# Roetzel comments

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CONTRACTOR

PUBLIC WORKS PROVISIONS

# Standard Form of Guaranteed Energy Savings Contract Agreement Between Owner and Contractor

This <b>GUARANTEED ENERGY SAVINGS CONTRACT AGREEMENT</b> is made in the Ohio Revised Code § 717.02 as of	n accordance with
BETWEEN the Owner:	
City of North Royalton 14600 State Road North Royalton, Ohio 44133-5120	
Attn: Mayor Robert A. Stefanik Telephone: (440) 237-4300 Email: mayorstefanik@northroyalton.org	
and the Contractor:	
Leopardo Companies, Inc. 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 Attn: Joe Frankini Telephone: (847) 783-3902 Email: JFFrankini@leopardo.com	
for the following Project:	
North Royalton Guaranteed Energy Savings Contract Agreement	
The Owner and Contractor agree as follows.	
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### ARTICLE 1 THE WORK OF THIS CONTRACT

The Contractor shall execute the Work as defined at Section 7.3 of this Agreement and as further described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

- § 1.1 ENERGY MANAGEMENT PLAN. Owner shall furnish (or cause Owner's energy supplier to furnish) to Contractor all of Owner's records and complete data concerning energy usage and energy-related maintenance for the Owner's properties (the "Premises"), for the most current twelve (12) month period, including utility records, occupancy information, occupancy schedules, descriptions of any changes in building structures or the heating, cooling, lighting or other systems or energy requirements, descriptions of all energy-consuming or energy-saving equipment on the Premises, bills and records relating to maintenance of the energy-related equipment, fleet operating data, and a description of energy management procedures Owner presently utilizes and details of all performance deficiencies in existing systems ("Owner's Information"). Owner acknowledges that Contractor relied, or will rely, upon Owner's Information in developing, or will develop, the Facility Energy Audit and the savings calculations described in this Agreement based on Owner's Information and accordingly, represents Owner's Information is accurate.
- § 1.2 Contractor has made an assessment of the energy consumption characteristics of the Premises and prepared the complete Facility Energy Audit and Analysis of the Premises (the "Facility Energy Audit") as set forth in Owner's Request for Proposal. Owner has approved and accepted the Facility Energy Audit including all Energy Conservation Measures (ECM's) agreed upon by the Parties.
- § 1.3 Owner is authorized under Ohio Revised Code §717.02 to enter into this Contract for the purpose set forth in this Contract.

### ARTICLE 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 2.1 The date of commencement of the Work shall be a date set forth in a notice to proceed issued by the Owner which shall be effective only after sixty (60) days after the last of receipt by Contractor of (a) written confirmation that project financing is in place sufficient to ensure payment of the entire Contract Sum timely and in full accordance with the payment terms of this Agreement to the reasonable satisfaction of Contractor; (b) receipt by Contractor of (i) Owner's Initial Payment as defined by Section 15.2.1 of this Agreement; (ii) copies of the insurance policy(ies) required to be purchased by Owner under Exhibit A, Insurance and Bonds; and (iii) an original of this Agreement and the other Contract Documents executed by Owner. In the event Contractor commences Work in advance of any of

the foregoing conditions, Contractor shall be entitled to an extension of time in accordance with this Agreement if such condition's failure causes delay.

§ 2.2 The Contract Time shall be measured from the date of commencement.

## § 2.3 Substantial Completion

- § 2.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work not later than «three hundred sixty-five» ( «365» ) calendar days from the date of commencement of the Work.
- § 2.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

#### **Portion of Work**

### **Substantial Completion Date**

## ARTICLE 3 CONTRACT SUM

- § 3.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be the Stipulated Sum, in accordance with Section 3.2 below.
- § 3.2 The Stipulated Sum shall be «three million seventy-nine thousand four hundred eighty-seven» (\$ «3,079,487»), subject to additions and deductions as provided in the Contract Documents but that Stipulated Sum expires if Owner has not confirmed financing to Contractor within ninety (90) days of the Effective Date.

## ARTICLE 4 PAYMENT

## § 4.1 Progress Payments

- § 4.1.1 For all payments after the Initial Payment of Section 15.2.1 of this Agreement, based upon Applications for Payment submitted to the Owner by the Contractor, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided by Ohio Revised Code § 4113.61.
- § 4.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.
- § 4.1.3 Provided that an Application for Payment is received by Owner not later than the 30th day of a month, the Owner shall make payment of the approved amount to the Contractor not later than the 30th day of the following month. If an Application for Payment is received by the Owner after the date fixed above, payment shall be made by the Owner not later than thirty (30) days after the Owner receives the Application for Payment.
- § 4.1.4 Payments due and unpaid under the Contract shall bear interest from the date payment is due, at the legal rate prevailing from time to time at the place where the Project is located, which shall not exceed 5% interest.

## § 4.2 Final Payment

- **§ 4.2.1** Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 18.2, and to satisfy other requirements, if any, which extend beyond final payment.
- § 4.2.2 The Owner's final payment to the Contractor shall be made no later than thirty (30) days after Contractor's submission of Contractor's final Application for Payment, subject to the provisions of 15.7.2 hereof.

## ARTICLE 5

## **Intentionally deleted**

## ARTICLE 6 ENUMERATION OF CONTRACT DOCUMENTS

**§ 6.1** The Contract Documents are defined in Article 7 and, except for Modifications issued after execution of this Agreement, are enumerated in the sections below in this Article 6.

## § 6.1.1 This Agreement.

- § 6.1.2 Additional documents forming part of the Contract Documents:
  - .1 Attachment 1, Scope of Work
  - .2 Attachment 2, Energy Savings Program
  - .3 Attachment 3, Measurement and Verification Plan
  - **.4** Exhibit A, Insurance and Bonds
  - .5 Exhibit B, Contractor's Schedule
  - **.6** Other documents, if any, listed below: Not Applicable.

## ARTICLE 7 GENERAL PROVISIONS

### § 7.1 The Contract Documents

The Contract Documents are enumerated in Article 6 and consist of this Agreement and other documents listed in this Agreement, and Modifications issued after execution of this Agreement. A Modification is (1) a written amendment to the Contract signed by both parties, or (2) a Change Order as set forth in Section 13. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required to the extent consistent with the Contract Documents.

§ 7.1.1 In the event of any conflict between the Facility Energy Audit and the provisions of this Agreement and the Contract Documents, this Agreement and the other Contract Documents shall govern the Facility Energy Audit.

### § 7.2 The Contract

The Contract Documents form the Guaranteed Energy Savings Contract. The Contract represents the entire and integrated agreement between the Parties and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between any persons or entities other than the Owner and the Contractor.

## § 7.3 The Work

The term "Work" means the design, engineering, supervision, materials, equipment, construction and other services as described in Attachment 1 – Scope of Work required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work constitutes a part of the Project and excludes work to be performed by Owner or Owner's Separate Contractors. All Work will be subject to the Energy and Savings Program set forth in Attachment 2 – Energy Savings Program and the terms and conditions of this Agreement.

- § 7.3.1 If, and where applicable, all fleet leasing, fleet fuel conversion or information technology equipment purchases recommended by this Agreement are not part of the Work and shall be contracted separately by Owner.
- § 7.3.2 This Work does not include the design of existing systems, or responsibility for existing system obsolescence, vandalism, misuse or abuse, negligence, repair or replacement necessitated by freezing weather, electrical power failure, low voltage, burned-out main or branch fuses, low water pressure, or other causes beyond the control of Contractor.

## § 7.4 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Contractor and the Contractor's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

## § 7.5 Ownership and use of Drawings, Specifications and Other Instruments of Service

- § 7.5.1 The Contractor shall be deemed the author and owner of Contractor's and Contractor's Subconsultants' and Subcontractors' respective Instruments of Service, including Attachment 1 and all Submittals, and will retain all common law, statutory and other reserved rights in their Instruments of Service, including copyrights. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Contractor's reserved rights.
- § 7.5.2 Subcontractors, Sub-subcontractors and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to the protocols established pursuant to Sections 7.6 and 7.7, solely and exclusively

for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Contractor.

## § 7.6 Digital Data Use and Transmission

Contractor may agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form.

- § 7.7 Confidential Software and Confidential Information. Contractor may include and utilize software and other specialty tools such as: Metrix, Perfectware Facility Management Software, and other proprietary energy and savings calculation tools (the "Contractor's Software"). These items are the property of the Contractor and, along with Contractor's technical and pricing data, are Confidential Information providing Contractor with a competitive advantage in the marketplace. Hence, any unauthorized disclosure of the Software or the Confidential Information to any third party will cause irreparable harm to Contractor and no remedy at law will be adequate to compensate for this harm to Contractor. Owner agrees Contractor may obtain a temporary restraining order and preliminary and permanent injunctive relief against Owner, without the requirement of posting a bond, to prevent the disclosure of the Software or the Confidential Information to any third party. Owner shall pay Contractor all court costs and reasonable attorneys' fees incurred by Contractor in pursuing such equitable relief.
- § 7.7.1 In the event there is any public records request for the Confidential Information (a "Public Records Request"), Owner immediately shall notify Contractor and Owner shall raise all proprietary, trade secret and other applicable exceptions under the Freedom of Information Act to the Public Records Request or Ohio Public Records Laws and abide by any Orders of Court of appropriate jurisdiction adjudicating such exception.
- § 7.7.2 Systems and software purchased by Owner such as direct digital control, metering and monitoring systems and associated software that are included as part of this Agreement become the Owner's property upon Final Completion. Future software updates, upgrades, renewal and maintenance fees are the responsibility of the Owner unless specifically defined as part of Contractor's obligation under this Agreement.

## § 7.8 Severability

The invalidity or illegality of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable and the Contract shall not be deemed void or voidable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

## § 7.9 Notice

§ 7.9.1 Where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission.

## ARTICLE 8 OWNER

## § 8.1 Information and Services Required of the Owner

- **§ 8.1.1** Prior to commencement of the Work, the Owner shall furnish to the Contractor reasonable evidence, which is satisfactory to Contractor, that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 8.1.1, the Contract Time shall be extended appropriately.
- § 8.1.2 In addition to the requirements of Section 1.1, the Owner shall furnish all necessary surveys of all sites of the Work where any Work is to be erected.
- § 8.1.3 The Contractor shall be entitled to rely on the accuracy of Owner's Information but shall exercise proper precautions relating to the safe performance of the Work. Contractor is not responsible for undisclosed, pre-existing system deficiencies or problems. Such examples include but are not limited to existing leaking valves, leaking or under-sized piping, leaking or under-sized ductwork, under-sized equipment, insufficient outside air, etc.

§ 8.1.4 Except for securing permits and paying fees that are the responsibility of the Contractor under the Contract Documents, if any, including those required under Section 9.6.1, the Owner shall secure and pay for other necessary approvals, easements, assessments, and charges required for the construction, use, or occupancy of permanent structures or for permanent changes in existing facilities. Owner shall furnish water, electricity and other utilities utilized by the Contractor and Subcontractors in connection with their performance of the Work which shall be paid for by Owner.

## § 8.2 Owner's Right to Stop the Work

If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents, or repeatedly fails to carry out the Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order is eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

## ARTICLE 9 CONTRACTOR

### § 9.1 Review of Field Conditions by Contractor

- § 9.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local and only readily visible conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.
- § 9.1.2 Notwithstanding anything to the contrary contained in the Contract Documents, the Contractor shall not be liable for failing to discover unforeseen, differing subsurface or concealed conditions. Contractor shall be entitled to rely upon information, "as-built" documents, surveys, energy information provided under Section 1.1 and test results furnished by the Owner, the Owner's Consultants, or the Owner's agents.

## § 9.2 Supervision and Construction Procedures

- § 9.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters.
- § 9.2.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors.

### § 9.3 Labor and Materials

- § 9.3.1 The Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for proper execution and completion of the Work but Owner shall provide and pay for all water, heat and utilities.
- § 9.3.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
- § 9.3.3 The Contractor may make a substitution only with the consent of the Owner, and in accordance with a Modification.

## § 9.4 Warranty

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation or normal wear and tear under normal usage. All manufacturers' warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 15.6.3.

### § 9.4.1 Limitations on Warranty.

- § 9.4.1.1 Except for the specific express warranty provided by Section 9.4 of this Agreement, Contractor makes no other warranties by this Agreement and disclaims any and all implied warranties including, but not limited to, any warranties that the Project or its components are merchantable, habitable, or fit for the purposes intended by Owner.
- § 9.4.1.2 Notwithstanding anything to the contrary contained in this Section 9.4 or the Contract Documents, Contractor's warranty under Section 9.4 shall not apply to any system or equipment which is separately warranted by written warranty to the Owner by a manufacturer supplier or Subcontractor (we added subcontractor back in) of any tier. Owner understands and agrees that Owner's remedy for any shortfall of Guaranteed Energy Savings or Operational Savings attributable to a system or equipment separately warranted by that manufacturer or supplier of Subcontractor is solely against that warrantor and not against Contractor regardless of whether such warrantor actually reimburses Owner. Contractor shall promptly secure and provide to Owner any such third party written warranties as set forth in Section 15.6.
- § 9.4.1.3 Retro-commissioning is the process of refurbishing select equipment and systems to extend the useful life and improve performance including cleaning, calibrating, minor repairs, parts replacement and general tune up of the individual components and systems ("RCx"). Because RCx applies to existing used equipment, the warranty shall be limited to the manufacturer's supplied warranty, if any, on replacement parts only, and no other warranty of parts, components or labor is included.
- § 9.4.1.4 Contractor's warranty does not include routine maintenance, including, without limitation, equipment cleaning, mechanical parts lubrication, testing, belt adjustment, or similar items. Owner may purchase those maintenance services from Contractor by separate contract, in which case Contractor's warranty shall be applicable. Contractor's warranty does not include damage caused by voltage fluctuations, blown fuses, misuse, refrigerants loss, lightning or other acts of nature. Work performed by anyone other than the Contractor or Contractor's representative voids any warranty coverage.

## § 9.4.2 Guaranteed Energy Savings

Subject to Contractor's right to correct under Sections 18.2 and 18.2.2 of this Contract (as limited by Sections 9.4.1 and 18.2.1), Owner's sole remedy against Contractor for shortfall in the Guaranteed Energy & Operational Savings shall be the applicable annual payment under Attachment 2.

### § 9.5 Taxes

Owner warrants that the Contract is exempt from all sales, consumer, use, and other similar taxes.

### § 9.6 Permits, Fees, Notices, and Compliance with Laws

- **§ 9.6.1** If required, the Contractor shall secure and pay for any permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work as part of the Contract Sum.
- § 9.6.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.
- § 9.7 Intentionally omitted.

