/15	1/29	2/12	2/26	3/12	3/26	4/9	4/23	5/7	5/21	6/4	6/18	7/2	7/16	7/30	8/13	8/27	9/10	9/24	10/8	10/22	11/5	11/19	12/3	12/17	12/31	1/14	1/28	2/11	2/25	3/11	3/25	4/8	4/22					
23		DDC Controls Installations	190 days	Tue 2/21/17	Mon 11/13/17	DDC Controls Installations																																															
24		Lawrence Arts Center DDC	40 days	Tue 4/11/17	Mon 6/5/17	Lawrence Arts Center DDC																																															
25		Communtiy Health DDC	60 days	Tue 6/13/17	Mon 9/4/17	Communtiy Health DDC																																															
26		Fire Station 4 DDC	25 days	Tue 9/5/17	Mon 10/9/17	Fire Station 4 DDC																																															
27		Fire Station 5 DDC	25 days	Tue 10/10/17	Mon 11/13/17	Fire Station 5 DDC																																															
28		Lighting Projects	160 days	Tue 3/7/17	Mon 10/16/17	Lighting Projects																																															
29		Building Lighting	160 days	Tue 3/7/17	Mon 10/16/17	Building Lighting																																															
30		Outdoor Lighting	120 days	Tue 3/28/17	Mon 9/11/17	Outdoor Lighting																																															
31		Sports Field Lighting	60 days	Tue 4/18/17	Mon 7/10/17	Sports Field Lighting																																															
32		Roofing Projects	95 days	Tue 2/21/17	Mon 7/3/17	Roofing Projects																																															
33		Community Health Building	35 days	Tue 2/21/17	Mon 4/10/17	Community Health Building																																															
34		Fire Station #3	25 days	Tue 4/11/17	Mon 5/15/17	Fire Station #3																																															
35		Community Building	35 days	Tue 5/16/17	Mon 7/3/17	Community Building																																															
36		City Hall Window Replacements	60 days	Tue 4/4/17	Mon 6/26/17	City Hall Window Replacements																																															
37		Fire Station #5 Solar	40 days	Tue 4/4/17	Mon 5/29/17	Fire Station #5 Solar																																															
38		Commissioning	120 days	Thu 6/1/17	Wed 11/15/17	Commissioning																																															
39		Owner Training	10 days	Thu 11/16/17	Wed 11/29/17	Owner Training																																															
40		Construction Phase Closeout & Transition to Measurement and Verification	5 days	Thu 11/30/17	Wed 12/6/17	Construction Phase Closeout & Transition to Measurement and Verification																																															
		Task	<div></div>	Summary	<div></div>	External Milestone	<div></div>	Inactive Summary	<div></div>	Manual Summary Rollup	<div></div>	Finish-only	<div></div>																																								
		Split	<div></div>	Project Summary	<div></div>	Inactive Task	<div></div>	Manual Task	<div></div>	Manual Summary	<div></div>	Deadline	<div></div>																																								
		Milestone	<div></div>	External Tasks	<div></div>	Inactive Milestone	<div></div>	Duration-only	<div></div>	Start-only	<div></div>	Progress	<div></div>																																								
Page 2																																																					

SCHEDULE H:

SYSTEM START-UP AND COMMISSIONING; OPERATING PARAMETERS OF INSTALLED EQUIPMENT

1. All systems and equipment installed or modified will include start-up and commissioning. Commissioning of the equipment and systems will include pre-functional testing, functional testing, and final acceptance. A detailed commissioning plan will be generated by the ESCO to provide guidance on the procedures and the Customer's and ESCO's roles and responsibility during the testing and acceptance phases of the commissioning process. A sample of this report has been provided to the Customer in the Investment Grade Audit Report Appendix.

SCHEDULE I:

STANDARDS OF COMFORT

1. Lighting

- a) In all areas where lighting is changed, final light levels will meet or exceed minimum levels as established by the IESNA Lighting Handbook, 9th Edition, for the space affected.

2. HVAC

- a) Customer will maintain the following standards of comfort, which were used to evaluate the energy conservation measures for this program. Significant deviation from these standards will represent a change in operation that must be accounted for, in accordance with SCHEDULE F (SAVINGS MEASUREMENT & CALCULATION FORMULAE; METHODOLOGY TO ADJUST BASELINE), in order to accurately verify the Energy Savings Guarantee.

- (1) Occupied temperature set points: 70°F or below in heating and 74°F or above in cooling.

- (2) Unoccupied temperature set points: 55°F in heating and 85°F or above in cooling.

- b) Spaces excepted from these standards of comfort include:

- (1) Pool spaces shall be kept at 2°F above pool water temperature setpoints.

- (2) Locker rooms and other changing areas shall be set for occupant comfort.

- (3) Spaces housing animals shall be kept at appropriate temperature for the animals.

SCHEDULE J:

ESCO'S MAINTENANCE RESPONSIBILITIES

1. The ESCO is not responsible for performance of any maintenance on equipment or premises.
2. ESCO shall not be responsible for any service work on equipment in Customer's facilities.

SCHEDULE K:

CUSTOMER'S MAINTENANCE RESPONSIBILITIES

1. Customer is required to perform all necessary maintenance as recommended by the manufacturer in the Operation and Maintenance manuals (to be provided upon Project Completion) for equipment installed as part of this Contract, as well as all additional equipment that will continue to operate in Customer facilities.

SCHEDULE L:

FACILITY MAINTENANCE CHECKLIST

1. The ESCO shall provide Customer with a complete facility maintenance checklist prior to the Acceptance of Project Completion.

SCHEDULE M:

ESCO'S TRAINING RESPONSIBILITIES

1. The ESCO will provide eight (8) hours of dedicated training prior to Project Completion to ensure proper understanding of installed systems. Additional training will be provided at no additional cost until 45 days following Project Completion as deemed necessary by Customer and the ESCO.
2. During the period that ESCO is providing Savings Reporting and Reconciliation services as described in SCHEDULE C (ENERGY SAVINGS GUARANTEE), ESCO shall provide basic educational support to Customer in the operation of systems installed by ESCO. This service includes:
 - a) Continued instruction of how to operate energy savings features of the systems installed by ESCO
 - b) Monitor the Customer's electric, natural gas, and water service cost rates and make any recommendations to optimize these structures to benefit the Customer at the Customer's request
 - c) Assist the Customer in establishing a holistic energy management plan at the request of the Customer.
 - d) ESCO shall not be expected to provide maintenance, HVAC or controls service, diagnostic, or other services as part of this agreement

SCHEDULE N:

GENERAL CONDITIONS

1. Terms and Conditions

1.1. Contract Documents

In the event of a conflict in terms of language among the documents, the following order of precedence shall govern:

- Form DA 146a;
- written modifications to the executed contract;
- written contract signed by the parties;
- the Bid Event documents, including any and all amendments; and
- Contractor's written offer submitted in response to the Bid Event as finalized.

1.2. Captions

The captions or headings in this contract are for reference only and do not define, describe, extend, or limit the scope or intent of this contract.

1.3. Definitions

A glossary of common procurement terms is available at <http://da.ks.gov/purch>, under "Forms".

1.4. Contract Formation

No contract shall be considered to have been entered into by the State until all statutorily required signatures and certifications have been rendered and a written contract has been signed by the contractor.

1.5. Notices

All notices, demands, requests, approvals, reports, instructions, consents or other communications (collectively "notices") that may be required or desired to be given by either party to the other shall be IN WRITING and addressed as follows:

Kansas Procurement and Contracts

800 SW Jackson, Ste 600

Topeka, Kansas 66612-1216

RE: EVT0002461

or to any other persons or addresses as may be designated by notice from one party to the other.

1.6. Statutes

Each and every provision of law and clause required by law to be inserted in the contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein. If through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then on the application of either party the contract shall be amended to make such insertion or correction.

1.7. Governing Law

This contract shall be governed by the laws of the State of Kansas and shall be deemed executed in Topeka, Shawnee County, Kansas.

1.8. Jurisdiction

The parties shall bring any and all legal proceedings arising hereunder in the State of Kansas District Court of Shawnee County, unless otherwise specified and agreed upon by the State of Kansas. Contractor waives personal service of process, all defenses of lack of personal jurisdiction and forum non conveniens. The Eleventh Amendment of the United States Constitution is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this Agreement shall be deemed a waiver of the Eleventh Amendment

1.9. Mandatory Provisions

The provisions found in Contractual Provisions Attachment (DA 146a) are incorporated by reference and made a part of this contract.

1.10 Termination for Cause

The Director of Purchases may terminate this contract, or any part of this contract, for cause under any one of the following circumstances:

- the Contractor fails to make delivery of goods or services as specified in this contract;
- the Contractor provides substandard quality or workmanship;
- the Contractor fails to perform any of the provisions of this contract, or
- the Contractor fails to make progress as to endanger performance of this contract in accordance with its terms.

The Director of Purchases shall provide Contractor with written notice of the conditions endangering performance. If the Contractor fails to remedy the conditions within ten (10) days from the receipt of the notice (or such longer period as State may authorize in writing), the Director of Purchases shall issue the Contractor an order to stop work immediately. Receipt of the notice shall be presumed to have occurred within three (3) days of the date of the notice.

1.11. Termination for Convenience

The Director of Purchases may terminate performance of work under this contract in whole or in part whenever, for any reason, the Director of Purchases shall determine that the termination is in the best interest of the State of Kansas. In the event that the Director of Purchases elects to terminate this contract pursuant to this provision, it shall provide the Contractor written notice at least 30 days prior to the termination date. The termination shall be effective as of the date specified in the notice. The Contractor shall continue to perform any part of the work that may have not been terminated by the notice.

1.12. Rights and Remedies

If this contract is terminated, the State, in addition to any other rights provided for in this contract, may require the Contractor to transfer title and deliver to the State in the manner and to the extent directed, any completed materials. The State shall be obligated only for those services and materials rendered and accepted prior to the date of termination.

In the event of termination, the Contractor shall receive payment prorated for that portion of the contract period services were provided to or goods were accepted by State subject to any offset by State for actual damages including loss of federal matching funds.

The rights and remedies of the State provided for in this contract shall not be exclusive and are in addition to any other rights and remedies provided by law.

1.13. Antitrust

If the Contractor elects not to proceed with performance under any such contract with the State, the Contractor assigns to the State all rights to and interests in any cause of action it has or may acquire under the anti-trust laws of the United States and the State of Kansas relating to the particular products or services purchased or acquired by the State pursuant to this contract.

1.14. Hold Harmless

The Contractor shall indemnify the State against any and all loss or damage to the extent arising out of the Contractor's negligence in the performance of services under this contract and for infringement of any copyright or patent occurring in connection with or in any way incidental to or arising out of the occupancy, use, service, operations or performance of work under this contract.

The State shall not be precluded from receiving the benefits of any insurance the Contractor may carry which provides for indemnification for any loss or damage to property in the Contractor's custody and control, where such loss or destruction is to state property. The Contractor shall do nothing to prejudice the State's right to recover against third parties for any loss, destruction or damage to State property.

1.15. Force Majeure

The Contractor shall not be held liable if the failure to perform under this contract arises out of causes beyond the control of the Contractor. Causes may include, but are not limited to, acts of nature, fires, tornadoes, quarantine, strikes other than by Contractor's employees, and freight embargoes.

