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Memo (Non-Bid Award)

To Board of Education

From Kyla Johnson-Trammell, Superintendent
Preston Thomas, Chief Systems & Services Officer

Board Meeting Date June 25, 2025

Subject Investment Grade Audit Agreement – Willdan Energy Solutions – Energy Efficiency
Investment Grade Audit Project – Division of Facilities Planning and Management

Action Requested Approval by the Board of Education of the Investment Grade Audit Agreement by and between the District and **Willdan Energy Solutions**, Oakland, CA, for the latter to install and implement energy and water saving measures at various sites for the **Energy Efficiency Investment Grade Audit Project**, in the lump-sum amount of **\$840,000.00**, with the work scheduled to commence on **June 26, 2025**, and expected to last until **April 1, 2026**.

Discussion architect, engineer, construction project manager, land surveyor, or environmental services – selected (a) based on demonstrated competence and professional qualifications (Government Code §4526), and (b) using a fair, competitive RFP selection process (Government Code §§4529.10 et seq.)

LBP (Local Business Participation Percentage) 100.00%

Recommendation Approval by the Board of Education of the Investment Grade Audit Agreement by and between the District and Willdan Energy Solutions, Oakland, CA, for the latter to install and implement energy and water saving measures at various sites for the Energy Efficiency Investment Grade Audit Project, in the lump-sum amount of \$840,000.00, with the work scheduled to commence on June 26, 2025, and expected to last until April 1, 2026.

Fiscal Impact Fund 21 Building Funds, Measure Y

Attachments

- Contract Justification Form
- Agreement, and Other Contract Documents
- Certificate of Insurance
- Routing Form



CONTRACT JUSTIFICATION FORM
This Form Shall Be Submitted to the Board Office With Every
Agenda Contract.

Legislative File ID No. 25-1447

Department: Division of Facilities Planning and Management

Vendor Name: Willdan Energy Solutions

Project Name: Energy Efficiency Investment Grade Audit

Project No.: 25066

Contract Term: Intended Start: June 26, 2025

Intended End: April 1, 2026

Total Cost Over Contract Term: \$840,000.00

Approved by: Preston Thomas

Is Vendor a local Oakland Business or has it met the requirements of the

Local Business Policy? ☐ Yes (No if Unchecked)

How was this contractor or vendor selected?

An RFQ/P process was conducted.

Summarize the services or supplies this contractor or vendor will be providing.

Vendor will conduct a district-wide IGA to identify energy and operational savings measures, determine the cost and savings of each measure, and present a measurement and verification plan and commissioning plan to verify the project savings.

Was this contract competitively bid? ☐ Check box for "Yes" (If "No," leave box unchecked)

If "No," please answer the following questions:

1) How did you determine the price is competitive?

The District conducted an RFQ/P process and believe that the vendor's qualification is best match for the District's goal and vendor's price is reasonable.

2) Please check the competitive bidding exception relied upon:

Construction Contract:

- ☐ Price is at or under UPCCAA threshold of \$75,000 (as of 1/1/25)
- ☐ CMAS contract [may only include “incidental work or service”] (Public Contract Code §§10101(a) and 10298(a)) – *contact legal counsel to discuss if applicable*
- ☐ Emergency contract (Public Contract Code §§22035 and 22050) – *contact legal counsel to discuss if applicable*
- ☐ No advantage to bidding (including sole source) – *contact legal counsel to discuss if applicable*
- ☐ Completion contract – *contact legal counsel to discuss if applicable*
- ☐ Lease-leaseback contract RFP process – *contact legal counsel to discuss if applicable*
- ☐ Design-build contract RFQ/RFP process – *contact legal counsel to discuss if applicable*
- ☐ Energy service contract – *contact legal counsel to discuss if applicable*
- ☐ Other: _____ – *contact legal counsel to discuss if applicable*

Consultant Contract:

- ☒ Architect, engineer, construction project manager, land surveyor, or environmental services – selected (a) based on demonstrated competence and professional qualifications (Government Code §4526), and (b) using a fair, competitive RFP selection process (Government Code §§4529.10 et seq.)
- ☐ Other professional or specially trained services or advice – no bidding or RFP required (Public Contract Code §20111(d) and Government Code §53060) – *contact legal counsel to discuss if applicable*
- ☐ Architect or engineer *when state funds being used* – selected (a) based on demonstrated competence and professional qualifications (Government Code §4526), (b) using a fair, competitive RFP selection process (Government Code §§4529.10 et seq.), **and** (c) using a competitive process consistent with Government Code §§4526-4528 (Education Code §17070.50)
- ☐ For services other than above, the cost of services is \$114,800 or less (as of 1/1/25)
- ☐ No advantage to bidding (including sole source) – *contact legal counsel to discuss if applicable*

Purchasing Contract:

- ☐ Price is at or under bid threshold of \$114,800 (as of 1/1/25)
- ☐ Certain instructional materials (Public Contract Code §20118.3)
- ☐ Data processing systems and supporting software – choose one of three lowest bidders (Public Contract Code §20118.1)

- ☐ Electronic equipment – competitive negotiation (Public Contract Code §20118.2) – *contact legal counsel to discuss if applicable*
- ☐ CMAS contract [may only include “incidental work or service”] (Public Contract Code §§10101(a) and 10298(a)) – *contact legal counsel to discuss if applicable*
- ☐ Piggyback contract for purchase of personal property (Public Contract Code §20118) – *contact legal counsel to discuss if applicable*
- ☐ Supplies for emergency construction contract (Public Contract Code §§22035 and 22050) – *contact legal counsel to discuss if applicable*
- ☐ No advantage to bidding (including sole source) – *contact legal counsel to discuss if applicable*
- ☐ Other: _____

Maintenance Contract:

- ☐ Price is at or under bid threshold of \$114,800 (as of 1/1/25)
- ☐ No advantage to bidding (including sole source) – *contact legal counsel to discuss*
- ☐ Other: _____

3) Explain in detail the facts that support the applicability of the exception marked above:

- Architect, engineer, construction project manager, land surveyor, or environmental services – selected (a) based on demonstrated competence and professional qualifications (Government Code §4526), and (b) using a fair, competitive RFP selection process (Government Code §§4529.10 et seq.)

Oakland Unified School District

OaklandBuilt - Facilities Planning and Management Department

LBU Scoring and Analysis Rubric: LBU Affirmation Worksheet & LBU Outline Review ▾



Project:

Project 00918 - Energy Efficiency Investment Grade Audit and Implementation of Related Conservation Measures from Energy Services Company (ESCO)

Entity Name	LBU Affirmation Worksheet	Additional Points					Overall LBU Score
		Category 1	Category 2	Category 3	Category 4	Category 5	
NORESCO	Signed - Pass ▾	1.5	1.0	1.0	0.0	0.5	4.0 ▾
Willden Energy Solutions	Signed - Pass ▾	2.0	1.0	1.0	0.5	0.5	5.0 ▾

LBU Affirmation Worksheet & Narrative:

A positive affirmation to achieve the LBU requirements as outlined by the District, inclusive of a narrative describing methods, strategies, past experience, etc. will be scored as a pass.

Category Explanations:

- **Category 1:** An outline of small and local firms with planned partnership/JV Partnership (2 Points)
- **Category 2:** Other identified opportunities for local and small local utilization; Expressed Plan/Strategies to Increase LBP - (1 Point)
- **Category 3:** Areas and/or scopes that have been identified as carve out opportunities for small, local partners - (1 Point)
- **Category 4:** Relevant California K-12 DBE, LLB, delivery method/project specific example (.5 Point)
- **Category 5:** Previously implemented methods used for successful Local Business Utilization (.5 Point)

Overall Summary - We don't doubt the commitment or ability of either of the submitting entities to do the work of meeting the District's LBU goals. One proposal submission, however, stands out - receiving the full 5 points, for their expressed experience, outlined strategies, and commitment to the District's goals.