## § 9.8 Contractor's Schedules

- § 9.8.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's information a Contractor's Schedule for the Work which shall become Exhibit B to this Contract. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.
- § 9.8.2 The Contractor shall perform the Work in general accordance with the most recent schedule submitted to the Owner. Contractor shall not be obligated to meet interim or milestone dates set forth in Contractor's schedules other than those specifically required by Section 2.3.2 of this Contract, if any ("Mandatory Milestones") and may be liable only for Contractor's failure, as a result of Contractor-caused delays, to meet the agreed date of Substantial Completion and Mandatory Milestones, if any, each as modified pursuant to the Contract Documents.

## § 9.9 Submittals

§ 9.9.1 The Contractor shall review for compliance with the Contract Documents and submit to the Owner the Drawings and Submittals required by Attachment 1. By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner that the Contractor has (1) reviewed and approved them; (2) determined and verified materials, field measurements, and field construction criteria related thereto, or will do so; and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of Attachment 1. The Work shall be in accordance with submittals approved by Contractor's engineer.

§ 9.9.2 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering except to the extent Contractor needs to provide such services in order to carry out the Contractor's own responsibilities. Where professional design services or certifications by a design professional are specifically required, the Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional. If no criteria are specified, the design shall comply with applicable codes and ordinances. Each Party shall be entitled to rely upon the information provided by the other Party. The Contractor will cause a licensed engineer to review and approve or take other appropriate action on submittals for the limited purpose of checking for conformance with information provided and the design concept expressed in the Contract Documents. The Contractor's engineer's review of Drawings and Submittals shall be for the limited purpose of checking for conformance with information given and the concept expressed in Attachment 1. In performing such review, the Contractor's engineer will approve, or take other appropriate action upon, the Contractor's Drawings and Submittals.

## § 9.10 Use of Sites

The Contractor shall confine operations at the sites to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the sites with materials or equipment.

## § 9.11 Cutting and Patching

The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.

## § 9.12 Cleaning Up

The Contractor shall keep the Premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus material from and about the Project.

### § 9.13 Access to Work

The Contractor shall provide the Owner with access to the Work in preparation and progress wherever located.

## § 9.14 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by Owner or where the copyright violations are contained in information supplied by, or documents prepared, by the Owner.

### § 9.15 Indemnification

§ 9.15.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and Owner's agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to reasonable attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, but not to the extent such claim, damage, loss, or expense is caused by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 9.15.1.

§ 9.15.2 In claims against any person or entity indemnified under this Section 9.15 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 9.15.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

### ARTICLE 10 PUBLIC WORKS PROVISIONS

§ 10.1 Contractor acknowledges that this is a public works project governed by the Ohio Prevailing Wage Act. Contractor shall pay its laborers if any and Subcontractors shall pay their laborers not less than the established prevailing rate of wages, as provided in Ohio Revised Code § 4115.01, *et seq.* Contractor shall comply with all reporting requirements of the Ohio Prevailing Wage Act. Similarly, the Contractor shall assure that all Subcontractors and sub-tier subcontractors comply with the reporting requirements of the Ohio Prevailing Wage Act.

§ 10.2 Contractor represents that it does not discriminate in its hiring practices based upon race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service. Contractor shall assure the Owner that Trade Contractors shall not discriminate as set forth in this paragraph. Ohio Revised Code § 4112.01, et seq.

### ARTICLE 11 SUBCONTRACTORS

§ 11.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site.

§ 11.2 Contractor, as soon as practicable after award of the Contract, shall notify the Owner of the Subcontractors or suppliers proposed for each of the principal portions of the Work. The Contractor shall not contract with any Subcontractor or supplier to whom the Owner has made reasonable written objection within seven days after receipt of the Contractor's list of Subcontractors and suppliers. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection. It shall be considered reasonable for the Contractor to reject a Subcontractor who fails or refuses to sign a form of Contractor's standard subcontract.

§ 11.3 Contracts between the Contractor and Subcontractors shall (1) require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by the Contract Documents, assumes toward the Owner, and (2) allow the Subcontractor the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Contract Documents, has against the Owner.

### ARTICLE 12 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 12.1 The term "Separate Contractor(s)" shall mean Owner's own forces or other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with those Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to indemnity, insurance (including, without limitation, naming Contractor as an Additional Insured with Contractor's insurance being excess and non-contributory to Owner's Separate Contractor's Insurance) and waiver of subrogation.

- § 12.2 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities.
- § 12.3 The Owner shall be responsible to the Contractor for costs incurred by the Contractor because of delays, improperly timed activities, damage to the Work, or defective construction of a Separate Contractor.

### ARTICLE 13 CHANGES IN THE WORK

§ 13.1 By appropriate Modification, changes in the Work may be accomplished after execution of the Contract. The Owner or Contractor, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, but only if the Contract Sum and Contract Time and, where relevant, annual energy savings and operational savings as detailed in Attachment 2 have been adjusted accordingly. Such changes in the Work shall be authorized by written Change Order signed by the Owner and Contractor. Upon issuance of the Change Order, the Contractor shall proceed promptly with such changes in the Work, unless otherwise provided in the Change Order.

- § 13.2 Adjustments in the Contract Sum and Contract Time resulting from a change in the Work shall be determined by mutual agreement of the parties. When the Owner and Contractor agree on adjustments to the Contract Sum and Contract Time arising from a change or Claim, the Contractor will prepare a Change Order.
- § 13.3 If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in Owner's Information, or from those conditions ordinarily found to exist, the Contract Sum and Contract Time shall be equitably adjusted by Change Order as mutually agreed between the Owner and Contractor; provided that the Contractor provides notice to the Owner promptly and before conditions are disturbed.

## **ARTICLE 14 TIME**

- **§ 14.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing this Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.
- § 14.2 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.
- § 14.3 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.
- § 14.4 The date of Substantial Completion is the earlier of the date upon which the Work or designated portion thereof is usable or the date upon which the Owner first uses the Work or designated portion thereof.
- § 14.5 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) changes ordered in the Work, or by delays in the approval of changes in the Work, or by the encountering of hazardous substances, or by concealed, unforeseen or subsurface conditions, adverse weather, actions, inactions of governing authorities, or by delay or failure to act of utility services (telephone, cable, electrical, gas, etc.); (2) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or any causes beyond the Contractor's control; or (3) by other causes not caused by Contractor, then the Contract Time shall be extended by Change Order by the amount of the delay to the date of Substantial Completion and the Contract Sum shall be increased by the additional expense and fee markup to Contractor caused by the delay, subject to the provisions of Article 21.

## ARTICLE 15 PAYMENTS AND COMPLETION

## § 15.1 Progress Payments

§ 15.1.1 After the Initial Payment of Section 15.2.1, the Contractor shall submit to the Owner monthly Applications for Payment, allocating the entire Stipulated Sum to the various portions of the Work.

### § 15.2 Initial Payment

§ 15.2.1 Contractor's initial Application for Payment may include, and Owner shall pay twenty percent (20%) of the Stipulated Sum of Section 3.2 because of initial expense toward Contractor's engineering, Contractor's General Conditions, Contractor's Insurance, Contractor's Bond, permits, mobilization and procurement down payments and other items incurred or to be incurred by Contractor within thirty (30) days of the date of the Payment Application (the "Initial Payment").

### § 15.3 Applications for Payment

- § 15.3.1 At least five (5) days before the date established for each progress payment, the Contractor shall submit to the Owner an Application for Payment.
- § 15.3.2 Within the Initial Payment and subsequent payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. Payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing or where a material or equipment supplier requires pre-payment in whole or in part before manufacture is commenced or completed or prior to delivery.
- § 15.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that, after the Initial Payment, upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or other encumbrances adverse to the Owner's interests.

## § 15.4 Certificates for Payment

- § 15.4.1 Other than the Initial Payment, Owner may withhold payment of an Application for Payment in whole or in part, to the extent reasonably necessary to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 9.2.2, because of
  - .1 defective Work not remedied;
  - .2 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
  - .3 damage to the Owner or a Separate Contractor;
  - .4 reasonable evidence that the Work will not be completed within the Contract Time and that the unpaid balance would not be adequate to cover damages for the anticipated delay; or
  - .5 repeated failure materially to carry out the Work in accordance with the Contract Documents.
- § 15.4.4 When Contractor disputes the Owner's decision regarding a Certificate for Payment under Section 15.4.3, in whole or in part, Contractor may submit a Claim in accordance with Article 21.

## § 15.5 Progress Payments

- § 15.5.1 The Contractor shall not be responsible to pay a Subcontractor unless and until the condition precedent has been satisfied that Contractor has received payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work and then in the time required by the Ohio Prompt Pay Act, Ohio Revised Code § 4113.61 \_\_\_\_\_\_. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to sub-subcontractors in a similar manner.
- § 15.5.2 The Owner shall have no obligation to pay or see to the payment of money to a Subcontractor or supplier except as may otherwise be required by law.
- § 15.5.3 A progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.
- § 15.5.4 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor.

## § 15.6 Substantial Completion

- § 15.6.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. Substantial Completion shall not be dependent on governmental inspection or certificate where the failure to receive a prompt inspection or a certification is caused other than by the fault of the Contractor.
- § 15.6.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- § 15.6.3 Upon receipt of the Contractor's list, the Owner will make a single inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item which is not complete in accordance with the Contract Documents, but the Owner nevertheless can occupy or utilize the Work or, where the Owner has requested partial occupancy or use, that designated portion, for its intended use, then the Work, or designated portion thereof if that is what Owner has requested be completed, shall be considered to have achieved Substantial Completion and Contractor shall complete such listed incomplete items as soon as practicable thereafter. When the Work or designated portion thereof is substantially complete, the Contractor shall prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the manufacturers' or suppliers' warranties.

§ 15.6.4 Contractor shall submit the Certificate of Substantial Completion to the Owner for written acceptance of responsibilities assigned to Owner in the Certificate. Owner may withhold from payment one hundred percent (100%) of the estimated cost of the Work that is incomplete or not in accordance with the requirements of the Contract Documents until complete and correct.

## § 15.7 Final Completion and Final Payment

§ 15.7.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, Owner will promptly make such inspection and, when the Owner reasonably finds the Work acceptable under the Contract Documents and the Contract fully performed, the Owner will approve a final Application for Payment.

§ 15.7.2 Final payment shall not become due until the Contractor has delivered to the Owner a complete release of all liens arising out of this Contract or receipts in full covering all labor, materials and equipment for which a lien could be filed, or a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including costs and reasonable attorneys' fees, unless Contractor is proceeding diligently and in good faith to contest such lien and has furnished to Owner a bond or undertaking to reasonably protect Owner against such lien.

§ 15.7.3 The making of final payment shall constitute a waiver of claims by the Owner except those arising from

- 1 liens, claims, security interests or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents.

§ 15.7.4 Acceptance of final payment by the Contractor, a Subcontractor or supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of the final Application for Payment.

### ARTICLE 16 PROTECTION OF PERSONS AND PROPERTY

## § 16.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work. The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall comply with, and give notices required by, applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on safety of persons and property and their protection from damage, injury, or loss. The Contractor shall promptly remedy damage and loss to property only to the extent caused by the Contractor, a Subcontractor, a sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 16.1.2 and 16.1.3. The Contractor may make a claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or any of Owner's Separate Contractors or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 9.15.

## § 16.2 Hazardous Materials and Substances

§ 16.2.1 The Contractor is responsible for compliance with the requirements of the Contract Documents regarding hazardous materials or substances Contractor brings to the Premises and legal disposal of those Contractor removes from the Premises. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents, and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos, polychlorinated biphenyl (PCB), lead-based paint, oil and petroleum products and their constituents, or any materials containing any of the foregoing ("Hazardous Substance") encountered on the Premises by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner of the condition. When the material or

substance has been rendered harmless by Owner, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

- § 16.2.2 To the fullest extent permitted by law, the Owner waives all claims against Contractor, Subconstractors, Subconsultants, and agents and employees of any of them from and against all claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area, if in fact, the material or substance presents the risk of bodily injury or death as described in Section 16.2.1 and has not been rendered harmless by Owner, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the Contractor, Subcontractors or Subconsultants. Contractor shall have the right to accept or decline any compromise or settlement of any claims or actions against Contractor.
- § 16.2.3 The Owner shall be responsible for all fines and costs and expenses in connection with remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents.
- § 16.2.3.1 During the term of this Agreement, each Party shall promptly notify the other of any summons, citation, directive, notice, complaint, letter or other communication, written or oral, received by that Party from any state or federal Environmental Protection Agency or any other governing authority concerning (i) any alleged violations of any state or federal environmental or health and safety law, or (ii) any investigation or request for information relating to the generation, use, handling, packing, transportation, treatment, storage, release, or disposal of Hazardous Materials with respect to the Work or the Site.
- § 16.2.4 Contractor will remove or recycle existing equipment and materials deemed unfit for use (unless such equipment or materials are hazardous). Contractor will transport such items to a salvage yard for recycling to the extent economically sensible. Any salvage value is the property of Contractor. Any deviations shall be mutually approved by Contractor and Owner prior to commencement.
- § 16.2.5 Contractor expressly disclaims any and all responsibility and liability for the indoor air quality of the Owner's Premises, including without limitation, injury or illness to occupants of the facility or third parties, including without limitation any illness, injury, or damage resulting in any manner from any fungi or spores, any substance, vapor or gas produced by or arising out of any fungi or spores, or any material, product, building component or structure that contains, harbors, nurtures or acts as a medium for any fungi or spores.

## ARTICLE 17 INSURANCE AND BONDS

### § 17.1 Contractor's Insurance

§ 17.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in Exhibit A. The Contractor shall purchase and maintain the insurance required by this Agreement from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 18.4, unless a different duration is stated in Exhibit A.

# § 17.2 Owner's Insurance please check and make sure the City's insurance provisions cover these requirements.

### § 17.2.1 Owner's Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance as provided by Exhibit A.

## § 17.2.2 Property Insurance

§ 17.2.2.1 As provided by Exhibit A, Contractor shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, builder's risk insurance written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis (the "Builder's Risk Insurance"). On existing buildings and other facilities, the Owner shall maintain its usual property insurance coverage and provide Owner's property insurer's consent to the Work ("Owner's Property Insurance"). The Builder's Risk Insurance shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications. The Builder's Risk Insurance shall be maintained until Substantial Completion and, thereafter, the Owner shall continue to maintain Owner's Property

Insurance as provided in Section 17.2.2.2. The Builder's Risk Insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Project as insureds and Contractor shall be a Named Insured and entitled to adjust the loss.