1.16. Assignment

The Contractor shall not assign, convey, encumber, or otherwise transfer its rights or duties under this contract without the prior written consent of the State. State may reasonably withhold consent for any reason.

This contract may terminate for cause in the event of its assignment, conveyance, encumbrance or other transfer by the Contractor without the prior written consent of the State.

1.17. Third Party Beneficiaries

This contract shall not be construed as providing an enforceable right to any third party.

1.18. Waiver

Waiver of any breach of any provision in this contract shall not be a waiver of any prior or subsequent breach. Any waiver shall be in writing and any forbearance or indulgence in any other form or manner by State shall not constitute a waiver.

1.19. Injunctions

Should Kansas be prevented or enjoined from proceeding with the acquisition before or after contract execution by reason of any litigation or other reason beyond the control of the State, Contractor shall not be entitled to make or assert claim for damage by reason of said delay.

1.20. Staff Qualifications

The Contractor shall warrant that all persons assigned by it to the performance of this contract shall be employees of the Contractor (or specified Subcontractor) and shall be fully qualified to perform the work required. The Contractor shall include a similar provision in any contract with any Subcontractor selected to perform work under this contract.

Failure of the Contractor to provide qualified staffing at the level required by the contract specifications may result in termination of this contract or damages.

1.21. Subcontractors

The Contractor shall be the sole source of contact for the contract. The State will not subcontract any work under the contract to any other firm and will not deal with any subcontractors. The Contractor is totally responsible for all actions and work performed by its subcontractors. All terms, conditions and requirements of the contract shall apply without qualification to any services performed or goods provided by any subcontractor.

1.22. Independent Contractor

Both parties, in the performance of this contract, shall be acting in their individual capacity and not as agents, employees, partners, joint ventures or associates of one another. The employees or agents of one party shall not be construed to be the employees or agents of the other party for any purpose whatsoever.

The Contractor accepts full responsibility for payment of unemployment insurance, workers compensation, social security, income tax deductions and any other taxes or payroll deductions required by law for its employees engaged in work authorized by this contract.

1.23. Worker Misclassification

The Contractor and all lower tiered subcontractors under the Contractor shall properly classify workers as employees rather than independent contractors and treat them accordingly for purposes of workers' compensation insurance coverage, unemployment taxes, social security taxes, and income tax withholding. Failure to do so may result in contract termination.

1.24. Immigration and Reform Control Act of 1986 (IRCA)

All contractors are expected to comply with the Immigration and Reform Control Act of 1986 (IRCA), as may be amended from time to time. This Act, with certain limitations, requires the verification of the employment status of all individuals

who were hired on or after November 6, 1986, by the Contractor as well as any subcontractor or sub-contractors. The usual method of verification is through the Employment Verification (I-9) Form.

The Contractor hereby certifies without exception that such Contractor has complied with all federal and state laws relating to immigration and reform. Any misrepresentation in this regard or any employment of persons not authorized to work in the United States constitutes a material breach and, at the State's option, may subject the contract to termination for cause and any applicable damages.

Unless provided otherwise herein, all contractors are expected to be able to produce for the State any documentation or other such evidence to verify Contractor's IRCA compliance with any provision, duty, certification or like item under the contract.

1.25. Proof of Insurance

Upon request, the Contractor shall present an affidavit of Worker's Compensation, Public Liability, and Property Damage Insurance to Procurement and Contracts.

1.26. Conflict of Interest

The Contractor shall not knowingly employ, during the period of this contract or any extensions to it, any professional personnel who are also in the employ of the State and providing services involving this contract or services similar in nature to the scope of this contract to the State. Furthermore, the Contractor shall not knowingly employ, during the period of this contract or any extensions to it, any state employee who has participated in the making of this contract until at least two years after his/her termination of employment with the State.

1.27. Nondiscrimination and Workplace Safety

The Contractor agrees to abide by all federal, state and local laws, and rules and regulations prohibiting discrimination in employment and controlling workplace safety. Any violations of applicable laws or rules or regulations may result in termination of this contract.

1.28. Confidentiality

The Contractor may have access to private or confidential data maintained by State to the extent necessary to carry out its responsibilities under this contract. Contractor must comply with all the requirements of the Kansas Open Records Act (K.S.A. 42-215 et seq.) in providing services under this contract. Contractor shall accept full responsibility for providing adequate supervision and training to its agents and employees to ensure compliance with the Act. No private or confidential data collected, maintained or used in the course of performance of this contract shall be disseminated by either party except as authorized by statute, either during the period of the contract or thereafter. Contractor agrees to return any or all data furnished by the State promptly at the request of State in whatever form it is maintained by Contractor. On the termination or expiration of this contract, Contractor shall not use any of such data or any material derived from the data for any purpose and, where so instructed by State, shall destroy or render it unreadable.

1.29. Environmental Protection

The Contractor shall abide by all federal, state and local laws, and rules and regulations regarding the protection of the environment. The Contractor shall report any violations to the applicable governmental agency. A violation of applicable laws or rule or regulations may result in termination of this contract for cause.

1.30. Care of State Property

The Contractor shall be responsible for the proper care and custody of any state owned personal tangible property and real property furnished for Contractor's use in connection with the performance of this contract. The Contractor shall reimburse the State for such property's loss or damage caused by the Contractor, except for normal wear and tear.

1.31. Prohibition of Gratuities

Neither the Contractor nor any person, firm or corporation employed by the Contractor in the performance of this contract shall offer or give any gift, money or anything of value or any promise for future reward or compensation to any State employee at any time.

1.32. Retention of Records

Unless the State specifies in writing a different period of time, the Contractor agrees to preserve and make available at reasonable times all of its books, documents, papers, records and other evidence involving transactions related to this contract for a period of five (5) years from the date of the expiration or termination of this contract.

Matters involving litigation shall be kept for one (1) year following the termination of litigation, including all appeals, if the litigation exceeds five (5) years.

The Contractor agrees that authorized federal and state representatives, including but not limited to, personnel of the using agency; independent auditors acting on behalf of state and/or federal agencies shall have access to and the right to examine records during the contract period and during the five (5) year post contract period. Delivery of and access to the records shall be within five (5) business days at no cost to the state.

1.33. Off-Shore Sourcing

If, during the term of the contract, the Contractor or subcontractor plans to move work previously performed in the United States to a location outside of the United States, the Contractor shall immediately notify the Procurement and Contracts and the respective agency in writing, indicating the desired new location, the nature of the work to be moved and the percentage of work that would be relocated. The Director of Purchases, with the advice of the respective agency, must approve any changes prior to work being relocated. Failure to obtain the Director's approval may be grounds to terminate the contract for cause.

1.34. On-Site Inspection

Failure to adequately inspect the premises shall not relieve the Contractor from furnishing without additional cost to the State any materials, equipment, supplies or labor that may be required to carry out the intent of this Contract.

1.35. Indefinite Quantity Contract

This is an open-ended contract between the Contractor and the State to furnish an undetermined quantity of a good or service in a given period of time. The quantities ordered will be those actually required during the contract period, and the Contractor will deliver only such quantities as may be ordered. No guarantee of volume is made. An estimated quantity based on past history or other means may be used as a guide.

1.36. Price Adjustments

Prices shall remain firm for the entire contract period and subsequent renewals. Prices shall be net delivered, including all trade, quantity and cash discounts. Any price reductions available during the contract period shall be offered to the State of Kansas. Failure to provide available price reductions may result in termination of the contract for cause.

On the yearly anniversary date of this contract, costs may remain at the existing contract price or a request for adjustment may be made, either upward or downward, keyed to industry changes. Contractor shall furnish documentation at least 30 days prior to expiration date to substantiate any claim for increase. Price increases shall not exceed five percent (5%) of the existing contract. The State of Kansas reserves the right to accept, amend or deny any such price increase. If parties to the contract cannot agree on renewal terms, it is hereby understood that the contract will be rebid.

1.37. Payment

Payment Terms are Net 30 days. Payment date and receipt of order date shall be based upon K.S.A. 75-6403(b). This Statute requires state agencies to pay the full amount due for goods or services on or before the 30th calendar day after the date the agency receives such goods or services or the bill for the goods and services, whichever is later, unless other provisions for payment are agreed to in writing by the Contractor and the state agency. NOTE: If the 30th calendar day noted above falls on a Saturday, Sunday, or legal holiday, the following workday will become the required payment date.

Payments shall not be made for costs or items not listed in this contract.

Payment schedule shall be on a frequency mutually agreed upon by both the agency and the Contractor.

1.38. Accounts Receivable Set-Off Program

If, during the course of this contract the Contractor is found to owe a debt to the State of Kansas, agency payments to the Contractor may be intercepted / setoff by the State of Kansas. Notice of the setoff action will be provided to the Contractor. Pursuant to K.S.A. 75-6201 et seq, Contractor shall have the opportunity to challenge the validity of the debt. If the debt

is undisputed, the Contractor shall credit the account of the agency making the payment in an amount equal to the funds intercepted.

K.S.A. 75-6201 et seq. allows the Director of Accounts & Reports to setoff funds the State of Kansas owes Contractors against debts owed by the Contractors to the State of Kansas. Payments setoff in this manner constitute lawful payment for services or goods received. The Contractor benefits fully from the payment because its obligation to the State is reduced by the amount subject to setoff.

1.39. Federal, State and Local Taxes

Unless otherwise specified, the contracted price shall include all applicable federal, state and local taxes. The Contractor shall pay all taxes lawfully imposed on it with respect to any product or service delivered in accordance with this Contract. The State of Kansas is exempt from state sales or use taxes and federal excise taxes for direct purchases. These taxes shall not be included in the contracted price. Upon request, the State shall provide to the Contractor a certificate of tax exemption.

The State makes no representation as to the exemption from liability of any tax imposed by any governmental entity on the Contractor.

1.40. Debarment of State Contractors

Any Contractor who defaults on delivery or does not perform in a satisfactory manner as defined in this Agreement may be barred for up to a period of three (3) years, pursuant to K.S.A. 75-37,103, or have its work evaluated for pre-qualification purposes. Contractor shall disclose any conviction or judgment for a criminal or civil offense of any employee, individual or entity which controls a company or organization or will perform work under this Agreement that indicates a lack of business integrity or business honesty. This includes (1) conviction of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract or in the performance of such contract or subcontract; (2) conviction under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property; (3) conviction under state or federal antitrust statutes; and (4) any other offense to be so serious and compelling as to affect responsibility as a state contractor. For the purpose of this section, an individual or entity shall be presumed to have control of a company or organization if the individual or entity directly or indirectly, or acting in concert with one or more individuals or entities, owns or controls 25 percent or more of its equity, or otherwise controls its management or policies. Failure to disclose an offense may result in the termination of the contract.

1.41. Materials and Workmanship

The Contractor shall perform all work and furnish all supplies and materials, machinery, equipment, facilities, and means, necessary to complete all the work required by this Contract, within the time specified, in accordance with the provisions as specified.

The Contractor shall be responsible for all work put in under these specifications and shall make good, repair and/or replace, at the Contractor's own expense, as may be necessary, any defective work, material, etc., if in the opinion of agency and/or Procurement and Contracts said issue is due to imperfection in material, design, workmanship or Contractor fault.

1.42. Industry Standards

If not otherwise provided, materials or work called for in this contract shall be furnished and performed in accordance with best established practice and standards recognized by the contracted industry and comply with all codes and regulations which shall apply.