INVESTMENT GRADE AUDIT AGREEMENT

This Investment Grade Audit Agreement (the "Contract") is made and entered into as of this day of _____, at _____, in the County of _____, State of _____, by and between _Willdan Energy Solutions_ ("ESCO"), having its principal offices at 2401 E. Katella Ave. #300 Anaheim, CA 92806_, and _Oakland Unified School District ("Owner")_ having principal offices at _1011 Union St. Oakland, CA 94607_, for the purpose of identifying certain energy and water cost saving equipment upgrades, and identifying other services designed to save energy for the Owner's property and buildings.

W I T N E S S E T H

WHEREAS, This Contract was created to obtain a Investment Grade Audit of a facility from a private energy service company (ESCO).

WHEREAS, ESCO has submitted a ESCO Response, in response to Owner's Request for Proposals (RFP), pertaining to the discovery, engineering, procurement, installation, financing, savings guarantee, maintenance and monitoring of energy and water saving measures at Owner's facilities; and

WHEREAS, Owner has selected ESCO to provide the services described herein; and

WHEREAS, Owner desires to enter into a Contract to have ESCO perform an Investment Grade Audit and Project Proposal to determine the feasibility of entering into an **Energy Services Agreement** to provide for installation and implementation of energy and water saving measures at Owner's facilities.

WHEREAS, if energy and water saving measures are determined to be feasible, and if the amount of savings can be reasonably sufficient to cover all costs, as defined by Owner, associated with an Energy Savings Performance Contracting project, the parties intend to negotiate an Energy Services Agreement under which the ESCO will design, procure, install, implement, maintain and monitor such energy and water saving measures. However, this intent does not commit Owner to entering into such Energy Services Agreement.

THEREFORE, the parties agree as follows:

1. Investment Grade Audit Report

ESCO agrees to perform a Investment Grade Audit in accordance with the Scope of Work described below in **Exhibit D-1**. ESCO agrees to complete the Investment Grade Audit and tender to Owner a final report within 270 calendar days from the execution of this Contract.

Owner agrees to assist the ESCO in performing the Investment Grade Audit in accordance with the Scope of Work described below. Owner agrees to work diligently to provide full and accurate information. ESCO agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed. The parties contemplate that this will be an iterative process and that Owner will have a reasonable amount of time to review and determine acceptance before issuing the **Notice of Acceptance (Exhibit D-2: Notice of Acceptance of Investment Grade Audit Report)**.

ESCO agrees to offer an **Investment Grade Audit Report** with a package of energy and water saving measures and with details as specified in the Scope of Work in **Exhibit D-1**.

2. Compensation to ESCO

ESCO shall be compensated as follows:

- a. **Payment through Performance Contract.** Owner shall have no payment obligations under this contract if ESCO and Owner execute an Energy Services Agreement within 120 days, allowing sufficient time for contract negotiation, attorney review, and Owner processing days, after issuance of the **Notice of Acceptance (Exhibit D-2: Notice of Acceptance of Investment Grade Audit Report)** of the final **Investment Grade Audit Report**, in which case the fee indicated in section 2(b) below shall be incorporated into ESCO's project costs in the Energy Services Agreement and paid through the project's funding mechanisms.
- b. **Non-Execution of ESA.** If Owner and ESCO do not Execute an Energy Services Agreement within 120 days as provided for in **Subsection 2(a), above, and if ESCO's Investment Grade Audit Report meets the parameters of subsection 2(c) below**, then Owner shall pay to ESCO a sum not to exceed eight hundred thirty-five thousand one hundred ninety-eight dollars (\$835,198) based on a maximum of 5,965,703 gross square feet at \$0.140 per square foot of audited square-footage, as per **Exhibit D-4: Pricing for Project**. Owner shall only pay for square-footage actually audited. Areas deemed by ESCO not to be audited will not be charged to Owner.
- c. **Project With Insufficient Savings.** Owner shall have no payment obligations under this Contract in the event that ESCO's final **Investment Grade Audit Report** does not contain a package of energy and water saving measures which, if implemented and as meeting terms of **Exhibit D-1: Scope of Work, (b) Guidelines and Requirements**, will provide Owner with cash savings sufficient to fund Owner's payments of all costs and fees associated with the Energy Services Agreement, including 1) the fee associated with the Investment Grade Audit, 2) all monthly payments to finance the measures, 3) any annual fees for measurement, monitoring, and maintenance incurred by the ESCO, and 4) all fees related to the Owner's 3rd Party Representative. Should the ESCO determine at any time during the Investment Grade Audit that savings cannot be attained to meet these terms, the Investment Grade Audit will be terminated by written notice by the ESCO to Owner. In this event this Contract shall be cancelled and Owner shall have no obligation to pay, in whole or in part, the amount specified in **Section 2(b)**.