- § 17.2.2.2 Unless the parties agree otherwise, upon Substantial Completion, the Owner shall continue the Owner's Property Insurance required by Section 17.2.2.1 or, if necessary, replace the insurance policy required under Section 17.2.2.1 with property insurance written for the total value of the Project that shall remain in effect until expiration of the period for correction of the Work set forth in Section 18.4.
- § 17.2.2.3 If the insurance required by this Section 17.2.2 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions.
- § 17.2.2.4 If the Work involves Work installed in an existing structure or constructing an addition to an existing structure, the Owner shall purchase and maintain, until the expiration of the period for correction of Work as set forth in Section 18.4, Owner's Property Insurance on the basis "all-risks" property insurance, on a replacement cost basis, protecting the existing structures against direct physical loss or damage, notwithstanding the undertaking of the Work. The Owner shall be responsible for all co-insurance penalties.
- § 17.2.2.5 Prior to commencement of the Work, Contractor shall secure the Builder's Risk Insurance and the Owner shall secure Owner's Property Insurance, and each shall provide evidence of the coverage, required under this Section 17.2.2 and, upon the Contractor's request, provide a copy of the Owner's Property Insurance policy or policies required by this Section 17.2.2. The copy of the policy or policies provided shall contain all applicable conditions, definitions, exclusions, and endorsements.
- § 17.2.2.6 Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any insurance required by this Section 17.2.2, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

## § 17.2.2.7 Waiver of Subrogation

- § 17.2.2.7.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, subsubcontractors, agents, and employees, each of the other; and (2) Owner's Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by Builder's Risk Insurance or Owner's Property Insurance required by this Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Owner's Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 17.2.2.7 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.
- § 17.2.2.7.2 The Owner waives all rights in accordance with the terms of Section 17.2.2.7.1 for damages caused by fire or other causes of loss covered by Owner's Property Insurance.
- § 17.2.2.8 A loss insured under the Builder's Risk insurance shall be adjusted by Contractor, and under Owner's Property Insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner and Contractor, jointly, for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause. The Owner shall pay the Contractor its just shares of insurance proceeds received by the Owner, and by appropriate agreements, written where legally required for validity, Contractor shall make payments to its consultants and Subcontractors in similar manner.

### § 17.2.3 Other Insurance Provided by the Owner

**Coverage** Limits

Boiler & Machinery Insurance Value of Purchased Equipment

§ 17.2.3.1 The Owner shall purchase and maintain boiler and machinery insurance, which specifically shall cover equipment purchased by Owner under this Contract during installation and until final acceptance by Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

### § 17.3 Performance Bond and Payment Bond

- § 17.3.1 As provided by Exhibit A, the Contractor shall furnish bonds covering faithful performance of the Work and payment of obligations arising from the Work as stipulated in the Contract Documents on the date of execution of the Contract.
- § 17.3.2 Notwithstanding any provisions to the contrary contained in this bond or the bonded contract, this bond guarantees only the performance of the installation portion of the contract, and shall not be construed to guarantee the performance of (i) any efficiency or energy savings guarantees, (ii) any support or maintenance service agreement, or (iii) any other guarantees or warranties with terms beyond one (1) year in duration from the completion of the installation portion of the Contract Documents. Owner agrees that the Performance and Payment Bond provided for this Agreement only covers the actual Work and in no way covers the Energy Savings requirement of this Agreement which is solely secured by Contractor's Savings Guaranty.
- § 17.3.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

#### ARTICLE 18 CORRECTION OF WORK

- § 18.1 The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed, or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and Owner's expenses made necessary thereby, shall be at the Contractor's expense.
- § 18.2 In addition to the Contractor's obligations under Section 9.4 as modified by Section 9.4.1, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 15.6.3 (the "Correction Period"), and subject to Sections 18.2.1 and 18.2.2, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty.
- § 18.2.1 Notwithstanding anything to the contrary contained in this Article 18 or the Contract Documents, Contractor's duty to correct under this Article 18 shall not apply to any system or equipment which is separately warranted by written warranty to the Owner by a manufacturer, supplier or Subcontractor of any tier.
- § 18.2.2 In the event of any shortfall in Guaranteed Energy Savings or Operational Savings, regardless of whether the shortfall occurs during the Correction Period, Contractor shall have the absolute right to analyze the cause or causes of such shortfall and, to the extent caused by Contractor, remedy the shortfall to the extent possible in lieu of payment to Owner to the extent remedied.
- § 18.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 8.3.
- § 18.4 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 18.5 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Article 18.

### ARTICLE 19 MISCELLANEOUS PROVISIONS

#### § 19.1 Assignment of Contract

Neither party to the Contract shall assign the Contract without written consent of the other, except that the Owner may, without consent of the Contractor, assign the Contract to a lender providing financing for the Project if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment provided Contractor need not consent to any of the following: (1) to perform absent cure by Owner's lender or lender's designee of any and all Owner breaches including, without limitation, payment in full of all amounts past due; (2) to perform absent commitment by Owner's lender or lender's designee to honor all of Owner's obligations under this Agreement after the date of Owner's Lender's assumption; (3) to give Owner's Lender prior notices of change orders increasing the Contract Sum unless an individual change exceeds two percent (2%) of the Contract Sum before such change order, or if change orders in the aggregate would increase the Contract Sum by five percent (5%); or (4) otherwise to provide Contractor with rights or remedies against Lender which are less favorable than the rights and remedies which Contractor has against Owner under the Contract Documents or at law; or which seek to impose obligations upon Contractor beyond those required by the Contract Documents.

## § 19.2 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules.

## § 19.3 Tests and Inspections

Tests, inspections, and approvals of portions of the Work required by the Contract Documents or by applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests and inspections. The Contractor shall give the Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after the Contract Sum is established. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

- § 19.4 The Owner's representative is stated on the cover page.
- § 19.5 The Contractor's representative is stated on the cover page.
- § 19.6 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.
- § 19.7 Owner represents and warrants that the person signing this Agreement on behalf of Owner has the authority to execute this Agreement, including all legal authorization after duly followed required procedures, and thereby legally bind Owner. Likewise, Contractor represents and warrants that the person signing this Agreement on behalf of Contractor has the authority to execute this Agreement and thereby legally bind Contractor.

## ARTICLE 20 TERMINATION OF THE CONTRACT

### § 20.1 Termination by the Contractor

If the Owner (a) fails to make payment by the date as provided in Section 4.1.3 and for a period of thirty (30) days thereafter, or (b) if Contractor discovers that Owner's Information is materially incorrect, the Contractor may, upon seven (7) additional days' notice to the Owner, suspend or terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages including, without limitation, lost profits on the unperformed portion of the Work.

## § 20.2 Termination by the Owner for Cause

- § 20.2.1 The Owner may terminate the Contract if the Contractor
  - repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
  - .2 otherwise is guilty of substantial breach of a provision of the Contract Documents.

- § 20.2.2 When any of the reasons described in Section 20.2.1 exists, the Owner may, without prejudice to any other remedy the Owner may have and after giving the Contractor seven (7) days' written notice and provided the Contractor, within such seven (7) day period, has not commenced to cure such cause or breach, terminate the Contract and take possession of the site and may finish the Work by whatever reasonable method the Owner may deem expedient. The Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.
- § 20.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 20.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished, if the Owner chooses to finish, except to the extent amounts otherwise owing to Contractor exceed a good faith estimate of the cost to complete the Work. If Owner chooses not to finish, Owner shall pay Contractor the amount of Section 20.2.4.
- § 20.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. This reciprocal obligation for payment shall survive termination of the Contract.

## § 20.3 Termination by the Owner for Convenience

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. The Owner shall pay the Contractor for Work executed; and costs incurred by reason of such termination, along with a Termination Fee of fifty percent (50%) of the unearned Fee on the unperformed Work.

## ARTICLE 21 CLAIMS AND DISPUTES

§ 21.1 Claims, disputes, and other matters in question arising out of or relating to this Contract, except those waived as provided for in Section 21.11 and Sections 15.7.3 and 15.7.4, may be subject to mediation upon joint agreement of Owner and Contractor.

#### § 21.2 Notice of Claims

§ 21.2.1 Claims by either the Owner or Contractor shall be initiated by notice to the other party.

## § 21.3 Intentionally Deleted

§ 21.4 If a claim, dispute or other matter in question relates to or is the subject of a mechanic's lien, the party asserting such matter may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

### § 21.5 Continuing Contract Performance

Pending final resolution of a Claim, except as otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

## § 21.6 Waiver of Claims for Consequential Damages

The Contractor and Owner waive claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 20.

## ARTICLE 22 179D TAX DEDUCTION AND ENVIRONMENTAL BENEFITS

§ 22.1 As a result of the Work including, without limitation, Contractor's technical specifications prepared under Attachment 1, certain tax deductions under Section 179D of the Internal Revenue Code may be available because of the Environmental Benefits resulting from energy efficient improvements to the Owner's facilities. The Owner agrees to allocate these Section 179D tax deductions to Contractor to the extent such deductions arise from the

implementation of the Work. Upon Substantial Completion, the Owner <u>shall execute the required written allocation</u> in a declaration accompanying documentation prepared by Contractor designating Contractor as Section 179D beneficiary.

§ 22.1.1 "Environmental Benefits" as used in Section 22.1 and this Section 22.2 means any and all credits, deductions, benefits, emission reductions, incentives, offsets, and allowances, howsoever entitled, attributable to and arising from the implementation of the Work, including any energy capacity, reliability, or other energy reduction attributes that result from the implementation of the Work whether such Environmental Benefits now exist or are developed in the future. All Environmental Benefits arising from the implementation of the Work shall be owned by Contractor. Owner agrees to execute all required documentation to assign all Environmental Benefits to Contractor. If any filings are required with the Internal Revenue Service or some other governmental entity to obtain the benefits of the Environmental Benefits, Owner hereby instructs Contractor to prepare and file such documents.

## ARTICLE 23 - ADDITIONAL SAVINGS MEASURES / FUTURE PHASES

This Agreement may serve as the baseline contractual Agreement for future directly negotiated energy conservation measures and related facility upgrades by Change Order with a new Scope of Work and supporting cash flow.

This Agreement entered into as of the day and year first written above.

	LEOPARDO Companies, INC.
OWNER (Signature)	CONTRACTOR (Signature)
(Printed name and title)	(Printed name and title)

[Illinois, May 16, 2018]

## ATTACHMENT 1 - SCOPE OF WORK

#### Standard to all ECM's:

All work to be performed during normal working hours, Monday - Friday 7:30 AM to 4:30 PM excluding holidays.

### **General Notes and Assumptions**

- Good house-keeping practices will be followed on job sites.
- Internet access and static IP address to be provided by Owner for DDC control system.
- Final patching, painting, or woodwork / trim finishes are excluded unless specifically listed in the Scope of Work below.
- Contractor will be responsible for disposal of old equipment removed or replaced per ARTICLE 9.
- This proposal does not include any obligation of Contractor or its subcontractors to identify or remove any hazardous materials, as mentioned in ARTICLE 9.
- Existing systems and components such as fire alarm, life safety, building automation controls, or other such associated systems and components are assumed to be in working order and are excluded for upgrades, repairs, changes or service unless specifically listed in this Scope of Work.
- Lighting retrofits and upgrades are planned as like for like replacements unless specific light measurements and modifications are defined in this agreement.
- Water conservation efforts including fixture replacements are planned as like for like replacements.
  ADA or other needs are not included unless specifically defined in this agreement. Adequate
  system pressures, facility sewer, water, drains, and other piping systems are assumed to be
  sufficient and operating properly. Metering upgrades are planned as like for like replacements and
  assume adequate pressures, flows and system operation. Lead or other piping, pit, or system
  deficiencies are excluded unless specifically defined in this agreement.

## **Professional Services to include:**

## ECM –1 Lighting Upgrade

Contractor shall retrofit and replace interior and exterior lighting systems throughout the Owner's facilities. A full room-by-room shall be provided electronically. A summary of scope of work by Owner site, scope type, and count is shown below:

# Building 01 – City Hall

Scope ID – 01.01.01 - Retrofit Remaining Fluorescent Lighting to LED

City Hall	268
LED 9W A19 Replacement	7
2x4 Volumetric LED Lens Door Retrofit 3000 Lm	4
4' Strip LED 4000 Lm	4
No Action - Existing Efficient Fixture	14
Drum LED 2000 Lm 13"	1
2x4 Volumetric LED Lens Door Retrofit 4000 Lm	1
4' Wall Bracket LED 3000 Lm	1
RC LED Retrofit 1000 Lm 6"	78
RC LED Retrofit 1000 Lm 6" BB	17

RT, LED 17W 4P 2G11 2L	8
2x4 Volumetric Rec LED 4000 Lm	67
4' Low Profile Wrap LED 4000 Lm Dim x2	3
RT, 4' 10.5W SE LED 1L BB	6
RT, 4' 10.5W SE LED 1L	24
RT, 3' 12W SE LED 1L	5
2x4 Volumetric Rec LED 5000 Lm DS	12
2x4 Volumetric Rec LED 3000 Lm BB	1
2x4 Volumetric Rec LED 3000 Lm	3
4' Strip LED 4000 Lm BB	2
4' Low Profile Wrap LED 4000 Lm Dim x3	1
2x4 Volumetric Rec LED 4000 Lm DS	9

# Building 02 – Police Station

Scope ID – 02.01.01 - Retrofit Interior and Exterior Lighting to LED

Police Station	552
Exit Sign LED BB	2
LED 9W A19 Replacement	16
4' Strip LED 4000 Lm	7
No Action - Existing Efficient Fixture	6
LED 11W PAR30 Replacement	30
4' Vaportight LED 4000 Lm	26
Wall Pack LED FT 1.6 kLm PC	5
RT, 4' 10.5W SE LED 2L TP	39
1x4 Volumetric LED Lens Door Retrofit 3000 Lm	32
4' Strip LED 2000 Lm	30
4' Wall Bracket LED 3000 Lm	1
RC LED Retrofit 1000 Lm 6"	19
Area LED 10 kLm	13
Flood LED 5.4 kLm SF	4
4' Wall Bracket LED 4000 Lm	6
2x4 Volumetric LED Lens Door Retrofit 5000 Lm	2
LED HID H Retrofit 6 kLm Mog Base	11
1x4 Volumetric Rec LED 2000 Lm	233
RT, 4' 10.5W SE LED 2L	14
RT, 3' 12W SE LED 2L	8
RT, LED 6W 2P GX23 H	28
2x4 Volumetric LED Lens Door Retrofit 6000 Lm	3