1.43. Implied Requirements

All products and services not specifically mentioned in this contract, but which are necessary to provide the functional capabilities described by the specifications, shall be included.

1.44. Inspection

The State reserves the right to reject, on arrival at destination, any items which do not conform with specification of the Contract.

1.45. Acceptance

No contract provision or use of items by the State shall constitute acceptance or relieve the Contractor of liability in respect to any expressed or implied warranties.

1.46. Ownership

All data, forms, procedures, software, manuals, system descriptions and work flows developed or accumulated by the Contractor under this contract shall be owned by the using agency. The Contractor may not release any materials without the written approval of the using agency.

1.47. Information/Data

Any and all information/data required to be provided at any time during the contract term shall be made available in a format as requested and/or approved by the State.

1.48. Certification of Materials Submitted

The Bid document, together with the specifications set forth herein and all data submitted by the Contractor to support their response including brochures, manuals, and descriptions covering the operating characteristics of the item(s) proposed, shall become a part of the contract between the Contractor and the State of Kansas. Any written representation covering such matters as reliability of the item(s), the experience of other users, or warranties of performance shall be incorporated by reference into the contract.

1.49. Transition Assistance

In the event of contract termination or expiration, Contractor shall provide all reasonable and necessary assistance to State to allow for a functional transition to another vendor.

1.50. Integration

This contract, in its final composite form, shall represent the entire agreement between the parties and shall supersede all prior negotiations, representations or agreements, either written or oral, between the parties relating to the subject matter hereof. This Agreement between the parties shall be independent of and have no effect on any other contracts of either party.

1.51. Modification

This contract shall be modified only by the written agreement and approval of the parties. No alteration or variation of the terms and conditions of the contract shall be valid unless made in writing and signed by the parties. Every amendment shall specify the date on which its provisions shall be effective.

1.52. Severability

If any provision of this contract is determined by a court of competent jurisdiction to be invalid or unenforceable to any extent, the remainder of this contract shall not be affected and each provision of this contract shall be enforced to the fullest extent permitted by law.

1.53. Charge Back Clause

If the Contractor fails to deliver the product within the delivery time established by the contract, the State reserves the right to purchase the product from the open market and charge back the difference between contract price and open market price to the Contractor.

1.54. Shipping and F.O.B. Point

Unless otherwise specified, prices shall be F.O.B. DESTINATION, PREPAID AND ALLOWED (included in the price), which means delivered to a state agency's receiving dock or other designated point as specified without additional charge. Shipments shall be made in order to arrive at the destination at a satisfactory time for unloading during receiving hours.

1.55. Deliveries

All orders shall be shipped FOB destination, prepaid and allowed, clearly marked with the purchase order number. If delays in delivery are anticipated, the Contractor shall immediately notify the ordering agency of the revised delivery date or partial delivery date. The order may be canceled if delivery time is unsatisfactory. The Contractor shall inform

Procurement and Contracts of any supply or delivery problems. Continued delivery problems may result in termination of the contract for cause.

1.56. Submission of the Bid

Submission of the bid will be considered presumptive evidence that the contractor is conversant with local facilities and difficulties, the requirements of the documents and of pertinent State and/or local codes, state of labor and material markets, and has made due allowances in the proposal for all contingencies. Later claims for labor, work, materials, equipment, and tax liability required for any difficulties encountered which could have been foreseen will not be recognized and all such difficulties shall be properly taken care of by Contractor at no additional cost to the State of Kansas.

1.57. New Materials, Supplies or Equipment

Unless otherwise specified, all materials, supplies or equipment offered by the Contractor shall be new, unused in any regard and of most current design. All materials, supplies and equipment shall be first class in all respects. Seconds or flawed items will not be acceptable. All materials, supplies or equipment shall be suitable for their intended purpose and, unless otherwise specified, fully assembled and ready for use on delivery.

1.58. Warranty

The Contractor will be the sole point of contact on any problems with the equipment or systems during the warranty period.

The Contractor shall be responsible for all work performed under these specifications. The Contractor shall make good, repair and replace, at the Contractor's own expense, as may be necessary, any defective work, material acceptance, if in the opinion of agency or Procurement and Contracts said defect is due to imperfection in material, design, or workmanship for the warranty period specified.

2. Statement of Work

Background and Scope:

In 1989, the State of Kansas established a program to complete energy conservation projects for State Agencies. Over \$23 million of projects were carried out under the bond financing approach. In April 2000, the Kansas Legislature passed House Bill No. 2603 (chapter 88 of 2000 Session Law of Kansas). The bill allowed State Agencies to utilize a procurement negotiating committee to contract for energy conservation measures, including both energy studies or audits, and the installation of related capital improvements and equipment. This PNC selected companies to assist State Agencies and other public entities with audits to identify measures that have good paybacks, and to assist with specification, bidding, construction management, installation and follow-up training and monitoring. In 2005 K.S.A 75-37,125 allowed the process established by the original RFP to be extended to municipalities and other public entities, "to enter into a contract or lease-purchase agreement for an energy conservation measure which meets the criteria of this section. In addition to any other authority provided by law a political subdivision or state agency may solicit proposals to contract for an energy conservation measure by advertising for proposals and qualifications in a newspaper of general circulation or the Kansas register, and by sending requests for proposals to at least three vendors and negotiating a lease-purchase agreement with one or more vendors submitting a proposal thereto. Negotiations entered into pursuant to this section with individual vendors shall not be subject to the provisions of the open meetings act. After an agreement has been executed, the agreement and all proposals from vendors shall be open records available for public inspection in accordance with the open records act."

This contract is with the Energy Division of the Kansas Corporation Commission (hereinafter referred to as the State) to provide services to: (1) conduct audits to identify Energy Conservation Measures (ECM's) which will reduce energy, water and related operating costs at facilities operated by State Agencies and other public entities (hereafter collectively referred to as Public Facilities); (2) provide construction and implementation services, and; (3) provide training, commissioning, operating, and monitoring services as required. The State's Facility Conservation Improvement Program (FCIP) will provide administration, monitoring of ESCO services and related capital improvements. The State has establish a group of ESCO's which Public Facilities may utilize with standardized fees and contracts to achieve energy, water or other operating cost savings by implementing related capital improvements in Public Facilities.

2. Projects entered into under these master contracts will be developed in the following phases:

1. Investment Grade Audit Phase:

A. Costs and markups provided in this contract are to be used and considered when developing costs and an Energy Performance Contract.

B. It is anticipated that additional Public Facilities will contact FCIP staff. In consultations with the requesting Public Facilities and FCIP staff, an ESCO will be selected to perform an Investment Grade Audit. The Public Facilities and ESCO will then develop the list of facilities to be audited.

2. Construction and Implementation Phase: Upon satisfactory completion of the Investment Grade Audit, the Public Facility will have the option to enter into an Energy Performance Contract (EPC) to implement the recommended projects. This contract creates a Master Energy Performance Contract which will have schedules attached which describe the scope of work and final terms for a specific Public Facility project. The Public Facility and ESCO will negotiate the final terms of the Energy Performance Contract which will then be submitted to the FCIP for approval or further negotiation.

3. Commissioning, Operations and Monitoring Phase: Public Facilities that desire commissioning operations or monitoring services shall include such services in the proposed Energy Performance Contract or Public Facilities may elect to contract for such service by an Addendum to the Energy Performance Contract.

Services to be provided:

Services may include but are not limited to the following:

1. Investment Grade Audit:

A. Define the scope of work with the Public Facility and FCIP staff.

B. Provide technical energy, water and operating cost analysis of a variety of conservation measures.

C. Provide cost/benefit financial analysis.

2. Construction and Implementation:
 - A. Negotiate Energy Performance Contract based upon Investment Grades Audit Agreement to define scope of work with the Public Facility and FCIP.
 - B. Provide design services.
 - C. Provide equipment procurement and purchasing.
 - D. Provide construction and construction management services.
 - E. Provide hazardous material abatement or disposal.
3. Commissioning, Operation and Monitoring:
 - A. Provide commissioning services.
 - B. Perform periodic inspection of improvements.
 - C. Perform routine maintenance of equipment.
 - D. Provide staff training for Public Facility personnel on routine maintenance and operation of systems.
 - E. Provide training of occupants.
 - F. Provide monitoring, measurement, verification and reporting of performance and savings.

State Resources to be Provided: Public Facilities using the ESCO services defined under this contract will provide the following:

1. Guidance to ESCO regarding future anticipated needs or changes to facilities or agency mission which may impact ESCO contract or anticipated results.
2. Access to key facility staff in management and engineering.
3. Reasonable access to facilities relevant to stage of work in progress.
4. Access to relevant utility records.
5. Access to relevant facility plans and blueprints.
6. Access to maintenance records.
7. Access to staff for training.

FCIP Standards of Performance for Participating Energy Service Companies (ESCOs)

ESCOs under this award agree to participate in the Facility Conservation Improvement Program (FCIP) and agree to the following standards of participation:

1. ESCO shall notify the KCC of any contracts signed with entities eligible to participate in the FCIP, as defined in KSA 75-37,125. Generally, this applies to local units of government, including, but not limited to, Unified School Districts, Cities, Counties, and Hospitals.
2. KCC shall be notified of all meetings with Customers participating in the FCIP, including but not limited to progress meetings, contract negotiations, and sales presentations.
3. ESCO shall provide the KCC all documents, proposals and drawings presented to the Customer at the same time they are presented to the Customer, or sooner.
4. ESCO shall participate fully and in good faith with the FCIP; ESCO shall not encourage customers to sign a contract outside of scope of the FCIP.
5. ESCOs not fully participating in the FCIP will not have their contracts renewed during the annual renewals and may be subject to Termination for Cause during the contract period due to lack of full participation

3. Contractual Provisions Attachment

DA-146a Rev. 06/12

3.1. Terms Herein Controlling Provisions

It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in any other document relating to and a part of the contract in which this attachment is incorporated. Any terms that conflict or could be interpreted to conflict with this attachment are nullified.

3.2. Kansas Law and Venue

This contract shall be subject to, governed by, and construed according to the laws of the State of Kansas, and jurisdiction and venue of any suit in connection with this contract shall reside only in courts located in the State of Kansas.

3.3. Termination Due To Lack Of Funding Appropriation

If, in the judgment of the Director of Accounts and Reports, Department of Administration, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges hereunder, State may terminate this agreement at the end of its current fiscal year. State agrees to give written notice of termination to contractor at least 30 days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in this contract, except that such notice shall not be required prior to 90 days before the end of such fiscal year. Contractor shall have the right, at the end of such fiscal year, to take possession of any equipment provided State under the contract. State will pay to the contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination of the agreement by State, title to any such equipment shall revert to contractor at the end of the State's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to the agency or the contractor.

3.4. Disclaimer Of Liability

No provision of this contract will be given effect that attempts to require the State of Kansas or its agencies to defend, hold harmless, or indemnify any contractor or third party for any acts or omissions. The liability of the State of Kansas is defined under the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.).

3.5. Anti-Discrimination Clause

The contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provisions of the Americans With Disabilities Act (42 U.S.C. 12101 et seq.) (ADA) and to not discriminate against any person because of race, religion, color, sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration; (f) if it is determined that the contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration.

Contractor agrees to comply with all applicable state and federal anti-discrimination laws.

The provisions of this paragraph number 5 (with the exception of those provisions relating to the ADA) are not applicable to a contractor who employs fewer than four employees during the term of such contract or whose contracts with the contracting State agency cumulatively total \$5,000 or less during the fiscal year of such agency.