3. Scope of Work

The Investment Grade Audit shall be performed as described in **Exhibit D-1: Scope of Work**.

4. Termination

This Contract may be terminated at any time as described below by:

a. Termination for Default/Cause

1) Default.

If the ESCO refuses or fails to timely perform any of the provisions of this contract, with such diligence as will ensure its completion within the time specified in this contract, the Owner may notify the ESCO in writing of the non-performance, and if not promptly corrected within the time specified, such officer may terminate the ESCO's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. The ESCO shall continue performance of the contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring similar goods or services elsewhere.

2) ESCO's Duties

Notwithstanding termination of the contract and subject to any directions from the Owner, the ESCO shall take timely, reasonable and necessary action to protect and preserve property in the possession of the ESCO in which the purchasing Owner has an interest.

3) Compensation

Payment for completed services delivered and accepted by Owner shall be at the contract price. Owner may withhold amounts due to the ESCO as the Owner deems to be necessary to protect Owner against damages.

4) Excuse for Nonperformance or Delayed Performance

The ESCO shall not be in default by reason of any failure in performance of this contract in accordance with its terms if such failure arises out of acts of God; acts of the public enemy; acts of the State and any governmental entity in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. Upon request of the ESCO, the Owner shall ascertain the facts and extent of such failure, and, if such officer determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the ESCO's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the purchasing Owner.

5) Erroneous Termination for Default

If after notice of termination of the ESCO's right to proceed under the provisions of this clause, it is determined for any reason that the ESCO was not in default under the provisions of this clause, or that the delay was excusable, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience clause.

b. Termination for Convenience

1) Termination

The Owner may, when the interests of the Owner so require, terminate this contract in whole or in part, for the convenience of the Owner. The Owner shall give written notice of the termination to the ESCO specifying the part of the contract terminated and when termination becomes effective. This in no way implies that the purchasing Owner has breached the contract by exercise of the Termination for Convenience Clause.

2) ESCO's Obligations

The ESCO shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination the ESCO will stop work to the extent specified. The ESCO shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The ESCO shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. The Owner may direct the ESCO to assign the ESCO's right, title, and interest under terminated orders or subcontracts to the purchasing Owner. The ESCO must still complete and deliver to the purchasing Owner the work not terminated by the Notice of Termination and may incur obligations as are necessary to do so.

3) Compensation

- a)** The ESCO shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data bearing on such claim. If the ESCO fails to file a termination claim within 90 days from the effective date of termination, the Owner may pay the ESCO, if at all, an amount set in accordance with subparagraph C of this Section.
- b)** The Owner and the ESCO may agree to a settlement provided the ESCO has filed a termination claim supported by cost or pricing data and that the settlement does not exceed the total contract price plus settlement costs, reduced by payments previously made by the purchasing Owner, the proceeds of any sales of supplies and

manufactured materials made under agreement, and the contract price of the work not terminated.