4' Wrap LED 6000 Lm	15
Flood LED 10.5 kLm SF	2

# Building 03 – Fire Station #1

Scope ID – 04.01.01 - Retrofit Interior Lighting to LED

Fire Station #1	158
LED 9W A19 Replacement	9
4' Wrap LED 4000 Lm	2
2x4 Volumetric LED Lens Door Retrofit 3000 Lm	31
No Action - Existing Efficient Fixture	28
RT, 4' 10.5W SE LED 8L	15
Drum LED 2000 Lm 13"	1
4' Vaportight LED 4000 Lm	2
Wall Pack LED FT 1.6 kLm PC	2
2x4 Volumetric LED Lens Door Retrofit 4000 Lm	39
4' Wall Bracket LED 3000 Lm	1
2x2 Volumetric LED Lens Door Retrofit 2000 Lm	10
Flood LED 5.4 kLm SF	2
4' Wall Bracket LED 4000 Lm	1
2x4 Volumetric LED Lens Door Retrofit 5000 Lm	13
2x2 Volumetric LED Lens Door Retrofit 3000 Lm	2

# Building 04 – Fire Station #2

Scope ID - 04.01.01 - Retrofit Interior and Exterior Lighting to LED

Fire Station #2	133
LED 9W A19 Replacement	1
4' Wrap LED 4000 Lm	13
2x4 Volumetric LED Lens Door Retrofit 3000 Lm	8
No Action - Existing Efficient Fixture	19
LED 11W PAR30 Replacement	4
4' Vaportight LED 4000 Lm	2
2x4 Volumetric LED Lens Door Retrofit 4000 Lm	3
4' Strip LED 2000 Lm	9
RC LED Retrofit 1000 Lm 6"	11
2x2 Volumetric LED Lens Door Retrofit 2000 Lm	6
Flood LED 5.4 kLm SF	2
2x2 Volumetric LED Lens Door Retrofit 3000 Lm	12
RT, 4' 10.5W SE LED 2L	1
RT, 3' 12W SE LED 2L	16

LED 17W A21 Retrofit	5
LED PT Retrofit 4.3 kLm	4
RS LED Retrofit 2200 Lm 10"	2
Cylinder LED 2000 Lm	3
High Bay LED 18 kLm	12

# Building 05 – Service Center

Scope ID – 05.01.01 - Retrofit Interior and Exterior Lighting to LED

Service Center	219
LED 9W A19 Replacement	3
4' Wrap LED 4000 Lm	21
2x4 Volumetric LED Lens Door Retrofit 3000 Lm	20
8' Strip LED 8000 Lm	30
No Action - Existing Efficient Fixture	13
Wall Pack LED FT 4.4 kLm	10
2x4 Volumetric LED Lens Door Retrofit 4000 Lm	59
Flood LED 5.4 kLm YK	8
High Bay LED 18 kLm	29
LED 7W MR16 Replacement	6
8' Vaportight LED 8000 Lm	9
Area LED 7 kLm	1
LED 14W PAR38 Replacement WL 2L	7
Flood LED 3 kLm KN	1
Flood LED 3 kLm KN PC	2

# Building 06 – Animal Control

Scope ID – 06.01.01 - Retrofit Interior and Exterior Lighting to LED

Animal Control	39
4' Wrap LED 4000 Lm	25
No Action - Existing Efficient Fixture	2
Wall Pack LED FT 1.6 kLm PC	1
2' Wall Bracket LED 2000 Lm	1
4' Wrap LED 6000 Lm	2
LED 14W PAR38 Replacement WL	8

# Building 10 – Cemetery Maintenance

Scope ID - 10.01.01 - Retrofit Interior and Exterior Lighting to LED

Cemetery Maintenance Building	34
LED 9W A19 Replacement	7
2x4 Volumetric LED Lens Door Retrofit 3000 Lm	2
2x4 Volumetric LED Lens Door Retrofit 4000 Lm	3
8' Strip LED 10000 Lm	15
2x4 Volumetric LED Lens Door Retrofit 4000 Lm	
DS	4
Wall Pack LED FT 4.4 kLm PC	2
Flood LED 2.1 kLm KN PC	1

# Building 11 – Parks Maintenance

Scope ID – 11.01.01 - Retrofit All Lighting to LED

Scope ID - 11.01.01 - Retroit An Lighting to LED		
Maintenance Building	43	
LED 9W A19 Replacement	5	
4' Wrap LED 4000 Lm	2	
4' Wrap LED 4000 Lm x 2	3	
8' Strip LED 8000 Lm	23	
No Action - Existing Efficient Fixture	4	
2x4 Volumetric LED Lens Door Retrofit 4000 Lm	2	
Wall Pack LED FT 4.4 kLm PC	1	
Flood LED 3 kLm KN	1	
Flood LED 3 kLm KN PC	1	
Flood LED 14.6 kLm YK	1	

# City-Wide Measures

## **Scope ID – 12.01.01 – Traffic Signal Improvements**

Contractor shall provide the following scope for traffic lighting:

Upgrade 993 incandescent signals to LED

## Scope ID – 12.01.02 – First Energy Owned Street Lighting

The scope of upgrading the utility-owned street lights to LED shall be contracted directly between the Utility Provider (FirstEnergy) and the City. Project management of the upgrade will be included in the scope of the Contractor (Leopardo) as a part of the Project. Although the contract and payment terms will be directly between FirstEnergy and the City, the contract cost of this work will be included in the financing of the overall Project.

Scope ID – 03.01.02 – Park Lighting to LED

Community Park	23
No Action - Existing Efficient Fixture	10
Flood LED 5.4 kLm SF	2
LED PT Retrofit 4.3 kLm	9
Remove Fixture	2

The table below is a reference of fixture codes related to specific building scope:

Scope Code	Scope Description
1x4 Volumetric LED Lens Door	Retrofit existing fixture with LED 1x4 Volumetric Lens Door Kit 3,000
Retrofit 3000 Lm	Lumens
1x4 Volumetric Rec LED 2000	Replace existing fixture with 1x4 Volumetric Recessed LED 2,000
Lm	Lumens
2x2 Volumetric LED Lens Door	Retrofit existing fixture with LED 2x2 Volumetric Lens Door Kit 2,000
Retrofit 2000 Lm	Lumens
2x2 Volumetric LED Lens Door	Retrofit existing fixture with LED 2x2 Volumetric Lens Door Kit 3,000
Retrofit 3000 Lm	Lumens
2x4 Volumetric LED Lens Door	Retrofit existing fixture with LED 2x4 Volumetric Lens Door Kit 3,000
Retrofit 3000 Lm	Lumens
2x4 Volumetric LED Lens Door	Retrofit existing fixture with LED 2x4 Volumetric Lens Door Kit 4,000
Retrofit 4000 Lm	Lumens
2x4 Volumetric LED Lens Door	Retrofit existing fixture with LED 2x4 Volumetric Lens Door Kit 4,000
Retrofit 4000 Lm DS	Lumens, Dual Switched
2x4 Volumetric LED Lens Door	Retrofit existing fixture with LED 2x4 Volumetric Lens Door Kit 5,000
Retrofit 5000 Lm	Lumens
2x4 Volumetric LED Lens Door	Retrofit existing fixture with LED 2x4 Volumetric Lens Door Kit 6,000
Retrofit 6000 Lm	Lumens
2x4 Volumetric Rec LED 3000	Replace existing fixture with 2x4 Volumetric Recessed LED 3,000
Lm	Lumens
2x4 Volumetric Rec LED 3000	Replace existing fixture with 2x4 Volumetric Recessed LED 3,000
Lm BB	Lumens, Battery Backup
2x4 Volumetric Rec LED 4000	Replace existing fixture with 2x4 Volumetric Recessed LED 4,000
Lm	Lumens
2x4 Volumetric Rec LED 4000	Replace existing fixture with 2x4 Volumetric Recessed LED 4,000
Lm DS	Lumens, Dual Switched
2x4 Volumetric Rec LED 5000	Replace existing fixture with 2x4 Volumetric Recessed LED 5,000
Lm DS	Lumens, Dual Switched
4' Low Profile Wrap LED 4000	Replace existing fixture with (2) 4' Low Profile Wraps LED 4,000
Lm Dim x2	Lumens Each, Dimming, Continuous Row
4' Low Profile Wrap LED 4000	Replace existing fixture with (3) 4' Low Profile Wraps LED 4,000
Lm Dim x3	Lumens Each, Dimming, Continuous Row

4' Strip LED 2000 Lm	Replace existing fixture with 4' Strip LED 2,000 Lumens
4' Strip LED 4000 Lm	Replace existing fixture with 4' Strip LED 4,000 Lumens
•	Replace existing fixture with 4' Strip LED 4,000 Lumens, Battery
4' Strip LED 4000 Lm BB	Backup
4' Vaportight LED 4000 Lm	Replace existing fixture with 4' Vaportight LED 4,000 Lumens
4' Wall Bracket LED 3000 Lm	Replace existing fixture with 4' Wall Bracket LED 3,000 Lumens
4' Wall Bracket LED 4000 Lm	Replace existing fixture with 4' Wall Bracket LED 4,000 Lumens
4' Wrap LED 4000 Lm	Replace existing fixture with 4' Wrap LED 4,000 Lumens
4' Wrap LED 4000 Lm x 2	Replace existing fixture with (2) 4' Wrap LED 4,000 Lumens Each
4' Wrap LED 6000 Lm	Replace existing fixture with 4' Wrap LED 6,000 Lumens
8' Strip LED 10000 Lm	Replace existing fixture with 8' Strip LED 10,000 Lumens
8' Strip LED 8000 Lm	Replace existing fixture with 8' Strip LED 8,000 Lumens
8' Vaportight LED 8000 Lm	Replace existing fixture with 8' Vaportight LED 8,000 Lumens
, ,	Replace existing fixture with LED Area Fixture 10,300 Lumens, Direct
Area LED 10 kLm	Mount
	Replace existing fixture with LED Area Fixture 10,300 Lumens, Mast
Area LED 10 kLm MA PC	Arm Mount
	Replace existing fixture with LED Area Fixture 7,000 Lumens, Direct
Area LED 7 kLm	Mount
Cylinder LED 2000 Lm	Replace existing fixture with LED Cylinder 2,000 Lumens
Drum LED 2000 Lm 13"	Replace existing fixture with LED Drum 13" 2,000 Lumens
Exit Sign LED BB	Replace existing fixture with LED Exit Sign Battery Backup
Flood LED 10.5 kLm SF	Replace existing fixture with LED Flood Fixture 10,500 Lumens
	Replace existing fixture with LED Flood Fixture 14,600 Lumens, Slip
Flood LED 14.6 kLm SF	Replace existing fixture with LED Flood Fixture 14,600 Lumens,
Flood LED 14.6 kLm YK	Yoke/Trunion
TIOGG EED 14.0 KEIII TK	Replace existing fixture with LED Flood Fixture 2,100 Lumens,
Flood LED 2.1 kLm KN PC	Knuckle Mount
	Replace existing fixture with LED Flood Fixture 3,000 Lumens,
Flood LED 3 kLm KN	Knuckle Mount
	Replace existing fixture with LED Flood Fixture 3,000 Lumens,
Flood LED 3 kLm KN PC	Knuckle Mount
Flood LED 39.2 kLm SF PC	Replace existing fixture with LED Flood Fixture 39,200 Lumens
 	Replace existing fixture with LED Flood Fixture 5,400 Lumens, Slip
Flood LED 5.4 kLm SF	Penlara existing fixture with LED Flood Fixture E 400 Lumons
Flood LED 5.4 kLm YK	Replace existing fixture with LED Flood Fixture 5,400 Lumens, Yoke/Trunion
High Bay LED 18 kLm	Replace existing fixture with High Bay LED 18,000 Lumens
-	1
LED 11W PAR30 Replacement LED 14W PAR38 Replacement	Relamp existing fixture with (1) LED 11W PAR30 Lamp  Relamp existing fixture with (2) LED 14W PAR38 Wet Location
WL 2L	Lamps
LED 17W A21 Retrofit	Retrofit existing fixture with (1) LED 17W A21 Lamp
FFD TV AN UST IVERIOUS	The Ground Existing Installe With (1) LLD 17 W AZ1 Lamp

LED 7W MR16 Replacement	Relamp existing fixture with (1) LED 7W MR16 Lamp
LED 9W A19 Replacement	Relamp existing fixture with (1) LED 9W A19 Lamp
LED HID H Retrofit 6 kLm Mog	Retrofit existing fixture with LED Horizontal Orientation Module
Base	6,000 Lumens
LED PT Retrofit 4.3 kLm	Retrofit existing fixture with LED PT Module 4,300 Lumens
No Action - Existing Efficient	
Fixture	No Action (Existing Fixture to Remain "As is")
RC LED Retrofit 1000 Lm 6"	Retrofit existing fixture with LED Recessed Can 6" 1,000 Lumens
	Retrofit existing fixture with LED Recessed Can 6" 1,000 Lumens,
RC LED Retrofit 1000 Lm 6" BB	Battery Backup
RS LED Retrofit 2200 Lm 10"	Retrofit existing fixture with Led Recessed Square 10" 2,200 Lumens
RT, 3' 12W SE LED 1L	Retrofit existing fixture with (1) LED 3' 12W Single-end Power Lamp
RT, 3' 12W SE LED 2L	Retrofit existing fixture with (2) LED 3' 12W Single-end Power Lamps
	Retrofit existing fixture with (1) LED 4' 10.5W Single-end Power
RT, 4' 10.5W SE LED 1L	Lamp
	Retrofit existing fixture with (1) LED 4' 10.5W Single-end Power
RT, 4' 10.5W SE LED 1L BB	Lamp, Battery Backup
	Retrofit existing fixture with (2) LED 4' 10.5W Single-end Power
RT, 4' 10.5W SE LED 2L	Lamps
DT 4140 514465 LED 31 TD	Retrofit existing fixture with (2) LED 4' 10.5W Single-end Power
RT, 4' 10.5W SE LED 2L TP	Lamps, Tamper Proof Fixture
DT 4'10 EW SELED 81	Retrofit existing fixture with (8) LED 4' 10.5W Single-end Power
RT, 4' 10.5W SE LED 8L	Lamps
RT, LED 17W 4P 2G11 2L	Retrofit existing fixture with (2) LED 17W 4P 2G11 Lamps
RT, LED 6W 2P GX23 H	Retrofit existing fixture with (1) LED 6W 2P GX23 H Lamp
Wall Pack LED FT 1.6 kLm PC	Replace existing fixture with LED Wall Pack Fixture FT 1,600 Lumens
Wall Pack LED FT 4.4 kLm	Replace existing fixture with LED Wall Pack Fixture FT 4,400 Lumens
Wall Pack LED FT 4.4 kLm PC	Replace existing fixture with LED Wall Pack Fixture FT 4,400 Lumens

## ECM – 2 Retro-commissioning

# Building 01 – City Hall

# Scope ID - 01.02.01 - Retrocommission Existing BAS

Contractor shall provide the necessary labor to review and calibrate each existing control point in detail. Changes to software shall be made to optimize schedules, setpoints, and existing sequences of operation. Contractor shall modify and reprogram the existing building automation system to follow the schedules and setpoints listed in Section C-3: Performance Period Operational Conditions. All changes, setpoints, and sequences of operations shall be documented and submitted to Owner in close out documentation.