3.6. Acceptance Of Contract

This contract shall not be considered accepted, approved or otherwise effective until the statutorily required approvals and certifications have been given.

3.7. Arbitration, Damages, Warranties

Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State or its agencies have agreed to binding arbitration, or the payment of damages or penalties. Further, the State of Kansas and its agencies do not agree to pay attorney fees, costs, or late payment charges beyond those available under the Kansas Prompt Payment Act (K.S.A. 75-6403), and no provision will be given effect that attempts to exclude, modify, disclaim or otherwise attempt to limit any damages available to the State of Kansas or its agencies at law, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

3.8. Representative's Authority To Contract

By signing this contract, the representative of the contractor thereby represents that such person is duly authorized by the contractor to execute this contract on behalf of the contractor and that the contractor agrees to be bound by the provisions thereof.

3.9. Responsibility For Taxes

The State of Kansas and its agencies shall not be responsible for, nor indemnify a contractor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.

3.10. Insurance

The State of Kansas and its agencies shall not be required to purchase any insurance against loss or damage to property or any other subject matter relating to this contract, nor shall this contract require them to establish a "self-insurance" fund to protect against any such loss or damage. Subject to the provisions of the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.), the contractor shall bear the risk of any loss or damage to any property in which the contractor holds title.

3.11. Information

No provision of this contract shall be construed as limiting the Legislative Division of Post Audit from having access to information pursuant to K.S.A. 46-1101 et seq.

3.12. The Eleventh Amendment

"The Eleventh Amendment is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this contract shall be deemed a waiver of the Eleventh Amendment."

3.13. Campaign Contributions / Lobbying

Funds provided through a grant award or contract shall not be given or received in exchange for the making of a campaign contribution. No part of the funds provided through this contract shall be used to influence or attempt to influence an officer or employee of any State of Kansas agency or a member of the Legislature regarding any pending legislation or the awarding, extension, continuation, renewal, amendment or modification of any government contract, grant, loan, or cooperative agreement.

SCHEDULE O:

ANNUAL INSTALLMENT PAYMENT SCHEDULE TO FINANCING PARTY

Following is an estimated annual installment payment schedule to a financing party of the City's choosing. Financing will be a separate contract and the following table is for informational purposes only.

Final payment amounts will be determined based upon the City's selection of financing approach, lender, term, down payment, and other factors.

City of Lawrence, Kansas
General Obligation Improvement Bonds, Series 2017
Green Bonds - Energy Savings Improvement Project - Issue Summary

NET DEBT SERVICE SCHEDULE				
Date	Principal	Coupon	Interest	Total P+I
09/01/2017	295,000.00	2.000%	211,101.66	506,101.66
09/01/2018	320,000.00	2.200%	500,744.00	820,744.00
09/01/2019	350,000.00	2.500%	493,704.00	843,704.00
09/01/2020	80,000.00	2.700%	484,954.00	564,954.00
09/01/2021	105,000.00	2.900%	482,794.00	587,794.00
09/01/2022	135,000.00	3.050%	479,749.00	614,749.00
09/01/2023	165,000.00	3.250%	475,631.50	640,631.50
09/01/2024	200,000.00	3.450%	470,269.00	670,269.00
09/01/2025	235,000.00	3.600%	463,369.00	698,369.00
09/01/2026	275,000.00	3.700%	454,909.00	729,909.00
09/01/2027	315,000.00	3.890%	444,734.00	759,734.00
09/01/2028	360,000.00	4.060%	432,480.50	792,480.50
09/01/2029	410,000.00	4.240%	417,864.50	827,864.50
09/01/2030	465,000.00	4.350%	400,480.50	865,480.50
09/01/2031	525,000.00	4.510%	380,253.00	905,253.00
09/01/2032	585,000.00	4.820%	356,575.50	941,575.50
09/01/2033	660,000.00	4.920%	328,378.50	988,378.50
09/01/2034	735,000.00	4.970%	295,906.50	1,030,906.50
09/01/2035	820,000.00	5.020%	259,377.00	1,079,377.00
09/01/2036	910,000.00	5.070%	218,213.00	1,128,213.00
09/01/2037	1,005,000.00	5.120%	172,076.00	1,177,076.00
09/01/2038	1,110,000.00	5.150%	120,620.00	1,230,620.00
09/01/2039	1,225,000.00	5.180%	63,455.00	1,288,455.00
Total	\$11,285,000.00	-	\$8,407,639.16	\$19,692,639.16

SIGNIFICANT DATES

Dated.....	4/01/2017
Delivery Date.....	4/01/2017
First Coupon Date.....	9/01/2017

Yield Statistics

Bond Year Dollars.....	\$173,467.08
Average Life.....	15.371 Years
Average Coupon.....	4.8468211%

Net Interest Cost (NIC).....	4.9444044%
True Interest Cost (TIC).....	4.9468409%
Bond Yield for Arbitrage Purposes.....	4.8007363%
All Inclusive Cost (AIC).....	5.0126200%

Net Interest Cost in Dollars.....	8,407,639.16
Weighted Average Maturity.....	15.371 Years

SCHEDULE P:

DETAILED ECM SAVINGS CALCULATIONS

1. The ESCO provided detailed ECM savings calculations in the final IGA Report.

SCHEDULE Q:

DETAILED POLLUTION CREDIT CALCULATIONS

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EXHIBIT I:

PERFORMANCE BOND

1. ESCO will provide a performance bond in the sum of 100% of the Cost of Work as described in SCHEDULE A: EQUIPMENT TO BE INSTALLED BY ESCO. The performance bond shall apply to the performance of the work and warranty as defined in SCHEDULE A: EQUIPMENT TO BE INSTALLED BY ESCO.
2. Any and all bonds obtained by ESCO for this project shall specifically exclude coverage for those portions of the Contract or the Work pertaining to design services, efficiency guarantees, and any other parts of this Contract and the Contract Documents that do not relate specifically to construction management and supervision of Work for purchasing and installing of Equipment, or for work to be accomplished by the Customer.
3. Upon receipt of performance bonds as required, a copy shall be included as a piece of this Contract Exhibit.

EXHIBIT II:

LABOR AND MATERIAL PAYMENT BOND

1. ESCO will provide a payment bond in the sum of 100% of the Cost of Work as described in SCHEDULE A: EQUIPMENT TO BE INSTALLED BY ESCO. The payment bond shall apply to and cover those providing labor, materials, equipment, supplies and services in connection with the performance of the work covered by as defined in SCHEDULE A: EQUIPMENT TO BE INSTALLED BY ESCO.
2. Any and all bonds obtained by ESCO for this project shall specifically exclude coverage for those portions of the Contract or the Work pertaining to design services, efficiency guarantees, and any other parts of this Contract and the Contract Documents that do not relate specifically to construction management and supervision of Work for purchasing and installing of Equipment, or for work to be accomplished by the Customer.
3. Upon receipt of payment bonds as required, a copy shall be included as a piece of this Contract Exhibit.

EXHIBIT III:

CERTIFICATES OF ACCEPTANCE

i. INVESTMENT GRADE AUDIT

This is to certify that the ESCO has prepared the complete investment grade audit of the premises including all energy conservation measures agreed upon by the parties and pursuant to the signed Investment Grade Audit Agreement.

Signature below indicates that the investment grade audit has been approved and accepted by Customer in accordance with the terms and conditions outlined within the investment grade audit agreement.

ESCO

Signed _____

Name _____

Title _____

Date _____

CUSTOMER

Signed _____

Name _____

Title _____

Date _____

ENERGY DIVISION, KANSAS CORPORATION COMMISSION

Signed _____

Name _____

Title _____

Date _____

ii.

Customer and ESCO agree that the Work described in SCHEDULE A: EQUIPMENT TO BE INSTALLED BY ESCO has been substantially complete has been completed on the date listed below, which shall become the date of Substantial Completion.

The commencement of the equipment warranty will adhere to the dates initialed in the table below (and any addenda table thereto). Customer acknowledges that the energy conservation measures have been designed to perform according to the operating schedules and set points agreed upon and defined in SCHEDULE I: STANDARDS OF COMFORT. Equipment is of a size, design, capacity and manufacturer as submitted to Customer by ESCO – or its authorized agents or representatives – is in good condition, and has been satisfactorily delivered and installed.

[illegible]

ESCO

Signed _____

Name _____

Title _____

Date _____

CUSTOMER

Signed _____

Name _____

Title _____

Date _____

iii. PROJECT COMPLETION

This is to certify that a final inspection of the Project has been conducted jointly by ESCO and Customer, and that the parties have determined that the Project has been fully completed in accordance with the Contract documents. All guarantees and warranties that have not commenced previously shall commence as of the date of commencement below.

Customer accepts the Project as being fully completed and assumes responsibility for maintenance, custodial care, and utilities for the premises. ESCO remains responsible to correct errors and omissions discovered subsequent to the execution of this document and to respond to claims made under applicable warranties.

ESCO

Signed _____

Name _____

Title _____

Date _____

CUSTOMER

Signed _____

Name _____

Title _____

Date _____

EXHIBIT IV:

EQUIPMENT WARRANTIES

ESCO shall provide, on its own or through its representative or agents, the following warranties:

1. One year full parts and labor warranty for all items installed as part of SCHEDULE A: EQUIPMENT TO BE INSTALLED BY ESCO. Warranty start and end dates shall be documented in EXHIBIT III: CERTIFICATE OF ACCEPTANCE.
2. Warranties begin at Substantial Completion of an individual energy conservation measure, as documented in EXHIBIT III: CERTIFICATE OF ACCEPTANCE. Substantial completion is defined as the date on which Customer begins receiving beneficial use of the equipment.
3. Extended warranties may be provided by equipment manufacturers as detailed in the warranty information. Extended warranty information will be provided upon completion of construction along with Operations and Maintenance Manuals.

All applicable warranty information shall be provided to Customer, both electronically and in printed form, in an Operations and Maintenance Manual prior to project completion.

Appendix A

RFP for ESCO Solicitation

This Request for Proposals, dated July 16, 2013, issued by the Kansas State Energy Office Facility Conservation Improvement Program office is on file with that office.

In addition, the RFP has been made available in electronic format to Customer for review.

Appendix B

ESCO Proposal

This Proposal submitted by ESCO in response to the RFP denoted in Appendix A: RFP for ESCO Solicitation is on file with the Kansas State Energy Office Facility Conservation Improvement Program office.

In addition, the proposal has been made available in electronic format to Customer for review.

INVESTMENT GRADE AUDIT AGREEMENT

This Investment Grade Audit Agreement (the "Agreement") is made and entered into between *Willdan, DBA 360 Energy Engineers* (ESCO), having its principal offices at 730 New Hampshire, Suite 203, Lawrence, KS 66044 and *The City of Lawrence* (Customer) at 6 East 6th Street, Lawrence, KS 66044.

WITNESSETH

WHEREAS, ESCO was selected pursuant to RFP #EVT0002461 to provide energy service company services to State Agencies and Municipalities through the State of Kansas' Facility Conservation Improvement Program; and

WHEREAS, Customer desires to enter into an agreement to have ESCO perform an Investment Grade Audit (IGA) to determine the feasibility of entering into an Energy Performance Contract to provide for the installation and implementation of energy, water and other operating cost saving measures at Customer's facilities.