- c) Absent complete agreement, under subparagraph B of this Section, the Owner shall pay the ESCO the following amounts, provided the payments agreed to under subparagraph B shall not duplicate payments under this subparagraph:
 - (1) Contract prices for supplies or services accepted under the contract;
 - (2) Costs incurred in preparing to perform the terminated portion of the work plus a fair and reasonable profit on such portion of the work (such profit shall not include anticipatory profit or consequential damages) less amounts paid to or to be paid for accepted supplies or services; provided, however, that if it appears that the ESCO would have been sustained a loss if the entire contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss.
 - (3) Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to the ESCO's obligations paragraph of this clause. These costs must not include costs paid in accordance with subparagraph B of this Section.
 - (4) The reasonable settlement costs of the ESCO including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the terminated portion of this contract.
 - (5) The total sum to be paid the ESCO under this subparagraph C shall not exceed the total contract price plus settlement costs, reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph B, and the contract price of work not terminated.
- d) Cost claimed or agreed to under this section shall be in accordance with applicable sections of the State Procurement Code.

c. Available Funds – Contingency - Remedies

ESCO's compensation is contingent upon the continuing availability of Owner appropriations. Payments pursuant to this contract shall only be made from available funds encumbered for this Contract, and the Owner's liability for such payments shall be limited to the amount remaining of such encumbered funds. If Owner or federal funds are not appropriated, or otherwise become unavailable to fund this Contract, the Owner may immediately terminate the Contract in whole or in part without further liability in accordance with the Termination for Cause subsection of the Remedies section of this Contract. All payments are subject to the general Remedies section of this Contract.

5. Insurance

Before commencing any Work under this Contract, ESCO shall file with Owner certificates of insurance evidencing the coverage's as specified below

- a. It is agreed and understood ESCO shall maintain in full force and effect adequate commercial general liability insurance and property damage insurance, as well as workmen's compensation and employer's liability insurance pursuant to the State insurance requirements as defined below.
- b. The ESCO shall obtain, and maintain at all times during the term of this Agreement, insurance in the following kinds and amounts.
 - 1) Standard Workers' Compensation and Employer's Liability as required by State statute, including occupational disease, covering all employees at the work site.
 - 2) General Liability (minimum coverage)

- a) Combined single limit of \$1,000,000 written on an occurrence basis.
 - b) Any aggregate limit will not be less than \$2,000,000.
 - c) The ESCO must purchase additional insurance if claims reduce the annual aggregate below \$1,000,000.
- 3) Automobile Liability (minimum coverage) in the amount of \$1,000,000 combined single limit
 - 4) The Owner shall be named as an additional insured on each commercial general liability policy.
 - 5) The insurance shall include provisions preventing cancellation without 30 calendar days prior written notice, by certified mail to the Principal Representative
 - 6) ESCO shall be responsible for all claims, damages, losses or expenses, including attorney's fees, arising out of or resulting from the performance of the Services contemplated in this Contract, provided that any such claim, damage, loss or expense is caused by any negligent act, error or omission of ESCO, any Consultant or associate thereof, or anyone directly or indirectly employed by ESCO. ESCO shall submit a Certificate of Insurance at the signing of this Contract and also any notices of Renewal of said Policy as they occur.

6. Energy Services Agreement

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

7. Extent of Agreement

- a. This Contract represents the entire and integrated agreement between Owner and ESCO and supersedes all prior negotiations, representations or agreement, either written or oral. This Contract may be amended only by written instrument signed by the Owner.
- b. The Owner and ESCO understand and agree the attachment and exhibits hereto are and shall be an integral part of this Contract and the terms and provisions thereof are hereby incorporated, made a part of and shall supplement those recited herein. In the event of any conflict, or variance, the terms and provisions of this printed Agreement shall supersede, govern and control.

8. Term

The term of this Contract will become effective upon approval by the Owner's Board. The term shall end 120 plus 30 days to allow for processing of check (150 days) after signing of the **Notice of Acceptance (Exhibit D-2: Notice of Acceptance of Investment Grade Audit Report)** of the Final Investment Grade Audit Report by the Principal Representative.