All deficiencies in equipment shall be submitted in a written report to Owner.

## Scope ID – 02.02.01 – Retrocommission Existing BAS

Contractor shall provide the necessary labor to review and calibrate each existing control point in detail. Changes to software shall be made to optimize schedules, setpoints, and existing sequences of operation. Contractor shall modify and reprogram the existing building automation system to follow the schedules and setpoints listed in Section C-3: Performance Period Operational Conditions. All changes, setpoints, and sequences of operations shall be documented and submitted to Owner in close out documentation.

All deficiencies in equipment shall be submitted in a written report to Owner.

# **ECM** -3 Building Automations & Controls

# Building 01 – City Hall

## Scope ID – 01.03.01 – Install DDC

Contractor shall furnish and install a state of the art Direct Digital Control System incorporating the latest in open protocol Web Server technology.

Contractor shall provide the necessary labor to review and calibrate each existing control point in detail. Changes to software shall be made to optimize schedules, setpoints, and existing sequences of operation. Contractor shall modify and reprogram the existing building automation system to follow the schedules and setpoints listed in Section C-3: Performance Period Operational Conditions. All changes, setpoints, and sequences of operations shall be documented and submitted to Owner in close out documentation.

All deficiencies in equipment shall be submitted in a written report to Owner.

The Web accessible front end shall include graphic representation of floor plans and individual equipment components allowing user adjustment of operating perimeters, occupancy scheduling, set point adjustment, integration of economizer, demand ventilation and control of the mechanical HVAC systems.

The building operation sequence shall be developed to provide maximum energy savings while maintaining space comfort. Optimum start stop, and night pre-cooling will take advantage of outside conditions to lower the overall building load demands placed on the mechanical systems. System resets will be initiated and based on space conditions, local space set points, outdoor conditions and system capabilities to ensure efficient system operations. Individual set points can be limited by the building operator locally and remotely adjusted.

Base control implementation will be on the mechanical systems as listed

- 3 ea. Constant Volume Rooftop Units Network Thermostat Only
- 2 ea. VAV Rooftop Units with VAV Boxes including Electric Reheat
- 1 ea. Liebert Cooling Unit Network Thermostat Only
- Electric Heaters in Vestibules Network Thermostat Only

## Building 03 – Fire Station #1

## Scope ID – 03.03.01 – Install Web-Enabled Thermostats

Contractor shall furnish and replace the (5) existing thermostats with Wi-Fi thermostats.

Contractor shall integrate new thermostats into existing Wi-Fi network. Contractor shall program the new thermostats to follow the schedules and setpoints listed in Section C-3: Performance Period Operational Conditions.

Base control implementation will be on the mechanical systems as listed

- 2 ea. Constant Volume Rooftop Units Network Thermostats Only
- 3 ea. Infrared Heaters Network Thermostat Only

## Building 04 – Fire Station #2

## Scope ID – 04.03.01 – Install Web-Enabled Thermostats

Contractor shall furnish and replace the (3) existing thermostats with Wi-Fi thermostats.

Contractor shall integrate new thermostats into existing Wi-Fi network. Contractor shall program the new thermostats to follow the schedules and setpoints listed in Section C-3: Performance Period Operational Conditions.

Base control implementation will be on the mechanical systems as listed

- 1 ea. Constant Volume Rooftop Units Network Thermostats Only
- 2 ea. Infrared Heaters Network Thermostat Only

## Building 05 – Service Center

## **Scope ID – 05.03.01 – Install Web-Enabled Thermostats**

Contractor shall furnish and replace the (10) existing thermostats with Wi-Fi thermostats.

Contractor shall integrate new thermostats into existing Wi-Fi network. Contractor shall program the new thermostats to follow the schedules and setpoints listed in Section C-3: Performance Period Operational Conditions.

Base control implementation will be on the mechanical systems as listed

- 3 ea. Packaged Rooftop Units Network Thermostat Only
- 7 ea. Infrared Heaters Network Thermostat Only

# Building 11 – Parks Maintenance Building

## **Scope ID – 11.03.01 – Install Web-Enabled Thermostats**

Contractor shall furnish and replace the (4) existing thermostats with WIFI thermostats.

Contractor shall integrate new thermostats into existing Wi-Fi network. Contractor shall program the new thermostats to follow the schedules and setpoints listed in Section C-3: Performance Period Operational Conditions.

Base control implementation will be on the mechanical systems as listed

- 1 ea. Split System Network Thermostat Only
- 3 ea. Unit Heaters Network Thermostat Only

## ECM – 4 Mechanical & Electrical Retrofits

Contractor shall make the following HVAC improvements. Where previously noted, changes in the HVAC systems shall be incorporated with the associated building automation scope. Airside and hydronic system balancing shall be included with each new mechanical piece of equipment.

# Building 01 – City Hall

## Scope ID - 01.04.01 - Recondition Air-cooled Equipment

Contractor shall clean condenser coils for the air-cooled equipment listed below. A protective coating shall be applied for future protection. The following equipment shall be affected:

- 5 Rooftop Units
- 1 Split System

# Building 02 – Police Station

## Scope ID – 02.04.01 – Replace Condensing Units

Contractor shall furnish and replace the existing, antiquated condensing units with a new energy efficient condensing unit with environmentally friendly R410A refrigerant.

## Scope ID – 02.04.02 – Recondition Air-cooled Equipment

Contractor shall clean condenser coils for the air-cooled equipment not replaced in Scope ID 02.04.01.

## Building 03 – Fire Station #1

## Scope ID – 03.04.02 – Replace Two Rooftop Units & Provide Safety Rail

Contractor shall furnish and replace the rooftops with a new energy efficient gas furnace and condensing section using environmentally friendly R410A refrigerant. The new units will incorporate an economizer to provide free cooling as possible based on outdoor and space conditions. New units shall utilize a curb adaptor where needed. A safety rail along the roof line shall be provided to the north of the rooftop units.

## Building 04 – Fire Station #2

## Scope ID – 04.04.01 – Recondition Air-cooled Equipment

Contractor shall clean condenser coils for the air-cooled equipment listed below. A protective coating shall be applied for future protection. The following equipment shall be affected:

• 2 Split Systems

## Building 05 – Service Center

## Scope ID – 05.04.01 – Replace Rooftop Units

Contractor shall furnish and replace the (2) existing 5 ton and (1) 3 ton rooftops with a new energy efficient gas furnace and condensing section using environmentally friendly R410A refrigerant. The new

unit will incorporate an economizer to provide free cooling as possible based on outdoor and space conditions. New units shall utilize a curb adaptor where needed.

# Building 06 – Animal Control

## Scope ID - 06.04.01 - Recondition Air-cooled Equipment

Contractor shall clean condenser coils for the air-cooled equipment listed below. A protective coating shall be applied for future protection. The following equipment shall be affected:

• 1 Split Systems

# Building 10 – Cemetery Maintenance Building

## Scope ID – 10.04.01 – Recondition Air-cooled Equipment

Contractor shall clean condenser coils for the air-cooled equipment listed below. A protective coating shall be applied for future protection. The following equipment shall be affected:

• 1 Split Systems

# Building 11 – Parks Maintenance Building

## Scope ID – 11.04.01 – Replace Split System Unit

Contractor shall furnish and replace the existing 2.5 ton split system with a new energy efficient system with environmentally friendly R410A refrigerant.

## ECM – 6 Building Envelope

Contractor shall make the following envelope improvements.

## Building 01 – City Hall

# Scope ID – 01.06.01 – Building Weatherization

Contractor shall furnish and install the following measures to reduce air infiltration:

- 7 Exterior doors to receive weather-stripping.
- 135 linear feet of foam sealant.

# Building 02 – Police Station

## Scope ID - 02.06.01 - Window Replacement

Contractor shall furnish and install the following windows:

• 24 windows on the exterior to be replaced with double-pane, argon gas filled, and low-e window sections

## Scope ID – 02.06.02 – Building Weatherization

Contractor shall furnish and install the following measures to reduce air infiltration:

• 8 Exterior doors to receive weather-stripping.

• 5 garage doors to receive weather-stripping.

# Building 03 – Fire Station #1

## Scope ID – 03.06.01 – Building Weatherization

Contractor shall furnish and install the following measures to reduce air infiltration:

- 5 Exterior doors to receive weather-stripping.
- 6 garage doors to receive weather-stripping.

# Building 04 – Fire Station #2

## Scope ID – 04.06.01 – Building Weatherization

Contractor shall furnish and install the following measures to reduce air infiltration:

- 4 Exterior doors to receive weather-stripping.
- 3 garage doors to receive weather-stripping.

## Scope ID – 04.06.02 – Replace Roof and Gutters

Contractor shall furnish and install the following roofing measures on the existing roof:

- Tear shingles down to wood deck.
- Install self-adhered ice and water shield membrane over entire wood deck.
- Install Garlands Rmer Loc system per specification.
- Install new flanged gutters and new gutters.
- Install snow guards.

## Building 05 – Service Center

## **Scope ID – 05.06.01 – Building Weatherization**

Contractor shall furnish and install the following measures to reduce air infiltration:

- 8 Exterior doors to receive weather-stripping.
- 780 linear feet of foam sealant.
- 6 garage doors to receive weather-stripping.

## Scope ID – 05.06.02 – Roof Repair (Metal Section A)

Contractor shall furnish and install the following roofing measures on the existing metal roof over the garage area:

- Make all necessary repairs throughout the entire roof system. Install new rubber boots, fill empty screw holes with larger screws, caulk all screw heads and lap seams and any openings found.
- Prime entire roof.
- Install CPR Restoration system.

## Scope ID – 05.06.03 – Roof Replacement (Section B)

Contractor shall furnish and install the following roofing measures on the existing roof over the office area:

- Tear all roofing down to the metal deck.
- Repair/replace decking where needed.
- Mechanically fasten 2 layers of 2.2" polyisocyanurate simultaneously while making sure all boards are staggered and butted up tightly against one another.
- Adhere ½" of Dens Deck recovery board to the polyisocyanurate.
- Install Flexbase 80 in Weatherking Adhesive followed by Stressply E followed by topcoat of Garla-Brite aluminizer.
- Install ½ diamond saddles at scuppers on both the west and east side. Unit on east side of roof shall be raised to accomplish positive drainage. ½ Diamond saddle also to be installed where the roof currently meets wall.
- New metal edge, downspouts, counterflashing and slip metal to be installed throughout.

# Building 06 – Animal Control

## Scope ID – 06.06.01 – Building Weatherization

Contractor shall furnish and install the following measures to reduce air infiltration:

• 3 Exterior doors to receive weather-stripping.

## Building 10 – Cemetery Maintenance

# Scope ID – 10.06.01 – Building Weatherization

Contractor shall furnish and install the following measures to reduce air infiltration:

- 1 Exterior door to receive weather-stripping.
- 165 linear feet of foam sealant.
- 2 garage doors to receive weather-stripping.

## Scope ID – 10.06.02 – Replace Roof

Contractor shall furnish and install the following roofing measures on the existing roof:

- Tear all roofing down to the metal deck.
- Repair/replace decking where needed.
- Mechanically fasten 2 layers of 2.2" polyisocyanurate simultaneously while making sure all boards are staggered and butted up tightly against one another.
- Adhere ½" of Dens Deck recovery board to the polyisocyanurate.
- Install Flexbase 80 in Weatherking Adhesive followed by Stressply E followed by topcoat of Garla-Brite aluminizer.
- Add scupper and downspout on the southeast portion of the roof.
- Install ½ diamond saddles between drains.
- New metal edge around perimeter.

# Building 11 – Parks Maintenance

## Scope ID – 11.06.01 – Replace Roof

Contractor shall furnish and install the following roofing measures on the existing roof:

- Tear all roofing down to the metal deck.
- Repair/replace decking where needed.
- Mechanically fasten 2 layers of 2.2" polyisocyanurate simultaneously while making sure all boards are staggered and butted up tightly against one another.
- Adhere ½" of Dens Deck recovery board to the polyisocyanurate.
- Install Flexbase 80 in Weatherking Adhesive followed by Stressply E followed by topcoat of Garla-Brite aluminizer.
- Mechanically fasten Dens Deck to parapet wall and flash base and cap up the wall.
- New coping cap, gutters and downspouts to be installed.

## **Scope ID – 11.06.02 – Building Weatherization**

Contractor shall furnish and install the following measures to reduce air infiltration:

- 2 Exterior doors to receive weather-stripping.
- 320 linear feet of foam sealant.
- 5 garage doors to receive weather-stripping.

## **IT and Other Outsourced Savings Programs**

Contractor shall make the following IT improvements.

## City Wide

## Scope ID – 14.08.01 – Voice Over Internet Protocol VoIP)

Contractor shall furnish and install the following measures to implement VoIP:

- 39 Polycom 301 Business Media Phones
- 11 Polycom 401 Business Media Phones
- 4 Color Expansion Modules
- 2 Netgear switches
- New cabling in Police Station
  - Upper Level
  - 1 Tripp Lite 8U 12U 22U 2 Post Open Frame Rack Cabinet Expandable 23.5"
     Depth Wall Mount 19" 22U Wide x 23.50" Deep Wall Mountable for UPS,
     Patch Panel, LAN Switch Black Powder Coat Steel 150 lb x Maximum
     Weight Capacity
  - o Mount Wall Mounted Rack
  - o Repunch 36 Camera Cat5/6 Cables
  - 4 Single Cat-6 cable installation & testing up to 100ft, including cable, keystone jack and wall plate.
  - o 10 Double Cat-6 cable installation & testing up to 100ft, including cable, keystone jack and wall plate.
  - o 1 Triple Cat-6 cable installation & testing up to 100ft, including cable, keystone jack and wall plate.
  - 1 Quad Cat-6 cable installation & testing up to 100ft, including cable, keystone jack and wall plate.

- o 3 Single Cat-6 PLENUM cable installation & testing up to 200ft, including cable, keystone jack and wall plate.
- o 9 Double Cat-6 cable installation & testing up to 200ft, including cable, keystone jack and wall plate.
- 1 Quad Cat-6 cable installation & testing up to 200ft, including cable, keystone jack and wall plate.