WHEREAS, if such measures are determined to be feasible, and if the amount of savings can be reasonably sufficient to cover all costs, or a substantial amount of the costs associated with an energy performance contracting project, the Customer, with the approval of the Kansas Corporation Commission Energy Division (KCC-ED), may negotiate an Energy Performance Contract under which the ESCO will design, procure, install, implement, maintain and/or monitor such measures. However, this Agreement does not require Customer to enter into such Energy Performance Contract.

THEREFORE, the parties agree as follows:

1. Contract Documents

- 1.1 This Investment Grade Audit Agreement
- 1.2 Attachment "A" - Contract Terms and Conditions (from the award of RFP # EVT0002461)
- 1.3 Attachment "B" - Construction Markups (from the award of RFP # EVT0002461)
- 1.4 Attachment "C" - The List of Buildings (Scope of Investigation if for Non-Traditional facilities)
- 1.5 Attachment "D" - The Investment Grade Audit Process

2. Amendments or Modifications to the Contract Documents

The Contract Documents (Appendix 1, Appendix 2 and Attachment A) may only be amended or modified by written modification on a change order signed by the parties and issued by the Kansas Corporation Commission.

3. Investment Grade Energy Audit

- 1.1. ESCO agrees to perform an Investment Grade Energy Audit in accordance with the Scope of Work described below. ESCO agrees to complete the Investment Grade Audit and present to Customer a final report within 180 days from the execution of this agreement. Customer agrees to assist the ESCO in performing the Investment Grade Audit in accordance with the Scope of Work described below.
- 1.2. Customer agrees to work diligently to provide full and accurate information. ESCO agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed.
- 1.3. ESCO agrees to offer in the Investment Grade Audit a proposal of Energy Performance

Contract terms and conditions, based on a recommended package of energy and water saving measures selected by the ESCO. The proposal will include details as specified in the Scope of Work below.

2. Compensation

- 2.1. The following is the basis upon which a fee ("Report fee") of **\$64,000.00** shall be due to the ESCO from Customer. This fee is provided as a negotiated cost by the ESCO under the assumption that Customer has the intent to enter into an Energy Performance Contract.
- 2.2. If the Customer accepts the Investment Grade Audit and enters into an Energy Performance Contract with the ESCO to implement the energy, water and other operating cost saving measures, Customer shall have no up-front payment obligations under this Agreement, but acknowledges that the report fee shall be incorporated into ESCO's project costs.
- 2.3. If the Customer accepts the Investment Grade Audit but fails to enter into an Energy Performance Contract with the ESCO to implement the energy and water saving measures within 90 business days, Customer shall pay the ESCO the Report Fee and the agreement will terminate without any further liability to either party.
- 2.4. Should the Customer, during the Investment Grade Audit, terminate this Agreement by written notice from the Customer to the ESCO, Customer shall pay the ESCO all proportional contractual payments earned up to the date of termination. The ESCO will be entitled to no other payments in case of termination and the agreement will terminate without any further liability to either party.
- 2.5. Should the ESCO determine any time during the Investment Grade Audit that sufficient savings cannot be attained to meet Customer's terms as set forth in the RFP, the Investment Grade Audit will be terminated by written notice from the ESCO to the Customer. In this event this Agreement shall be cancelled and Customer shall have no obligation to pay, in whole or in part, the amount specified.
- 2.6. If the Customer does not accept the Investment Grade Audit report within 90 business days, and the ESCO deems the basis for non-acceptance to be unreasonable, the ESCO may appeal to the KCC-ED to assist with resolution or to arrange mediation or arbitration.

3. Scope of Work. The Investment Grade Audit shall be performed as described below:

3.1. Establish allowable cost and savings factors with Customer:

3.1.1. Customer will provide ESCO with relevant information and assistance in developing savings estimates.

3.1.2. Savings estimates may include:

- a. Energy and water savings
- b. Customer material/commodity savings, including scheduled replacement of parts
- c. Outside labor cost savings, including maintenance contracts
- d. Customer in-house labor costs
- e. Customer deferred maintenance cost

3.1.3. The following items may be negotiated:

- a. Escalation rates for natural gas, electricity, water, material/commodity cost savings, and allowable labor savings. These are rates to be used in cash flow projections for project development purposes. Actual rates and a floor rate may be used in a subsequent performance contract.
- b. Interest rates (all types of financing that are available and could be considered for this project)
- c. Customer equity cash contribution to the project.

3.1.4. Construction Costs are defined as:

- a. Labor (and normal fringe benefits) paid by ESCO, **exclusive** of labor for design, construction management, monitoring and commissioning.
- b. Materials include wiring, piping and other products incorporated into the project.
- c. Construction equipment includes items which are used in the construction phase, but which are not incorporated into the project.
- d. Subcontractor costs include any payments to third parties relating to subcontracted work on the site **exclusive** of costs for design, construction management, monitoring or commissioning.
- e. Project equipment includes any individual item of equipment incorporated into the project.
- f. Miscellaneous project costs include reasonable expenses for bonds, insurance, job trailers, portable toilets, job vehicles, software licensed to the customer, and job site office space, but **excludes** costs (other than subcontractor costs) incurred by ESCO'S for office supplies and expenses including document reproduction, phone and fax usage; incidental job site expenses such as tools; general office supplies and expense, including document reproduction, phone and fax usage; meals; travel and overnight accommodations.

3.1.5. Construction Markups and Payments to ESCO

- a. The construction markups listed in Attachment "B" shall be applied to Construction Costs and shall be used as the **maximum** rates for projects to be performed under any Energy Performance Contract with Customer, but such rates may be exceeded if approved in writing by both the Customer and the KCC-ED. Construction Costs include only Items listed in section 5.1.4 above.

Customer and the KCC-ED will review proposed rates for projects. These rate caps are not to be considered the standard rates to be charged for all projects. Complex, innovative projects shall be allowed to approach the maximum rates, however routine, less complex projects should not justify the maximum rates and lower rates will be expected. Rates will be a factor considered by the Customer in the selection of an ESCO for a project.

- b. Audit Services shall be paid with no markup, and training and monitoring is to be negotiated if needed for a specific project. Major equipment

items (chillers, boilers, etc.) can be negotiated at a separate markup.

c. Payment to the ESCO shall take place as follows:

If the audit is accepted, but the customer chooses to arrange for the work outside the ESCO, the full cost of the audit will be paid by the customer.

If the ESCO is to complete the work, 90% of the audit cost shall be paid on the first construction pay request. 10% will be retained and paid upon satisfactory completion of the energy conservation measures.

The Customer shall cause monthly payments to be made to the ESCO for the value, proportionate to the amount of the allowable costs, of all work completed or materials delivered during the preceding calendar month. 10% of the cost of the above amount will be retained and paid upon satisfactory completion of the energy conservation measures. Pay requests shall be prepared and submitted using standard AIA documents.

3.2. Collect data and background information from Customer:

3.2.1. Customer will provide ESCO with information concerning facility operation and energy use for the most recent three years from the effective date of this Agreement as follows.

- a. Building area (square footage)
- b. Construction date of buildings and major additions
- c. Utility company invoices
- d. Occupancy and usage information
- e. Description of all energy-consuming or energy-saving equipment used on the premises, as available
- f. Description of energy management procedures utilized on the premises
- g. Description of any energy-related improvements made or currently being implemented
- h. Description of any changes in structure of the facility or energy-using or water-using equipment
- i. Description of future plans regarding building modifications or equipment modifications and replacements
- j. Drawings, as available (may include mechanical, plumbing, electrical, buildings automation and temperature controls, structural, architectural, modifications, and remodels)
- k. Original construction submittals and factory data (specifications, pump curves, etc.), as available
- l. Operating engineer logs, maintenance work orders, etc. as available
- m. Records of maintenance expenditures on energy-using equipment, including service contracts
- n. Prior energy audits or studies, if any.

3.2.2. Customer agrees to work diligently to furnish ESCO, upon request, accurate and complete data and information as available. Where information is not available from Customer, ESCO will make a diligent effort to collect such information through the facility inspection, staff interviews, and utility companies. ESCO agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed.

3.2.3 Customer agrees to input 13 months of utility data (water, electric, gas, etc.) into the Energy Star Portfolio Manager program and share this data with the KCC-ED electronically. If an Energy Performance Contract is entered into, Customer agrees to input 13 months of data, beginning the first month after project completion, into the Energy Star Portfolio Manager and share this data with the KCC-ED electronically.

3.3. Perform an inspection survey:

3.3.1. ESCO shall interview the facility manager, maintenance staff or others regarding facility operation, including:

- a. energy management procedures
- b. equipment maintenance problems
- c. comfort problems and requirements
- d. equipment reliability
- e. projected equipment needs
- f. occupancy and use schedules for the facility and specific equipment
- g. facility improvements, past and planned

3.3.2. Inspect major energy-using equipment, including:

- a. Lighting (indoor and outdoor)
- b. Heating and heat distribution systems
- c. Cooling systems and related equipment
- d. Automatic temperature control systems and equipment
- e. Air distribution systems and equipment
- f. Outdoor ventilation systems and equipment
- g. Exhaust systems and equipment
- h. Hot water systems
- i. Electric motors, transmission and drive systems
- j. Special systems (kitchen/dining equipment, swimming pools, laundry equipment, etc.)
- k. Renewable energy systems
- l. Other energy using systems
- m. Water consuming systems (restroom fixtures, water fountains, irrigation systems, etc.)

3.3.3. Perform "late-night" surveys outside of normal business hours or on weekends to confirm building system and occupancy schedules, if deemed necessary.

3.3.4. Develop a preliminary list of potential energy and water saving measures. Consider the following for each system:

- a. Comfort and maintenance problems
- b. Energy use, loads, proper sizing, efficiencies and hours of operation
- c. Current operating condition
- d. Remaining useful life
- e. Feasibility of system replacement
- f. Hazardous materials and other environmental concerns
- g. Customer's future plans for equipment replacement or building renovations
- h. Facility operation and maintenance procedures that could be affected.

3.3.5. Customer will allow ESCO reasonable access to facility staff to ensure

understanding of existing systems and opportunities. ESCO agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed

3.4. Establish base year consumption and reconcile with end use consumption estimates.

3.4.1. Examine utility bills for the past 36 months and establish base year consumption for electricity, gas, steam, water, etc. in terms of energy units (kWh, kW, ccf, Therms, gallons, or other units used in bills) and in terms of dollars. Describe the process used to determine the base year (averaging, selecting most representative contiguous 12 months, etc.). Consult with facility personnel to account for any anomalous billings that could skew the base year representation.

3.4.2. Estimate loading, usage and/or hours of operation for all major end uses representing over five percent of total facility consumption including, but not limited to:

- a. Lighting
- b. Heating
- c. Cooling
- d. HVAC motors (fans and pumps)
- e. Plug loads
- f. Kitchen equipment
- g. Other/miscellaneous

3.4.3. Where loading or usage are highly uncertain (including variable loads such as cooling), ESCO will use its best judgment or take direction from the Customer to use spot measurements or short-term monitoring.

3.4.4. Reconcile annual end-use estimated consumption with the annual base year consumption to within five percent for electricity (kWh), fuels and water. Also reconcile electric peak demand (kW) for each end use within five percent. The miscellaneous category can be no greater than five percent. This reconciliation will place reasonable limits on potential savings.

3.5. Develop a preliminary analysis of potential energy conservation measures (ECMs):

3.5.1. Identify ECMs, which appear in the judgment of the ESCO to be likely to be cost effective and therefore warrant detailed analysis.

3.5.2. For each ECM, prepare a preliminary estimate of energy cost savings including description of analysis methodology, supporting calculations and assumptions used to estimate savings.

3.5.3. The Customer's rejection of calculations of savings, or potential savings allowed, shall be at the risk of the ESCO. This is subject to third party review. Valid calculations cannot be rejected.

3.6. Preliminary Investment Grade Audit Presentation:

Prepare a presentation, which includes assessment of energy use, savings potential, retrofit opportunities, and potential for developing an energy performance contract. Describe how the projected project economics meet the customer's terms for completing the requirements of the audit report. The KCC-ED shall be notified of the Preliminary Investment Grade Audit Presentation and all subsequent presentations to Customer.

3.7. Analyze each Energy Conservation Measure (ECM):

3.7.1. Consider technologies in a comprehensive approach including, but not limited to: lighting systems, heating/ventilating/air conditioning equipment and distribution systems, controls systems, building envelope, motors, kitchen equipment, pools, renewable energy systems or other special equipment.

3.7.2. For each ECM:

- a. Use costs provided prior to contract negotiations in all cost estimates.
- b. Follow the methodology of ASHRAE or other nationally-recognized authority and be based on the engineering principle(s) identified in the description of the retrofit option.
- c. Use best judgment regarding the employment of instrumentation and recording durations so as to achieve an accurate and faithful characterization of energy use.
- d. Develop a preliminary measurement and verification plan for each ECM
Prepare a detailed report as described below.

3.8. Prepare a draft "Final Investment Grade Audit" which shall include:

3.8.1. . Overview Section containing:

- a. Contact information
- b. Summary table of recommended ECMs, with each ECM's estimated installed cost, annual maintenance costs, the first year cost avoidance (by fuel type in dollars and energy units), and simple payback
- c. Summary of annual energy use and costs of existing or base year condition (by fuel type in dollars and energy units)
- d. Calculation of annual percentage savings expected if all recommended ECMs were implemented
- e. Description of the existing facility, mechanical and electrical systems
- f. Summary description of energy conservation measures, including total estimated costs and savings
- g. Discussion of measures considered but not investigated in detail
- h. Conclusions and recommendations

3.8.2. **ECM section containing a complete description of each ECM including:**

- a. Full written description of ECM to include:
 - 1) Existing conditions. Include equipment, setpoints, operational hours, etc.
 - 2) Recommendations. Include discussion of facility operations and maintenance procedures that will be affected by ECM installation

and implementation

b. Base year energy use:

- 1) Summary of all utility bills
- 2) Base year consumption and description of how established
- 3) End use reconciliation with base year (include discussion of any unusual findings)

c. Savings calculations :

- 1) Base year energy use and cost
- 2) Post-retrofit energy use and cost
- 3) Savings estimates including analysis methodology, supporting calculations and assumptions used
- 4) Savings estimates must be limited to savings allowed by the Customer as described above
- 5) Percent cost-avoidance projected
- 6) Description and calculations for any proposed rate changes
- 7) Explanation of how savings duplication or interaction between retrofit options is avoided.
- 8) Operation and maintenance savings, including detailed calculations and description
- 9) If computer simulation is used, include a short description and state key input data. If requested by Customer, access will be provided to the program and all assumptions and inputs used, and/or printouts shall be provided of all input files and important output files and included in the Investment Grade Audit with documentation that explains how the final savings figures are derived from the simulation program output printouts
- 10) If manual calculations are employed, formulas, assumptions and key data shall be stated

d. Cost estimate -- detailed scope of the construction work needed, suitable for cost estimating including:

- 1) Engineering/design costs
- 2) Contractor/vendor estimates for labor, materials, equipment; include special provisions, overtime, etc., as needed to accomplish the work with minimum disruption to the operations of the facilities.
- 3) Permit costs
- 4) Construction management fees
- 5) Performance/payment bond costs
- 6) Commissioning costs
- 7) Other costs/fees
- 8) Company overhead/profit
- 9) Environmental costs or benefits (disposal, avoided emissions, handling of hazardous materials, etc.)
- 10) Note that all markups and costs disclosed and negotiated prior to contract negotiations shall be used in the cost estimates

In lieu of work proposed to be performed by ESCO or a subcontractor recommended by ESCO, ESCO agrees the Customer may specify that certain energy conservation measure components will be subject to requests for bids to ESCO from one or more contractors acceptable to

the Customer. ESCO shall provide its specifications for bids for review and comment prior to their release to bidders. Upon written request by Customer, ESCO will provide Customer copies of all bid responses. ESCO must consent to the bidder reasonably recommended by Customer and ESCO warrants that such consent shall not be unreasonably withheld. The timeframe provided in Section 3.1 shall be extended by a reasonable number of days taken by ESCO to obtain bids and conclude bidder selection discussions with Customer.

e. Other

- 1) Preliminary commissioning plan
- 2) Preliminary measurement and verification plan, explaining how each ECM is to be measured and verified
- 3) Discussion of impacts that facility would incur after contract ends. Consider operation and maintenance impacts, staffing impacts, budget impacts, etc.

f. Complete appendices including data used to prepare analyses and description of how data were collected.

3.9. Meet with Customer to:

- 3.9.1. Review the ECM options proposed in the draft "Final Investment Grade Audit", and assemble a package of options which are compatible with Customer's investment and infrastructure improvement goals.

3.10. Revise Audit as requested by Customer and provide final copy.

3.11. Prepare a proposal for an Energy Performance Contract.

- 3.11.1. . This Investment Grade Audit Agreement anticipates (but does not require) that the Customer will enter into an Energy Performance Contract with the ESCO to fully design, install, and monitor select ECMs investigated in the Investment Grade Audit. The ESCO with input from the customer shall prepare a proposal for such an Energy Performance Contract which shall include a Project Cost Proposal and a List of Services to be provided. Project Cost is the total amount Customer will pay for the Project. The Project Cost will include costs for ESCO'S services which may include but are not limited to:

- a. Engineering, designing, packaging, procuring, installing
- b. Maintenance fees
- c. Monitoring fees
- d. Training fees
- e. Legal services
- f. Overhead and profit margins
- g. Include a List of Services related to each cost

- 3.11.2. The Project Cost will include the FCIP fee. As per Kansas Statute 75-37, 125 (e), a FCIP fee for administrative support, resources, third- party oversight and review and other services made available by and through FCIP will be calculated in accordance with the following schedule;

Project Cost	FCIP Fee
First \$100,000	.04

Next \$100,001 to \$500,000	.03
Next \$500,001 to \$1,000,000	.02
Next \$1,000,001 to \$5,000,000	.01
Over \$5,000,000	.005

The FCIP fee is established between the FCIP and the customer and is not a component of "construction costs" used to determine the fee for ESCO services. The FCIP fee amount may be included in project financing and will be payable if an Energy Performance Contract is entered into.

3.11.3. Carbon credits, renewable energy credits (REC's), green tags or other marketable energy or environmental credits that are generated through an Energy Performance Contract that is entered into between Customer and ESCO shall accrue to Customer.

3.12. **Prepare a preliminary analysis of energy performance contract terms** to include:

3.12.1. List of ECMs included in recommended package

3.12.2. Interest rate used in the analysis

3.12.3. Expected contract term (in number of years)

3.12.4. Analysis of annual cash flow for Customer during the contract term

3.12.5. Explanation of how savings will be calculated and adjusted due to weather (such as heating or cooling degree days), occupancy changes or other factors.

4. **Termination**

4.1. ESCO may terminate this Agreement as described in Sections 2.5 and 2.6. Customer may terminate this Agreement upon ESCO'S failure to fulfill the terms of the Agreement. Termination shall be effective 30 days from receipt of written notice if conditions of default are not first corrected.

4.2. Customer may terminate this Agreement upon 30 days written notice at their convenience and pay to the ESCO all proportional contractual payments earned up to the date of termination . The ESCO will be entitled to no other payments in case of termination for convenience.

5. **Insurance**

5.1. Before commencing any Work under this Agreement, ESCO shall file with Customer insurance policies as specified below.

5.2. Workers Compensation Insurance with statutory limits as required by the State of Kansas, and Employer's Liability Insurance with limits of not less than \$1,000,000.00 or if such is permitted, a certificate of consent to self-insure.

5.3. For the duration of the Agreement, ESCO shall maintain Comprehensive General Liability Insurance written on an "occurrence" basis. Such insurance shall bear a combined single limit per occurrence of \$500,000 and annual aggregate of not less than \$1,000,000.00 exclusive of defense costs. Such insurance will name Customer as an additional insured as respects ESCO's acts or omissions, and shall contain standard cross-liability or severability of interest provisions and waiver of litigation.

6. **Workers' Compensation Liability**

The ESCO's signature affixed herein shall constitute a certification under penalty of perjury under the laws of the State of Kansas, that the ESCO is aware of the provisions which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with provisions of that code and agrees to comply with such provisions before commencing the performance of the work of this Agreement.

7. **Energy Performance Contract**

The Parties intend to negotiate an Energy Performance Contract under which the ESCO will design, install and implement energy conservation measures which the Parties have agreed to and provide certain maintenance and monitoring services. However, nothing in this Agreement should be construed as an obligation on any of the Parties to execute such an agreement. The terms and provisions of such an Energy Performance Contract will be set forth in a separate agreement.

8. **Notices**

All notices required by these Contract Documents to be given by one party to the other shall be effective only when sent in writing, either hand delivered, telecopied and then sent by overnight delivery by means of U.S. Express Mail, Federal Express, or similar delivery service, or mailed by U.S. registered or certified mail, return receipt requested, addressed as follows:

CUSTOMER

The City of Lawrence Kansas

Tom Markus, City Manager

6 East 6th Street

Lawrence, Kansas 66044

Contact Person: Eileen Horn, Sustainability Coordinator

6 East 6th Street

Lawrence, Kansas 66044

Ph: (785)330-3121 - Email: ehorn@douglas-county.com

ESCO

Willdan 360 Energy Engineers

Joseph Hurla, Vice President of Business Development

730 New Hampshire, Suite 203

Lawrence, Kansas 66044

Contact Person: Joseph Hurla, Vice President of Business Development

Ph: (785) 218-6549 - Email: jhurla@360energyengineers.com


9. **Disputes**

Disputes that cannot be resolved by negotiation between the customer and the ESCO may be submitted to the KCC-ED and resolved within the Douglas County District Court.

INWITNESS WHEREOF, and intending to be legally bound, the parties hereto subscribe their names to this agreement on the date first written above.

Willdan 360 Energy Engineers


By: _____


Joseph Hurla ~~Scott McVey~~
Title: VP of Business Development

Date: 6/8/16

The City of Lawrence Kansas

By: _____


Tom Markus
Title: City Manager

Date: _____

Approved as to Form:


Legal Counsel for Customer (if required)

Date: 5.27.2016

Approved by Kansas Corporation Commission


Date: 6-13-16

ATTACHMENT A:
CONTRACT TERMS AND CONDITIONS

1. Following are the provisions that are to be used in the Investment Grade Audit Agreement and the final Energy Performance Contract.