### Lower Level

- 2 Tripp Lite 8U 12U 22U 2 Post Open Frame Rack Cabinet Expandable 23.5"
   Depth Wall Mount 19" 22U Wide x 23.50" Deep Wall Mountable for UPS,
   Patch Panel, LAN Switch Black Powder Coat Steel 150 lb x Maximum
   Weight Capacity
- o Mount Wall Mounted Rack
- 5 Single Cat-6 cable installation & testing up to 100ft, including cable, keystone jack and wall plate.
- o 11 Double Cat-6 cable installation & testing up to 100ft, including cable, keystone jack and wall plate.
- o 1 Triple Cat-6 cable installation & testing up to 100ft, including cable, keystone jack and wall plate.
- o 3 Single Cat-6 PLENUM cable installation & testing up to 200ft, including cable, keystone jack and wall plate.
- 2 StarTech.com Cisco Compatible Gigabit Fiber SFP Transceiver Module MM LC w/DDM - 550m (Mini-GBIC) - 1 x 1000Base-SX
- o 1 4 Strand Custom Length Fiber 50/125 OM3 Cable run and termination/testing
- o 110 Patch Cable 1' CAT6, RJ-45

## Scope ID – 14.08.02 – Closed Circuit Television (CCTV) Server Upgrades

Contractor shall furnish and install the following measures to upgrade CCTV server:

- New Network Video Recorder (NVR) with 70 TB of storage
- Existing IP camera licensing to remain
- 3 New multi-sensor cameras at Police Station

## **ATTACHMENT 2 – ENERGY SAVINGS PROGRAM**

The Project will result in annual savings in the amount of \$241,972.

If Owner does not achieve actual energy savings equal to or greater than the guaranteed energy savings, the Contractor hereby agrees to annually reimburse Owner the difference between guaranteed total annual savings, and the actual total annual savings realized in that year, in accordance with the stipulations provided in Attachment 3 – Measurement and Verification Plan. The total savings guarantee shall extend for a 1-year period, to coordinate with the financing period, following the Substantial Completion Date. The parties agree that Attachment 3 – Measurement and Verification Plan shall control the rights and responsibilities of each party with respect to the total savings guarantee. It is agreed that the Contractor's obligation to deliver the savings as described in Attachment 3 – Measurement and Verification Plan will be fully satisfied upon Owner's Final Project Acceptance based on the documentation and data provided and included herein.

## **Project Energy Savings Workbook**

As part of this contract, Contractor agrees to provide Owner with a Project Energy Savings Workbook within ninety (90) days after the Substantial Completion Date. This energy savings workbook will detail all project energy savings calculations for the Energy Conservation Measures (ECM's) pertaining to the Scope of Work, as well as any mutually agreed upon changes to the ECMs. The project energy savings program start date shall be considered the first day of the month after Contractor's receipt of final payment and includes savings (if applicable) during the construction period. The energy savings workbook shall follow the International Performance Measurement and Verification Protocol (IPMVP Core Concepts – October 2016) using any combination of options A, B, C, or D, as well as Non-Measured savings. Owner and Contractor agree to all current utility rates, hours of use, occupant counts, space utilization and operation for determining energy savings.

## **Energy Reconciliation Report**

Included as part of this contract, the Contractor agrees to provide the Owner with a Project Energy Reconciliation Report at the end of the 12-month period following the energy savings program start date as detailed above and per the detailed Owner's Responsibilities listed below. The cost of this one-time report is included as part of this agreement. The reconciliation report shall disclose any shortfall or surplus between estimated energy and operational savings (the "Estimated Savings") specified in this Agreement and actual calculated energy and operational savings (the "Actual Savings") incurred during the savings calculation year. The Contractor shall pay the Owner any short fall between the Estimated Savings and the Actual Savings within 60 days after the annual report is completed. Any surplus in Actual Savings over the Estimated Savings in the savings year will be the Owner's. In the event of meeting or exceeding the estimated savings amount in a measured year, the energy savings program goals may be considered met and deemed mutually acceptable for the remaining years of the agreement without additional measurement and verification requirements. This effectively stipulates the remaining years as acceptable per the IPMVP guidelines.

### **Energy Reconciliation Report Extension**

The Owner may extend the Energy Savings Program year to year for an additional cost. This will be invoiced separately to continue the measurement and verification process for subsequent years as directed by the Owner. The Owner must continue to renew the annual service program as mutually negotiated. The contractor will perform the annual project Energy Reconciliation Report as stated above. Any surplus savings may be carried forward and applied against any possible savings shortfall in the following or previous Savings Years. If the Contractor pays the Owner for a short fall in Actual Savings incurred during a given Savings Year and there is a surplus in Actual Savings in future Savings Years, the Contractor shall invoice the Owner for the surplus and Owner shall pay such amount to Contractor, but such amount shall not exceed the amount of the short fall paid by Contractor in any prior Savings Years.

## <u>ATTACHMENT 3 – MEASUREMENT AND VERIFICATION PLAN</u>

The Project will result in annual savings in the amount of \$241,972.

## **Facility Energy Measurement and Verification**

The estimated savings for each facility shall be measured and verified per IPMVP guidelines. The estimated annual energy savings are calculated to be \$24,840. As per IPMVP guidelines, the Contractor shall establish a pre-retrofit utility baseline for each facility using Option C to which savings shall be compared. Option A savings are measured and documented in a Pre- and Post-measurement method.

Savings shall be determined for each facility as defined below. Contractor shall collect utility and cost invoices for the usages as needed. These documents shall be provided by the Owner in order to measure the energy usage of each facility per the details shown in Owners Responsibilities. The utility rates for electricity and natural gas used for each building are as follows:

Building Name	Electricity (\$/kWh)	Electricity (\$/kW)	Natural Gas (\$/CCF)	IPMVP – M+V Method
Animal Control	\$0.08	\$11.26	N/A	Lighting Option A
Cemetery Maintenance Building	\$0.08	N/A	\$0.56	Electric & Gas Option C
City Hall	\$0.08	\$11.26	\$1.15	Electric & Gas Option C
Fire Station #1 Park	\$0.08	\$11.26	N/A	Lighting Option A
Fire Station #1	\$0.08	\$11.26	\$0.65	Electric & Gas Option C
Fire Station #2	\$0.08	\$11.26	\$0.66	Electric & Gas Option C
Parks Maintenance Building	\$0.08	\$11.26	\$0.67	Electric & Gas Option C
Police Department	\$0.08	\$11.26	\$0.66	Electric Option C
Service Center	\$0.08	\$11.26	\$0.65	Electric & Gas Option C

Energy rates for the listed utilities were determined based on the utility invoices provided by the Owner. These rates were used to determine the dollar savings estimated above. Owner agrees that the utility rates used in the Investment Grade Audit phase to calculate the dollar savings are true and accurate and will be used annually to determine Actual Savings, as detailed below in the Energy Savings Calculation Methodology section.

The building energy savings shall be realized as a result of the proposed Energy Conservation Measures (ECM's) and the Scope of Work (detailed in Attachment 1) performed by the Contractor. These energy conservation measures may include lighting, retro-commissioning, mechanical upgrades, building automation, building envelope improvements, and other measures as detailed.

The energy savings calculations are based upon the following operational conditions for each facility. Any deviations from these and other operating parameters may result in a savings adjustment:

### **Facility Occupancy Schedules**

The HVAC equipment shall be scheduled and set back during the unoccupied periods. The following schedules are to be utilized for all areas unless otherwise indicated.

Facility	Area	Time Period	Operating Hours
City Hall	All Areas	Mon, Fri	7am - 5pm

	All Areas	Tues – Thurs	7am – 8pm
	All Areas	Sat-Sun	9am-2pm
Fire Otations	Occupied Areas	Sunday- Monday	24/7
Fire Stations	Apparatus Bay & Unoccupied Areas	Sunday- Monday	7am – 7pm
Parks	All Areas	Mon-Fri	7am – 4pm
Maintenance Building	All Areas	Sat-Sun	(Unoccupied)
Cemetery	Office Area	Mon – Fri	7am – 4pm
Maintenance	Garage Areas	Mon – Fri	7am – 4pm
Building	All Areas	Sat – Sun	(Unoccupied)
Police All Areas		Sunday – Monday	24/7
Comica Contor	All Areas	Mon-Fri	6am – 4pm
Service Center	All Areas	Sat-Sun	(Unoccupied)

#### **HVAC Set-Points**

Customer agrees to operate the conditioned spaces within the temperature range indicated I the table below. Set-points are for all areas unless otherwise indicated. All areas shall have a +/- 2 degree allowable adjustment.

Facility	Area	Operational Condition	Occupied Setpoint	Unoccupied Setpoint
City Hall	All Areas	Heating	70	60
City Hall	All Areas	Cooling	72	85
	Non-Bay Areas	Heating	70	70
Fire Stations	Non-Bay Areas	Cooling	72	72
Fire Stations	Truck Bay	Heating	60	50
	Truck Bay	Cooling	N/A	N/A
Parks	Office Area	Heating	70	55
Maintenance	Office Area	Cooling	72	85
Building	Truck Bay	Heating	60	50
Police	All Areas	Heating	70	60
Department	All Areas	Cooling	72	85
Service Center	Garage Areas	Heating	60	50
	All Areas	Heating	70	55
	All Areas	Cooling	72	85

#### **Weather Data Source**

In the event that savings are determined by comparing weather-normalized baseline consumption to actual performance period consumption, actual weather data will be gathered from NOAA Station Cleveland Hopkins International Airport, OH US. If the weather station is deactivated, weather data will be collected from the nearest possible alternative station. If there are gaps in the weather data collected, Contractor will use the aggregate for the immediately surrounding days in substitution.

## **Energy Savings Calculation Methodology**

Energy savings will be measured by comparing the Performance Period's total energy consumption and demand to the total energy consumption and demand for the same area in the base year period by utilizing energy meter data. Base year energy and demand will be adjusted for differences in weather, length of billing periods, and facility operational conditions in order to estimate how much energy would have been used in the Performance Period if energy conservation measures had not been implemented. Energy savings are defined as the difference between the adjusted base year consumption and demand (Baseline) and the Performance Period consumption and demand. This process will be included for each utility type involved in the guarantee.

The following equations are utilized to determine the difference in energy usage from the baseline period and performance period.

# Equation 1 – Energy Consumption Savings

 $E_{Savings} = E_{Baseline} - E_{Performance}$ 

Where:

 $E_{Savings}$  = Energy Savings

 $E_{Baseline}$  = Base year energy usage adjusted for normalization

 $E_{Performance}$  = Performance Period energy usage

# Equation 2 – Baseline Energy Usage

Baseline energy usage is determined by first analyzing the relationship between base year utility usage and the base year weather and/or other independent variables (i.e. occupancy, production volume). If the relationship between an independent variable is found to be statistically significant through linear regression analysis, the baseline is adjusted using a fit line equation. This equation allows for the accurate comparison of base year utility consumption and performance period utility consumption by routinely adjusting the baseline to mimic the conditions present in the Performance Period. The following equation is utilized for each meter present within the performance guarantee. Once the degree day balance point temperatures and the coefficients for heating degree days, cooling degree days, and all other applicable variables have been obtained by regression, they remain fixed and are used to derive baseline consumption for the performance period. Specific coefficients per meter can be found in the project M&V Workbook.

$$P_{i} = [D + (D_{h} * \Delta T_{BH_{i}}) + (D_{c} * \Delta T_{BC_{i}}) + (D_{1} * U_{1_{i}}) + (D_{2} * U_{2_{i}}) + (D_{3} * U_{3_{i}})] * BM_{m_{i}} + BM_{o_{i}}$$

Where:

i = index for N utility bills (i=1..N);

 $P_i$  = Best Fit to utility bill demands [Utility Demand Units, e.g., kW];

D = Baseload demand (Utility Units, e.g., kW);

 $D_h, D_c$  = Coefficients for Heating and Cooling  $\Delta T$  (Utility Demand Units/ °F or °C);  $\Delta T_{BH,i}$  = Heating  $\Delta T$ , (Balance Point Temperature  $T_{BH}$ - low temperature  $t_{Lo,i}$ ) (°F or °C);  $\Delta T_{CH,i}$  = Cooling  $\Delta T$ , (high temperature  $T_{Hi,i}$ - Balance Point Temperature  $t_{BC}$ ) (°F or °C);

 $D_1, D_2, D_3$  = Coefficients for other independent variables,  $k_1, k_2$ , and  $k_3$ ; = Values of other independent variables,  $k_1, k_2$ , and  $k_3$ ;

 $BM_{m,l}$  = Baseline Modification, multiplier;

 $BM_{o,I}$  = Baseline Modification, absolute offset.

# Equation 3 – Demand Savings

Demand savings are calculated similarly to energy usage savings, as seen by the equation below.

 $D_{Savings} = D_{Baseline} - D_{Performance}$ 

Where:

= Demand savings D Savings

= Base year demand adjusted for normalization D Baseline

= Performance Period demand D Performance

# Equation 4 – Baseline Demand

Because demand is an instantaneous value, it must be treated differently than energy usage when determining a baseline value. The differences between energy calculations and demand calculations are:

- 1) Demand is not a function of # of days
- 2) Demand does not have a relationship to degree days (which are summed over a number of days) but instead has a relationship to the Heating $\Delta T$  or Cooling $\Delta T$ .

Heating∆T is the difference between the demand heating balance point temperature and the lowest temperature during the billing period. The demand heating balance point temperature is unrelated to the balance point temperature used to calculate heating degree days.

Cooling \( \Darto T \) is the difference between the demand cooling balance point temperature and the highest temperature during the billing period. The demand cooling balance point is unrelated to the balance point temperature used to calculate cooling degree days.

The following equation is utilized for each meter with demand readings available present in the facility utility cost savings guarantee. Once ΔT balance point temperatures and the coefficients for baseload demand, Cooling∆T, Heating∆T, and all other variables have been obtained by regression, they remain fixed and are used to derive baseline demand throughout the performance period.

$$P_{i} = [D + (D_{h} * \Delta T_{BH,i}) + (D_{c} * \Delta T_{BC,i}) + (D_{1} * U_{1,i}) + (D_{2} * U_{2,i}) + (D_{3} * U_{3,i})] * BM_{m,i} + BM_{o,i}$$

Where:

1 = index for N utility bills (i=1..N);

 $P_{i}$ = Best Fit to utility bill demands [Utility Demand Units, e.g., kW];

D = Baseload demand (Utility Units, e.g., kW);

 $D_h,D_c$ = Coefficients for Heating and Cooling ΔT (Utility Demand Units/ °F); = Heating  $\Delta T$ , (Balance Point Temperature  $T_{BH}$ - low temperature  $t_{Lo,i}$ ) (°F);  $\Delta T_{BH,i}$ = Cooling  $\Delta T$ , (high temperature  $T_{Hi,i}$ - Balance Point Temperature  $t_{BC}$ ) (°F);  $\Delta T_{CH,i}$ 

 $D_1, D_2, D_3$ = Coefficients for other independent variables, k<sub>1</sub>, k<sub>2</sub>, and k<sub>3</sub>;  $U_{1,i}, U_{2,i}, U_{3,i}$ = Values of other independent variables, k<sub>1</sub>, k<sub>2</sub>, and k<sub>3</sub>;

 $BM_{m,i}$ = Baseline Modification, multiplier;

 $BM_{o,i}$ = Baseline Modification, absolute offset.

# Equation 5 – Degree Days

The heating and cooling degree days utilized in the baseline equation are calculated for each billing period using daily temperature data. For any given period from dates Di -1 to Di, heating degree days are calculated as the sum of positive differences of a balance point temperature and the average daily dry

bulb temperatures. Both heating and cooling balance point temperatures vary per building and are a function of building composition, heating system parameters, and internal gains. The balance point temperature is usually obtained from the best fit of regression.

The following equation is used to calculate heating degree days:

$$HDD_{BH,i} = \sum_{d=D_{i-1}+1}^{D_i} (T_{BH} - T_{O,d})^+$$

Where:

HDD<sub>BH,i</sub> = Heating Degree Days (the days from D<sub>i-1</sub> to D<sub>i</sub>), °F-day;

D<sub>i</sub> = Last day of the i-th billing period; D<sub>i-1</sub> = Last day of the (i-1)-th billing period;

 $D_{i-1}+1$  = 1st day of the i-th period.

T<sub>BH</sub> = Heating Balance Point Temperature, °F;

 $T_{O,j}$  = Average outdoor temperature for the day  $D_i$ , °F;

(X)<sup>+</sup> = Indicates that only positive differences are to be used, and negative differences set to

zero.

The following equation is used to calculate cooling degree days:

$$CDD_{BC,i} = \sum_{d=D_{i-1}+1}^{D_i} (T_{O,d} - T_{BC})^+$$

Where:

CDD<sub>BC, i</sub> = Cooling Degree Days (the days from D<sub>i-1</sub> to D<sub>i</sub>), °F-day;

D<sub>i</sub> = Last day of the i-th billing period; D<sub>i-1</sub> = Last day of the (i-1)-th billing period;

 $D_{i-1}+1$  = 1st day of the i-th period.

T<sub>BC</sub> = Cooling Balance Point Temperature, °F

 $T_{O,j}$  = Average outdoor temperature for the day  $D_i$ , °F;

(X)<sup>+</sup> = Indicates that only positive differences are to be used, and negative differences set to

zero.

#### **Measurement Procedure**

The following procedure is utilized to calculate utility unit savings:

#### 1) Determination of Baseline Period

A baseline period is first determined that best represents the facility's pre-retrofit utility usage pattern. Typically, this period consists of the most recent twelve months prior to the retrofit.

#### 2) Performance of Regression Analysis

Regression analysis is performed through Metrix utility accounting software. Utility bills, weather data, and other independent variable data (e.g. production or occupancy) are entered into Metrix. Regression of usage/demand vs. weather and/or another independent variable is performed per independent variable unit for each meter in which statistically significant relationship can be established. The fit line resulting from this equation is used throughout the annual performance periods to ensure accurate comparisons are made.

#### 3) Documentation of Baseline Information

The results of the linear regression are included in the project M&V Workbook. These reports will document:

A) Utility bills used, including meter read date, number of days in bill, usage (or demand)

- B) Independent variable amounts per bill (e.g. CDD, HDD, Occupancy, Production)
- C) Weather station used and balance point temperatures used to calculate CDD and HDD
- D) Fit line equation, coefficients of consumption (and demand) per independent variable unit (e.g. kWh/HDD, Therms/Building Occupancy).
- E) Statistical Indicators: R2 value, T-statistics, CVRMSE, and Mean Bias Error

## 4) Determining Post-Retrofit Utility Unit Savings

For each included annual performance period, utility bills, weather data, and other applicable independent variable information is entered into Metrix to determine the adjusted baseline value for each Performance Period utility bill. The adjusted baseline is calculated by Metrix using the fit line equation and any baseline modifications that may be applicable. Savings are equal to the adjusted baseline value minus the actual consumption (or demand) for the corresponding billing period.

#### **Baseline Modifications**

A baseline modification is an additional factor that is added or multiplied to the fit line equation to represent one of two types of anomalies: deviations from the usage pattern which occurred during the baseline period (annual periodic modifications) or post-retrofit changes in usage patterns caused by the customer which may compromise savings numbers (additional modifications).

#### **Annual Periodic Modifications**

Annual Periodic Modifications may be used to correct Adjusted Baseline consumption for anomalies that occurred during the Baseline period because of operational procedures or abnormal conditions that occurred. These "out of line" consumption periods cause the regression equation to over or under predict consumption. A modification helps to fit the equation's predicted value to the actual value that occurred during the tuning period. Future consumption can be predicted with a higher degree of confidence once the predicted and actual tuning period consumption is matched properly. Annual Periodic Modifications for the Project, if any are used, are identified in the M&V Workbook.

# **Facility Modifications**

During the term of the Agreement, the baseline may need to be adjusted to equalize the parameters of the current year to the base period. This allows for accurate analysis to be performed and valid savings to be measured. Potential reasons for adjustment include, but are not limited to:

- Changes in facility occupancy and use
- Changes in ventilation rates due to potential changes in any regulatory requirements
- Additions or deletions of energy using equipment
- Set-Point and schedule deviations from the initial agreed-upon settings

The operational conditions to be withheld are detailed under Facility Occupancy Schedules and HVAC Set-Points. Deviation from these parameters that impact energy savings will be documented and adjusted for in the annual M&V Reports.

# **Cost Savings Methodology**

Assigning Utility Cost to Utility Units

Facility utility cost savings are determined by applying utility unit costs to utility unit savings. The method used for applying utility costs differs per meter based on utility data availability and differences in utility rate structures. The following table details the potential cost calculation methods. The specific cost calculation methodologies selected for each meter can be found in the project M&V Workbook.

Method	Description	Typical Utilization
Blended Rate	Applies average total cost of utility bill to single consumption unit (e.g. kWh, Therm) for the billing period.	Utilized when vast majority of utility bill is based on \$/single unit type. Least detailed method as it does not factor out any non-unit based charges or charges based on other billed unit types.
Marginal Rate	Applies average cost per unit type to each available billed unit (e.g. \$/kWh, \$/kW, \$/rKVA). Factors out any non-unit based charges as miscellaneous costs.	Utilized when utility bill is billed based on multiple unit types (e.g. billed on both consumption and demand). Also utilized when non-unit based charges make up significant portion of total utility bill.
Rate Tariff Schedule	Applies modeled tariff rate to utility units. If utility provider changes the rate of utility being provided, calculations are modeled using new rates.	Utilized when meter is billed on complex utility rate structures (e.g. tiered billing structures, monthly/contract minimums, power factor) and cost per unit type cannot be accurately determined using the previous methods.

The annual utility cost savings guarantee was determined by applying the base year utility unit costs to the base year utility units. The base year utility rates will constitute the minimum values when assigning utility unit costs to utility units. In calculating the monetary value of utility cost savings for the purposes of guarantee reconciliation, the contractor will select the greater of (i) the performance period utility rate and (ii) the base period utility rate. This rate will then be applied to both the adjusted baseline utility data and performance period utility data to ensure a true and accurate cost comparison. The following equation will be utilized to determine utility cost savings:

$$$_{Savings} = $_{Baseline} - $_{Performance}$$

Where:

\$Savings = Guarantee year utility cost savings

\$Baseline = Baseline period utility cost \$Performance = Performance period utility cost

#### **Street Lighting Measurement and Verification**

The Street Lighting Program savings are calculated per Option A of the IPMVP guidelines. The estimated savings is calculated to be \$27,404\$ per year. This annual dollar amount was determined using the provided utility statements from Owner. The savings were calculated based on a utility rate of each fixture type. The number of fixtures were determined from the utility accounts and engineering reports provided by the Owner and are detailed below. This amount will be verified and supported from the exact number of fixtures retrofitted or replaced as part of the project, and will be modified to reflect any changes from the original estimated number of fixtures involved in the retrofit project, multiplied by the agreed number of hours of operation. Owner agrees that the estimates and assumptions for the savings in the Investment Grade Audit phase are true and accurate and will be used annually to determine Actual Savings. The utility accounts for the Owner's street lights may be unmetered, and in this case the savings shall be realized after the installation, and the Utility Provider converts their billing calculation to the new wattage or rates. It is both the Contractor's and Owner's responsibility to coordinate with the Utility Provider to ensure the utility bills reflect the wattage of the new fixtures after the installation is completed.

**Existing Fixture Summary:** 

			Lamp	Energy	
Monthly	Qty	Existing	Charge	Charge	Existing

Lamp	I	1	I	I	1	
Charge	(Customer)	kWh/Month	Cost	Cost	kWh	Utility Fixture Code
Charge	(Odstorner)	KVVI//WOITHI	0031	0031	KVVII	Clinty 1 ixture code
\$8.80	24	104	\$2,534	\$1,545	29,952	CE-CO-MV-OHWH-(104)-250W
\$11.38	23	158	\$3,141	\$2,250	43,608	CE-CO-MV-OHWH-(158)-400W
\$7.39	23	69	\$2,040	\$983	19,044	CE-CO-MV-OHWD-(69)-175W
\$11.74	24	69	\$3,381	\$1,025	19,872	CE-CO-MV-UGPS-(69)-175W
\$13.19	162	105	\$25,641	\$10,532	204,120	CE-CO-SV-OHWD-(105)-250W
\$15.16	4	163	\$728	\$404	7,824	CE-CO-SV-OHWD-(163)-400W
\$10.29	39	42	\$4,816	\$1,014	19,656	CE-CO-SV-OHWD-(42)-100W
\$10.95	286	62	\$37,580	\$10,979	212,784	CE-CO-SV-OHWD-(62)-150W
\$22.76	1	62	\$273	\$38	744	CE-CO-SV-UGPL-(62)-150W
\$14.81	61	42	\$10,841	\$1,586	30,744	CE-CO-SV-UGPS-(42)-100W
\$0.00	3	88	\$0	\$163	3,168	CE-CU-SV-PL-(88)-200WO&L
	650		\$90,975	\$30,521	591,516	

# Proposed Fixture Summary:

Qty	Proposed Monthly	Post Retrofit	Lamp Charge	Energy Charge	Post	
(Customer)	Lamp Charge	kWh/Month	Cost	Cost	kWh	kWh Savings
	1	1		I	I	ı
24	\$9.24	32	\$2,661	\$476	9,216	20,736
23	\$15.13	91	\$4,176	\$1,296	25,116	18,492
23	\$7.39	18	\$2,040	\$256	4,968	14,076
24	\$7.39	18	\$2,128	\$267	5,184	14,688
162	\$9.82	46	\$19,090	\$4,614	89,424	114,696
4	\$15.13	91	\$726	\$225	4,368	3,456
39	\$7.39	18	\$3,459	\$435	8,424	11,232
286	\$9.24	32	\$31,712	\$5,667	109,824	102,960
1	\$9.24	32	\$111	\$20	384	360
61	\$7.39	18	\$5,409	\$680	13,176	17,568
3	\$0.00	88	\$0	\$163	3,168	0
650		Total	\$71,512	\$14,099	273,252	318,264

# Street Lighting Savings Summary:

318,264	kWh Saved
\$16,422	Electric \$ Saved
\$19,463	Lamp Charges \$ Saved
(\$8,481)	Safety Factor
\$27,404	Guaranteed Savings

# Information Technology (IT) Savings Measurement and Verification

These savings are calculated per Option A of the IPMVP guidelines. The estimated total savings is calculated to be \$77,880 per year. This annual dollar amount was determined using data provided to Contractor. This amount will be verified and supported from the exact Scope of Work as part of the project. Owner agrees not to cancel or alter the program for the savings to be realized. If Owner modifies the program the Contractor has the right to adjust the savings guarantee based on modifications made. Savings is based on the following program parameters:

#### Star2Star

- Star2Star currently charges \$1598/mo city-wide. That will be reduced to \$1492/mo.
  - Applied these savings across all buildings city-wide (besides Police). Below is the current breakdown.

Location	Current Monthly Cost
City Hall	\$821.33
Fire Station 1	\$170.53
Fire Station 2	\$133.74
Service	\$213.74
Office on Aging	\$55.28
Waste Water A	\$166.73
Waste Water B	\$37.55
Total	\$1,598.90

• Star2Star will charge \$1058/mo to the Police department

#### AT&T

- Police currently pays AT&T \$1196/mo for just "dial tone". This will go away as a result of Star2Star's proposal of \$1058/mo.
- No longer need analog failover at each building. \$22/mo at each building can be eliminated.
- Elimination of POTS lines at WW Treatment will take \$172/mo down to \$50/mo
- AT&T phone system support of \$3,120/yr is eliminated. Maintenance and support are included in S2S's \$1058/mo.

#### Campbell

• Phone recording system maintenance and support of \$2,600/yr is eliminated. This is included in \$25's \$1058/mo.

#### Easton

Long distance is included in S2S's \$1058/mo. Easton's \$30/mo will be eliminated.

# Online Fax Savings

# Star2Star

• (7) fax lines at \$10/mo can be eliminated from S2S for a monthly fee with eFax or similar online service of about \$30/mo

# AT&T

• (1) fax line at Animal Control, (1) fax line at the Fire Department, and (3) fax lines at City Hall at \$22/mo/line could be eliminated and covered by the \$30/mo noted above.

# **Budget Variance Savings**

The estimated Budget Variance savings is projected to be \$95,754 per year. This calculation is based on the annual appropriations in the line items listed below compared to actual expenditures of 2018. Owner agrees that the assumptions for annual appropriations are true and accurate and will be used annually to determine Actual Savings. Future appropriations may be increased annually during the Guarantee Term to account for inflation. Owner and Contractor agree that such an adjustment is a reasonable projection of the future increases in appropriations based on past inflation experience.

Departments
Utilities
Building & Grounds Materials/Supplies
Building Maintenance
Street Lighting
Telephone/IT
Equipment Maintenance

# **Non-Measured Savings**

# Facility Utility Savings

Owner agrees that the projections for as shown in the Investment Grade Audit phase are true and accurate. Facility Utility Cost Savings (Non-Measured) are calculated to be \$94 per year. This annual dollar amount was determined using the data as provided to Contractor. Owner agrees that the estimates and assumptions for the Calculated Savings are true and accurate and will be used annually to determine Actual Savings without any further verification or reconciliation on the Contractor's part. Savings are detailed in the table below.