2. Investment Grade Audit Phase

- 2.1. Investment Grade Audit. The ESCO'S proposed contract terms must include the presentation of results from a detailed technical energy audit of acceptable quality to Customer. If Customer decides not to enter into an energy performance contract after the audit has been accepted, Customer agrees to pay the cost of the audit as stated in the submitted proposal in accordance with the contract terms and conditions. The audit must include estimates of savings for each measure. Also, the cost estimate for each measure must include an estimate of all costs including design, engineering, installation, maintenance, repairs and debt services.

2.2. Allowable savings.

2.2.1. Customer allows savings to include:

- a. Energy and water savings
- b. Customer material/commodity savings, including scheduled replacement of parts
- c. Outside labor cost savings, including maintenance contracts
- d. Customer in house labor costs
- e. Customer deferred maintenance costs

2.2.2. The following items may be negotiated:

- a. Escalation rates
- b. Interest rates
- c. Customer equity cash outlay (Customer's option)

- 2.2.3. Operating and Maintenance Savings. Any cost savings related to maintenance and operation of the facilities will be rigorously reviewed and, if agreed to, will be limited to those that can be thoroughly documented and approved by Customer.

- 2.2.4. Use of Stated Cost Markups. The pricing methodology and individual cost markups disclosed during preliminary contract negotiations will be expected to be applied in costs presented in any subsequent technical audit or performance contract, providing the scope and size of the project remain the same as assumed when markups were disclosed.

- 2.2.5. Professional Architect/Engineer Involvement. A registered architect or professional engineer must review and approve design work done under this contract and be involved throughout the process of auditing, design, construction, and installation. The engineer may be an employee of the ESCO and must be registered in Kansas.

3. Construction/ Implementation Phase

- 3.1. Open Book Pricing. Open book pricing will be required, such that the ESCO will fully disclose all costs. ESCO will maintain cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records. ESCO will afford Customer access to these records and preserve them for a period

of three (3) years after final payment. Costs will be evaluated through price analysis to compare costs with reasonable criteria such as established catalog and market prices or historical prices.

- 3.2. Meeting Project Schedule. ESCO must provide a final schedule of project milestones including equipment- servicing and preventive maintenance provisions that will become part of any final contract. ESCO is responsible for meeting scheduled deadlines or notifying customer of any schedule changes. In the event any milestone or service provision is not met as scheduled without prior approval from Customer, Customer reserves the right to consider it a default and withdraw from all contractual obligations without penalty.
- 3.3. Customer Inspection. Customer must have the right to inspect, test and approve the work conducted in the facilities during construction and operation. Customer shall have the right and access to the account books, records, and other compilations of data that pertain to the performance of the provisions and requirements of this agreement. Records shall be kept on a generally recognized accounting basis, and calculations will be kept on file in legible form and retained for three years after close-out. Customer retains the right to have its representative visit the site during the audit and implementation phases of the project, and to attend relevant on-site or off-site meetings of the ESCO and/or its subcontractors.
- 3.4. Final Approval by Customer. Customer retains final approval over the scope of work and all end-use conditions. Customer may delay the initiation of payments until approved.
- 3.5. Property of Drawings, Reports and Materials. All drawings, reports and materials prepared by the ESCO specifically in performance of this contract shall become the property of Customer and will be delivered to Customer no later than 45 days after completion of construction.
- 3.6. Compliance. All work completed under this contract must be in compliance with all applicable federal, state and local laws, rules and regulations such as building codes and appropriate accreditation, certification and licensing standards. Work must be in accordance with sound engineering and safety practices and in compliance with all Customer regulations relative to the premises. ESCO and its subcontractors will be responsible for obtaining any and all required governmental permits, consents and authorizations, and for payment of any and all state and city required taxes and fees which result from this contract. Where laws, rules or regulations require Customer to secure approvals for the work of this contract, ESCO shall assist Customer obtain such approvals and drawing review and on-site inspections, and incorporate such costs into this contract.
- 3.7. Handling of Hazardous Materials. All work completed under this contract must be in compliance with all applicable federal, state and local laws, rules and regulations regarding waste disposal and treatment/disposal of any hazardous materials that could result from this project. Work must also be in accordance with sound engineering and safety practices, and in compliance with all reasonable Customer rules relative to the premises. In the event the ESCO encounters any such materials, the ESCO shall immediately notify the project manager and stop work pending further direction from the project manager. Customer may, in its sole discretion, suspend work on the project pending removal of such materials or terminate this Agreement.
- 3.8. Hiring and Wage Requirements. The ESCO will comply with all requirements for the payment of prevailing wages and minority and women-owned business enterprises, if applicable.
- 3.9. Subcontractor Approval. Customer retains the right to approve any ESCO selected subcontractor prior to its commencement of work on this project. Names and qualifications must be submitted at least two weeks in advance.

- 3.10. Bonding Requirements. The ESCO will provide to Customer at contract signing separate performance and labor and material payment (public works) bonds, each in the sum of 100 percent of the cost of the construction work.
- 3.11. Standards of Comfort. Specific standards of comfort, safety and functionality will not be degraded from the existing condition and meet minimum established industry standards. The ESCO will be responsible for maintaining the levels of comfort for each building as specified in this RFP or in any final agreement. Persistent failure to maintain the defined climate and lighting conditions will constitute a default.
- 3.12. Construction Management. The ESCO will be required to work with current building management and maintenance personnel in order to coordinate construction and provide appropriate training in operations and maintenance of all installed improvements.
- 3.13. Equipment Compatibility or Standardization. All equipment installed that is comparable to similar equipment at other sites operated by Customer shall be of the same manufacturer for standardization of equipment agency-wide and/or for compatibility with existing systems, unless excepted by Customer.
- 3.14. As-Built Drawings. Where applicable, ESCO must provide durable, reproducible record drawings (or such electronic equivalents as may be agreed to with Customer) from the "as-built drawings" of all existing and modified conditions associated with the project, conforming to typical engineering standards. These should include architectural, mechanical, electrical, structural, and control drawings and operating manuals and will be delivered prior to acceptance.
- 3.15. Professional Architect/Engineer Involvement. A registered architect or professional engineer must review and approve design work done under this contract and be involved throughout the process of auditing, design, construction, and installation. The engineer may be an employee of the ESCO and must be registered in the State of Kansas.

4. Commissioning/ Monitoring Phase

- 4.1. Contract Term. No contract shall exceed thirty years in duration and is subject to annual appropriations.
- 4.2. Guaranteed Cost Savings. Improvements and services must result in guaranteed minimum cost savings to be achieved each year. Allowable savings are defined below. The guarantee is required to equal the calculated savings attributable to all energy saving measures for each year during the contract period. The combined annual savings must be sufficient to cover all project costs, including debt service and contractor fees, and maintenance, monitoring and other services, for the duration of the contract term. Annual cost savings beyond the guaranteed minimum savings will be held by Customer, and will not be allocated to shortfalls in other years.
- 4.3. Customer Payments. Payments must be based on actual measurements comparing post-retrofit improvements to building performance before the installation of any energy systems and service improvements.
- 4.4. Annual Reconciliation. As per negotiated agreement between Customer and ESCO annual savings may or may not be verified at specific time each year to determine if the ESCO guarantee was satisfied.
- 4.5. Methodology to Adjust for Changes. The contract must contain a mutually acceptable clause whereby unanticipated changes in facility use, occupancy, schedule and/or utility rates can

be accommodated in a fair manner agreeable to both parties. The ESCO'S proposed method for adjusting the energy use baseline should be identified in the RFP response and listed in a schedule to the contract.

- 4.6. Pre-Payment Non-Penalty. The contract must permit Customer to prepay the debt, in part or in whole, without penalty.
- 4.7. Contract Re-negotiation. Customer reserves the right to renegotiate the terms of the contract due to changes in the regulatory or utility climates or Customer's non-discretionary use of energy, or if Customer desires to add sites as defined in this RFP.
- 4.8. Preventive Maintenance Schedule. Upon completion of the contract, ESCO shall provide to Customer a single comprehensive schedule of necessary preventive maintenance for all installations for the five (5) years following contract expiration or termination.
- 4.9. Contract Cancellation. Customer reserves the right to cancel, for cause or convenience, any contract resulting from this RFP by providing timely written notice to the contractor.
- 4.10. Availability of Funds. Financial obligations of Customer payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted and otherwise made available. In the event funds are not appropriated, any resulting contract will become null and void, without penalty to Customer.
- 4.11. Maintenance Responsibilities. No equipment or other improvements will be installed that would require Customer to hire additional personnel unless contract negotiations produce an explicit exemption for a specific installation. Maintenance responsibilities shall be proposed in detail in the contract.
- 4.12. Follow-up Monitoring and Maintenance Services. Following the installation and implementation of improvements the ESCO will be responsible for maintaining and monitoring the measures to ensure optimal performance, however, Customer has the option to decline these services or negotiate for a reduced term of services. All maintenance and monitoring fees will be paid through guaranteed savings.
- 4.13. Operation and Maintenance Manuals. At least three (3) maintenance manuals for each site will be provided for all equipment replacements and/or upgrades at each location. Manuals are subject to approval of Customer.
- 4.14. Training. ESCO shall provide training for Customer personnel on all equipment and software provided by ESCO and necessary books, manuals and related educational and technical information.
- 4.15. Customer Activities. Customer reserves the right to make energy and water improvements to the work sites and to monitor the performance of the installations independently of the ESCO. Additionally, Customer may wish to integrate other identified capital needs with ESCO projects, which may or may not contain energy and water saving opportunities

5. General Issues

- 5.1. Standard Contract. The customer will incorporate standard state contract provisions (Special Provisions) into any contract resulting from this RFP.
- 5.2. Assignment and Delegation. Except for assignment of antitrust claims, neither party to any resulting contract may assign or delegate any portion of the agreement without the prior written consent of the other party.

- 5.3. Insurance. Prior to the commencement of work, the ESCO must provide evidence of insurance for both the construction and operations phases of the project in the amounts specified in this Contract.

The contractor shall procure, at its own expense, and maintain for the duration of the work, the following insurance coverage's; the Customer shall be issued certificates as an additional insured.

- a. Standard Workers' Compensation and Employer Liability as required by state statute, including occupational disease, covering all employees on or off the work site, acting within the course and scope of their employment.
 - b. General and/or Personal Injury and/or Professional and/or Automobile Liability - (including bodily injury, personal injury and property damage) with the following minimum coverage, depending on the policy format:
 - 1) Occurrence basis policy - combined single limit of \$500,000.
 - 2) Annual Aggregate limit policy - not less than \$1 million plus agreement that vendor will purchase additional insurance to replenish the limit to \$1,000,000 if claims reduce the annual aggregate below \$500,000.
 - 3) Claims-Made policy - Combined single limit of \$500,000, plus an endorsement that extends coverage two years beyond the policy expiration date.
 - c. Vendor shall provide such other insurance as may be required by law, or in a specific solicitation.
 - d. The Customer shall be named as an additional insured on all liability policies.
 - e. The insurance shall include a provision preventing cancellation without 60-calendar days prior written notice to the Customer by certified mail.
 - f. Vendor shall provide the following documentation to the Customer within 7 working days of a request therefore, unless otherwise provided:
 - 1) Certificates of adequate insurance coverage, each with a reference to the Customer being named as an additional insured, or
 - 2) Certificates of adequate insurance coverage and endorsement/s of additional insured coverage.
- 5.4. Indemnification. To the extent authorized by law, the contractor shall indemnify, save and hold harmless the Customer, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses, and attorney fees incurred as a result of any act or omission by the contractor or its employees, agents, subcontractors, or assignees pursuant to the terms of the contract resulting from this RFP.
- 5.5. Venue. The laws of the State of Kansas, U.S.A. shall govern in connection with the formation, performance and the legal enforcement of any resulting contract.
- 5.6. Contractual Provisions Attachment. The Customer will incorporate its standard contract provisions when they exit into any contract resulting from this RFP.
- 5.7. Ownership of Contract Products/Services. Proposals, upon established opening time,

become the property of Customer. All products/services produced in response to the contract resulting from this RFP will be the sole property of Customer, unless otherwise noted in the RFP. The contents of the successful ESCO'S proposal will become contractual obligations .