Facility	ECM	Utility	Utility Cost Savings
Animal Control	HVAC Restoration and Weatherization	Electricity	\$18
Police Department	2.1.1 - Retrofit Interior and Exterior to LED	Natural Gas	-\$584
Police Department	2.2.1 - RetroCX BAS	Natural Gas	\$251
Police Department	2.6.1 - Replace 2nd floor office windows	Natural Gas	\$185
Police Department	2.6.2 - Building Weatherization	Natural Gas	\$224

# City-Owned Traffic Lighting Maintenance Savings Measurement and Verification

The estimated total savings is calculated to be \$16,000 per year. This annual dollar amount was determined using data provided to Contractor. This amount will be verified and supported from the exact Scope of Work as part of the project. Owner agrees not to cancel or alter the program for the savings to be realized. If Owner modifies the program the Contractor has the right to adjust the savings guarantee based on modifications made.

# **Additional Savings**

Contractor may identify other Energy and Operational Savings opportunities during the construction period or during any guarantee year. Additional Energy and Operational Savings that can be demonstrated as a result of efforts by the Contractor that result in no additional costs to the Owner

beyond the costs identified in this Agreement will be included in the annual Project Energy Savings Report.

# **Savings Prior to Substantial Completion Date**

Energy and Operational savings that are achieved by the upgrades and modifications in the Agreement prior to completion of the entire Project will be added to the first year actual Energy and Operational savings amount. Such savings may include any utility rebates or other incentives earned as a direct result of the installed energy conservation measures provided by the Contractor. These amounts may be adjusted higher or lower depending on utility company's final acceptance of such rebates in effect at the time of the project completion. These amounts will be accounted for and applied toward all savings shortfalls before any payment is required.

#### **Savings Summary**

The annualized Actual Savings amount will be reconciled to meet the Guaranteed Savings amount utilizing the IPMVP guidelines Options A, B, C, D or Non-Measured. Owner and contractor agree to all hours of use and operation for determining energy savings. Contractor can adjust the baselines per the items listed in Owner's Responsibilities under The Savings Program.

The Baseline Cost Rates shall be increased annually during the Guarantee Term by 2.5% per year, compounded annually ("Adjusted Baseline Cost Rates"). Owner and Contractor agree that such an adjustment is a reasonable projection of the future increases in costs based on past inflation experience. In calculating the monetary value of the savings for the purpose of the Savings Guarantee reconciliation, Contractor will use the greater of (i) the then current applicable cost and (ii) the Adjusted Baseline Cost Rates.

# **Owner's Responsibilities**

The following items must be supplied by Owner and relied upon by Contractor in order to properly administer a savings program using the M&V protocol listed under the IPMVP guidelines:

- Copy of monthly utility bills within thirty (30) days of receipt of bill.
- Copy of other maintenance and operational expenditures pursuant to this agreement.
- Copy of street lighting maintenance expenditures.
- If Owner modifies the program the Contractor has the right to adjust the savings guarantee based on modifications made.
- Copy of trend-log of all system over-rides (provided monthly).
- Notify Contractor of any changes in occupancy, usages, schedules, or other modifications.
- Notify Contractor of any added energy consuming equipment (including computers, kitchen equipment, refrigeration, HVAC or other equipment, etc.) with schedules of use.
- Notify Contractor of any equipment or systems not currently operating.
- Notify Contractor of any equipment or systems break-downs/malfunctions immediately upon discovery of the problem.
- Regularly scheduled preventive maintenance must be performed on all energy consuming equipment and systems (if maintenance is supplied by Owner, Contractor reserves the right to inspect equipment).
- Maintain and operate systems as designed. Future maintenance and repair components should be equal to or less than the energy use of such components installed as part of this project.

# Exhibit A

# **Insurance and Bonds**

This Insurance and Bonds Exhibit is part of the Agreement, between the Owner and the Contractor, dated \_\_\_\_\_\_\_, 2019.

for the following **PROJECT**:

North Royalton Guaranteed Energy Savings Contract Agreement

#### THE OWNER:

City of North Royalton 14600 State Road North Royalton, Ohio 44133-5120

Attn: Mayor Robert A. Stefanik Telephone: (440) 237-4300

Email: mayorstefanik@northroyalton.org

#### THE CONTRACTOR:

Leopardo Companies, Inc. 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192

Attn: Joe Frankini

Telephone: (847) 783-3902 Email: JFFrankini@leopardo.com

#### TABLE OF ARTICLES

- A.1 GENERAL
- A.2 OWNER'S INSURANCE
- A.3 CONTRACTOR'S INSURANCE AND BONDS
- A.4 SPECIAL TERMS AND CONDITIONS

#### ARTICLE A.1 GENERAL

The Owner and Contractor shall purchase and maintain insurance, and Contractor shall provide bonds, as set forth in this Exhibit.

# ARTICLE A.2 OWNER'S INSURANCE (EXCEPT AS PROVIDED IN SECTIONS A.2.3.1 AND A.2.4) § A.2.1 General

Prior to commencement of the Work, the Owner shall secure the insurance, and provide evidence of the coverage, required under this Article A.2 (except under Sections A.2.3.1 and A.2.4 to be provided by Contractor) and, upon the Contractor's request, provide a copy of the property insurance policy or policies required by Section A.2.3.3 and A.2.5. The copy of the policy or policies provided shall contain all applicable conditions, definitions, exclusions, and endorsements.

#### § A.2.2 Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual general liability insurance.

# § A.2.3 Required Property Insurance

§ A.2.3.1 Contractor shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located with an A.M. Best "A X" rating or better, property insurance on the portion of Owner's property upon which to Work is being performed with written permission by the property insurer for the portion of the structure not part of the Work for the Work to be performed written on a builder's risk "all-risks" completed value inland marine form or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis. The Owner's property insurance coverage shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications and labor performed and materials or equipment supplied by others. The property insurance shall be maintained until Substantial Completion and thereafter as provided in Section A.2.3.1.3, unless otherwise provided in the Contract Documents or otherwise agreed in writing by the parties to this Agreement. This insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Project as named insureds. This insurance shall include the interests of mortgagees as loss payees.

§ A.2.3.1.1 Causes of Loss. The insurance required by this Section A.2.3.1 shall provide coverage for direct physical loss or damage, and shall not exclude the risks of fire, explosion, theft, vandalism, malicious mischief, collapse, earthquake, flood, water damage (including sewer backup, sprinkler leakage and pipe breakage), pollution, fungus and mold, or windstorm. The insurance shall also provide coverage for ensuing loss or resulting damage from error, omission, or deficiency in construction methods, design, specifications, workmanship, or materials. Sublimits, if any, are as follows:

(Indicate below the cause of loss and any applicable sub-limit.)

Causes of Loss

**Sub-Limit** 

§ A.2.3.1.2 Specific Required Coverages. The insurance required by this Section A.2.3.1 shall provide coverage for loss or damage to falsework and other temporary structures, hot testing and to building systems from equipment breakdown, testing and startup. The insurance shall also cover debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and reasonable compensation for the Architect's and Contractor's services and expenses required as a result of such insured loss, including claim preparation expenses. Sub-limits, if any, are as follows:

(Indicate below type of coverage and any applicable sub-limit for specific required coverages.)

Coverage

**Sub-Limit** 

§ A.2.3.1.3 Unless the parties agree otherwise, upon Substantial Completion, the Owner shall continue the insurance required by Section A.2.3.1 or, if necessary, replace the insurance policy required under Section A.2.3.1 with property insurance written for the total value of the Project that shall remain in effect until expiration of the period for correction of the Work set forth in Section 18.2 of the Contract.

- § A.2.3.1.4 Deductibles and Self-Insured Retentions. If the insurance required by this Section A.2.3 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions.
- § A.2.3.2 Occupancy or Use Prior to Substantial Completion. The Owner's occupancy or use of any completed or partially completed portion of the Work prior to Substantial Completion shall not commence until the insurance company or companies providing the insurance under Section A.2.3.1 have consented in writing to the continuance of coverage. The Owner and the Contractor shall take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance, unless they agree otherwise in writing.

#### § A.2.3.3 Insurance for Existing Structures

If the Work involves Work in an existing structure, the Owner, not Contractor, shall purchase and maintain, until the expiration of the period for correction of Work as set forth in Section 18.2 of the Contract, "all-risks" property insurance, on a replacement cost basis, protecting the existing structure against direct physical loss or damage from the causes of loss identified in Section A.2.3.1, notwithstanding the undertaking of the Work and Contractor's purchase of Builder's Risk Insurance insuring damage to the Work. The Owner shall be responsible for all coinsurance penalties.

# § A.2.4 Intentionally Omitted

#### § A.2.5 Other Owner Insurance.

The Owner shall purchase and maintain the insurance selected below.

[ **«X »**] **§ A.2.5.1 Cyber Security Insurance** for loss to the Owner due to data security and privacy breach, including costs of investigating a potential or actual breach of confidential or private information. (Indicate applicable limits of coverage or other conditions in the fill point below.)

« »

[ «X » ] § A.2.5.2 Other Insurance

**Coverage** Limits

Boiler and Machinery Insurance Value of Equipment Purchased by Owner from

Contractor

#### ARTICLE A.3 CONTRACTOR'S INSURANCE AND BONDS

#### § A.3.1 General

§ A.3.1.1 Certificates of Insurance. The Contractor shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Article A.3 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner's written request. An additional certificate evidencing continuation of commercial liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the periods required by Section A.3.2.1 and Section A.3.3.1. The certificates will show the Owner as an additional insured on the Contractor's Commercial General Liability and excess or umbrella liability policy or policies.

**§ A.3.1.2 Deductibles and Self-Insured Retentions.** The Contractor shall disclose to the Owner any deductible or self- insured retentions applicable to any insurance required to be provided by the Contractor.

§ A.3.1.3 Additional Insured Obligations. To the fullest extent permitted by law, the Contractor shall cause the commercial general liability coverage to include (1) the Owner and Owner's Lender as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions for which loss occurs during completed operations. The additional insured coverage shall be primary and non-contributory to any of the Owner's general liability insurance policies and shall apply to both ongoing and completed operations. To the extent commercially available, the additional insured coverage shall be no less than that provided by Insurance Services Office, Inc. (ISO) forms CG 20 10 04 13, CG 20 37 04 13.

#### § A.3.2 Contractor's Required Insurance Coverage

§ A.3.2.1 The Contractor shall purchase and maintain the following types and limits of insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 18.2 of the Contract, unless a different duration is stated below: (If the Contractor is required to maintain insurance for a duration other than the expiration of the period for correction of Work, state the duration.)

Completed operations for four (4) years after Substantial Completion.

# § A.3.2.2 Commercial General Liability

- § A.3.2.2.1 Commercial General Liability insurance for the Project written on an occurrence form with policy limits of not less than One Million Dollars (\$1,000,000) each occurrence, Two Million Dollars (\$2,000,000) general aggregate, and Two Million Dollars (\$2,000,000) aggregate for products-completed operations hazard, with waiver of subrogation and providing coverage for claims including
  - .1 damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
  - .2 personal injury and advertising injury;
  - .3 damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
  - .4 bodily injury or property damage arising out of completed operations; and
  - .5 the Contractor's indemnity obligations under Section 3.18.1 of the General Conditions.
- **§ A.3.2.2.2** The Contractor's Commercial General Liability policy under this Section A.3.2.2 shall not contain an exclusion or restriction of coverage for the following:
  - .1 Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
  - .2 Claims for property damage to the Contractor's Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
  - .3 Claims for bodily injury other than to employees of the insured.
  - .4 Claims for indemnity under Section 9.15.1 of the Contract arising out of injury to employees of the insured.
  - .5 Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
  - .6 Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
  - .7 Intentionally omitted.
  - .8 Claims related to roofing, if the Work involves roofing.
  - **.9** Intentionally omitted.
  - .10 Claims related to earth subsidence or movement, where the Work involves such hazards.
  - .11 Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.
- § A.3.2.3 Business Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than One Million Dollars (\$1,000,000) per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles along with any other statutorily required automobile coverage.
- § A.3.2.4 The Contractor's Umbrella/Excess Liability insurance for the Project written on a "follow form" basis over the Commercial General Liability, Business Automobile Liability and Employers Liability Insurance with limits of Fifty Million Dollars (\$50,000,000) per claim and Fifty Million Dollars (\$50,000,000) in the aggregate with waiver of subrogation. In no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy.
- § A.3.2.5 Workers' Compensation at statutory limits.
- **§ A.3.2.6** Employers' Liability with policy limits not less than One Million Dollars (\$1,000,000) each accident, One Million Dollars (\$1,000,000) each employee, and One Million Dollars (\$1,000,000) policy limit.
- § A.3.2.7 Intentionally omitted
- § A.3.2.8 If the Contractor is required to furnish professional services as part of the Work, the Contractor shall procure Professional Liability insurance covering performance of the professional services, with policy limits in the aggregate provided by Section A.3.2.10 below.

- § A.3.2.9 If the Work involves the transport, dissemination, use, or release of pollutants, the Contractor shall procure Pollution Liability insurance, with policy limits in the aggregate provided by Section A.3.2.10 below.
- § A.3.2.10 Coverage under Sections A.3.2.8 and A.3.2.9 is procured through a Combined Professional Liability and Pollution Liability insurance policy, with combined policy limits of not less than Fifteen Million Dollars (\$15,000,000) per claim and Fifteen Million Dollars (\$15,000,000) in the aggregate.
- § A.3.2.11 Intentionally omitted.
- § A.3.2.12 Intentionally omitted.

# § A.3.3 Contractor's Other Insurance Coverage

§ A.3.3.1 Insurance selected and described in this Section A.3.3 shall be purchased from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 18.2 of the Contract, unless a different duration is stated below:

None.

#### § A.3.3.2 Intentionally Omitted

#### § A.3.4 Performance Bond and Payment Bond

The Contractor shall provide surety bonds, from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located for the Work (but not the Savings Guaranty), as follows: (Specify type and penal sum of bonds.)

Type Penal Sum (\$0.00)

Payment Bond Contract Sum plus or minus net Modifications by Change Order
Performance Bond Contract Sum plus or minus net Modifications by Change Order

Payment and Performance Bonds shall be AIA Document A312<sup>TM</sup>, Payment Bond and Performance Bond, or contain provisions identical to AIA Document A312<sup>TM</sup>, current as of the date of this Agreement.

[Illinois, May 16, 2018]