- 5.8. Non-Discrimination. The ESCO shall comply with all applicable state and federal laws, rules and regulations involving non-discrimination on the basis of race, color, religion, national origin, age or sex.
- 5.9. Incurring Costs. Customer is not liable for any cost incurred by ESCO'S prior to issuance of a legally executed contract, purchase order, or other authorized acquisition document. No property interest, of any nature shall occur until a contract is awarded and signed by all concerned parties.

6. FCIP Standards of Performance for Participating Energy Service Companies (ESCOs)

- 6.1. ESCOs selected under this award agree to participate in the Facility Conservation Improvement Program (FCIP) and agree to the following standards of participation:
 - a. ESCO shall notify the KCC of any contracts signed with entities eligible to participate in the FCIP, as defined in KSA 75-37, 125. Generally, this applies to local units of government, including, but not limited to, Unified School Districts, Cities, Counties, and Hospitals.
 - b. KCC shall be notified of all meetings with Customers participating in the FCIP, including but not limited to progress meetings, contract negotiations, and sales presentations.
 - c. ESCO shall provide the KCC all documents, proposals and drawings presented to the Customer at the same time they are presented to the Customer, or sooner.
 - d. ESCO shall participate fully and in good faith with the FCIP; ESCO will not encourage customers to sign a contract outside of scope of the FCIP.
 - e. ESCOs not fully participating in the FCIP will not have their contracts renewed during the annual renewals and may be subject to Termination for Cause during the contract period due to lack of full participation.

ATTACHMENT B

WILLDAN 360 ENERGY ENGINEERS

CONSTRUCTION MARKUPS

Kansas Corporation Commission

360 Energy Engineers, LLC
Contract Number: 38616AA
730 New Hampshire, Suite 203
Lawrence, KS 66044
Local: 785-856-3360

Fax: 785-832-8234
Tax Number: 27-26 17309
Event# EVT0002461
Contact: Joseph Hurla
E-Mail: jh.urla@360energyengineers.com

Customer:
Address:
City/State/Zip:
Contact:
Phone

City of Lawrence, Ks
6 East 6th Street
Lawrence, Ks 660044
Eileen Horn
785-330-3121

INVESTMENT GRADE AUDIT FEE

(price {in dollars} per sq. ft. unless otherwise noted)

Note: Buildings Sq. Footage is 387,362 plus several non-traditional items.
IGA fee is \$64,000 payable from the Customer to the ESCO.

Principle Building Activity	FCIP Region					
	NW (1)	NC (2)	NE (3)	SW (4)	SC (5)	SE (6)
Corrections	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000
Education - Higher Ed.	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000
Education - USD	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000	\$ 0.1000
Food Sales or Service	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200
Health Care - Inpatient	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200
Health Care - Outpatient	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200
Lodging	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200
Office	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200
Public Assembly	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200	\$ 0.1200
Storage or Warehouse	\$ 0.0800	\$ 0.0800	\$ 0.0800	\$ 0.0800	\$ 0.0800	\$ 0.0800

CONSTRUCTION MARKUPS

(Compensation for project design, construction management, const. period interest, commissioning, measurement & verification 1, and ESCO's overhead & profit)

Apply to the *PORTION* of Construction Costs	FCIP Region					
	NW (1)	NC (2)	NE (3)	SW (4)	SC (5)	SE (6)
From \$0 and to \$1,000,000	41.00%	41.00%	41.00%	41.00%	41.00%	41.00%
From \$1,000,001 to \$5,000,000	39.00%	39.00%	39.00%	39.00%	39.00%	39.00%
From \$5,000,001 to \$10,000,000	35.50%	35.50%	35.50%	35.50%	35.50%	35.50%
Greater than \$10,000,000	34.00%	34.00%	34.00%	34.00%	34.00%	34.00%
Aquatic Centers Renovations	Changed to be treated as "Non Traditional" and priced accordingly					
Golf Course Puumhose						
Exterior Lighting - Various Locations						
Interior Lighting - Various Locations						
Traffic Lights - Downtown						
School crossing beacons - Various Locations						

NON TRADITIONAL ENERGY RELATED ITEMS - Fees for analysis of non-traditional measures, including but not limited to, wind and other community energy generation projects etc., will be negotiated between the ESCO and the public entity and will not exceed 10% of the total projected cost of the measure.

ATTACH

MENT C:

LIST OF

BUILDIN

GS

CITY OF LAWRENCE, KS

Building Name	Square Feet (sum = 387,362)	Principle Building Activity
Eagle Bend Golf Course Clubhouse	2,000	Public Assembly
East Lawrence Recreation Center	18,500	Public Assembly
Holcom Park Recreation Center	19,200	Public Assembly
Community Building	31,300	Public Assembly
Prairie Park Nature Center	5,500	Public Assembly
South Park Administrative Offices	3,600	Office
Fire/Med #5 and Admin	23,843	Lodging
Fire/Med #4	11,637	Lodging
Fire/Med #3	7,389	Lodging
Fire/Med #2	11,637	Lodging
City Hall	36,000	Office
Community Health Building	86,474	Health Care - Outpatient
Lawrence Arts Center	40,000	Public Assembly
Airport Terminal	4,500	Public Assembly
Airport GUTS Hangar	12,000	Storage or Warehouse
Community Hangar	14,400	Storage or Warehouse
FBO Hangar	12,000	Storage or Warehouse
Airport T Hangar A, B, C, and Runway lighting	25,000	Storage or Warehouse
Solid Waste Division	2,496	Storage or Warehouse
Vehicle Maintenance Garage	11,320	Storage or Warehouse
North Lawrence Pump Station	396	Storage or Warehouse
Street Division - Sand/Carpenter Building	1,170	Storage or Warehouse
Street Division - Red Barn	7,000	Storage or Warehouse

Non Traditional ECM Description
Indoor Aquatic Center - Renovation
Outdoor Aquatic Center - Renovation
Eagle Bend Golf Course Irrigation-Pump house
Holcomb Complex Ball Diamond - Lighting
Youth Sports Complex - Lighting
Park lighting (various locations, esp. Veterans Park, Watson Park)
Street Division Salt Dome (lighting) - Wakarusa
Street Division Salt Dome (lighting) - Haskell
Riverfront Parking Garage (lighting)
New Hampshire Parking Garage (lighting)
Downtown Canopy (lighting)
Downtown Traffic Lighting
School crossing beacons (various locations)

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

CONTRACTUAL PROVISIONS ATTACHMENT

Important: This form contains mandatory contract provisions and must be attached to or incorporated in all copies of any contractual agreement. If it is attached to the vendor/contractor's standard contract form, then that form must be altered to contain the following provision:

"The Provisions found in Contractual Provisions Attachment (Form DA-146a, Rev. 06-12), which is attached hereto, are hereby incorporated in this contract and made a part thereof."

The parties agree that the following provisions are hereby incorporated into the contract to which it is attached and made a part thereof, said contract being the 9th day of June, 2016.

1. Terms Herein Controlling Provisions: It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in any other document relating to and a part of the contract in which this attachment is incorporated. Any terms that conflict or could be interpreted to conflict with this attachment are nullified.
2. Kansas Law and Venue: This contract shall be subject to, governed by, and construed according to the laws of the State of Kansas, and jurisdiction and venue of any suit in connection with this contract shall reside only in courts located in the State of Kansas.
3. Termination Due To Lack Of Funding Appropriation: If, in the judgment of the Director of Accounts and Reports, Department of Administration, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges-hereunder, State may terminate this agreement at the end of its current fiscal year. State agrees to give written notice of termination to contractor at least 30 days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in this contract, except that such notice shall not be required prior to 90 days before the end of such fiscal year. Contractor shall have the right, at the end of such fiscal year, to take possession of any equipment provided State under the contract. State will pay to the contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination of the agreement by State, title to any such equipment shall revert to contractor at the end of the State's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to the agency or the contractor.
4. Disclaimer Of Liability: No provision of this contract will be given effect that attempts to require the State of Kansas or its agencies to defend, hold harmless, or indemnify any contractor or third party for any acts or omissions. The liability of the State of Kansas is defined under the Kansas Tort Claims Act (K.S.A. 75-6101 fil).
5. Anti-Discrimination Clause: The contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 fil) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 fil and the applicable provisions of the Americans With Disabilities Act (42 U.S.C. 12101 fil) (ADA) and to not discriminate against any person because of race, religion, color, sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration; (f) if it is determined that the contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration.

Contractor agrees to comply with all applicable state and federal anti-discrimination laws.

The provisions of this paragraph number 5 (with the exception of those provisions relating to the ADA) are not applicable to a contractor who employs fewer than four employees during the term of such contract or whose contracts with the contracting State agency cumulatively total \$5,000 or less during the fiscal year of such agency.

6. Acceptance Of Contract: This contract shall not be considered accepted, approved or otherwise effective until the statutorily required approvals and certifications have been given.
7. Arbitration. Damages. Warranties: Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State or its agencies have agreed to binding arbitration, or the payment of damages or penalties. Further, the State of Kansas and its agencies do not agree to pay attorney fees, costs, or late payment charges beyond those available under the Kansas Prompt Payment Act (K.S.A. 75-6403), and no provision will be given effect that attempts to exclude, modify, disclaim or otherwise attempt to limit any damages available to the State of Kansas or its agencies at law, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.
8. Representative's Authority To Contract: By signing this contract, the representative of the contractor thereby represents that such person is duly authorized by the contractor to execute this contract on behalf of the contractor and that the contractor agrees to be bound by the provisions thereof.
9. Responsibility For Taxes: The State of Kansas and its agencies shall not be responsible for, nor indemnify a contractor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.
10. Insurance: The State of Kansas and its agencies shall not be required to purchase any insurance against loss or damage to property or any other subject matter relating to this contract, nor shall this contract require them to establish a "self-insurance" fund to protect against any such loss or damage. Subject to the provisions of the Kansas Tort Claims Act (K.S.A. 75-6101 fil), the contractor shall bear the risk of any loss or damage to any property in which the contractor holds title.
11. Information: No provision of this contract shall be construed as limiting the Legislative Division of Post Audit from having access to information pursuant to K.S.A. 46-1101 fil §.111.
12. The Eleventh Amendment: "The Eleventh Amendment is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this contract shall be deemed a waiver of the Eleventh Amendment."
13. Campaign Contributions / Lobbying: Funds provided through a grant award or contract shall not be given or received in exchange for the making of a campaign contribution. No part of the funds provided through this contract shall be used to influence or attempt to influence an officer or employee of any State of Kansas agency or a member of the Legislature regarding any pending legislation or the awarding, extension, continuation, renewal, amendment or modification of any government contract, grant, loan, or cooperative agreement.