9. Order of Precedence

In the event of conflict or inconsistency between this contract and its exhibits or attachments, such conflicts or inconsistencies shall be resolved by reference to the documents in the following order of priority:

- 1. State Special Provisions *These Special Provisions are required for State Owner/Owner projects.*
- 2. ***Request for Proposal Documentation & Response by ESCO***
- 3. Contract - general terms and conditions
- 4. Other exhibits or attachments

10. Owner's Special Provisions

1. **Exhibit E-1:** Fingerprinting Notice and Acknowledgement for Contracts Other than Construction Contracts

THE PARTIES HERETO HAVE EXECUTED THIS CONTRACT

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

ESCO

By  May 19, 2025

Name: Aaron Etzkorn

Title: President

OAKLAND UNIFIED SCHOOL DISTRICT

Jennifer Brouhard, President,
Board of Education

Date

Kyla Johnson-Trammell, Superintendent
and Secretary, Board of Education

Date


Preston Thomas (May 28, 2025 15:37 PDT)

05/28/2025

Preston Thomas, Chief Systems &
Services Officer

Date

Approval as to form:


James Traber, Esq.

Facilities Counsel

05/23/2025

Date

EXHIBIT D-1

INVESTMENT GRADE AUDIT SCOPE OF WORK

1. Detailed Task List

The following scope will be conducted in intervals with review milestone points/submissions at the 30%, 60%, 90%, and 100% levels of completion. The entire Investment Grade Audit Scope of Work shall be completed within 270 calendar days of the date of execution of the Investment Grade Audit Agreement (IGAA). An ECM Matrix (or similar document approved by Owner) will be used in the presentations to facilities and management teams for decision-making and approval. This includes estimated cost, savings, simple payback and expected M&V Methodology for each individual measure, while emphasizing the performance of all measures as a whole.

Project Phasing: Such as prioritizing high-need, high-savings, or mission-critical buildings—will be discussed collaboratively during the 30% IGA Phase as part of the overall project ideation and strategic planning process. Any recommended phasing approach shall be based on factors including but not limited to facility condition, utility performance, occupant needs, and alignment with the Owner's capital planning objectives. Final phasing decisions, if applicable, shall be subject to Owner approval.

1.1 30% Phase - Assessment of Needs and Opportunities

Collect General Facility Information

Owner agrees to work diligently to furnish ESCO, upon request, accurate and complete data and information, as available. Owner will allow ESCO reasonable access to facility staff to ensure understanding of existing systems and opportunities. Owner shall have final approval of ESCO access. Upon notice to ESCO, Owner may, but shall not be required to, conduct the task to collect utility information from utilities in order to reduce ESCO time and expense.

The ESCO shall collect data and background information from Owner concerning facility operation and energy and water use, including any changes to operation, energy and water use anticipated within the next 5 years. ESCO agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed. Where information is not readily available from Owner, ESCO will make a diligent effort to collect such information through the facility inspection, staff interviews, and utility companies.

Collect the following information for the past 36-month period (where reasonably available):

General Facility Information

- Building list with square footage and age (including age of major remodels or additions)
- Construction data of buildings and major additions including building envelope, window specifications/performance and roof/wall assembly.
- General use of facility

Utility Information

- Utility company invoices
- Most recent energy supply contracts for determination of baseline cost analysis

Sub Meter Information

- Historical thermal and electrical sub meter data if available

Equipment and Facility Information

- Equipment Descriptions: Descriptions of all major energy and water consuming or energy and water saving equipment
- Facility Descriptions: Description of any structural or building use changes
- Past Changes: Record of any improvements or modifications related to energy, water or operational efficiencies that have been installed during the past three years
- Future Plans: Description of current or future plans regarding building or equipment modifications
- Drawings and Specifications: Drawings, as reasonably available (may include mechanical, plumbing, electrical, building automation and temperature controls, structural, architectural, modifications and remodels).
- Original construction submittals and factory data (specifications, pump curves, etc.), as reasonably available.
- Floor plans
- Hazardous materials inspection records

Operations Information

- Occupancy schedules
- Typical building/facility usage information
- Description of current energy management procedures
- Description of current operational practices
- Operating engineer logs, maintenance work orders, etc., as available
- Records of maintenance expenditures on energy or water-using equipment, including service contracts
- Existing issues with comfort levels, controls or equipment reliability.

Any estimations and/or assumptions made during IGA development shall be agreed to by all parties.

Inventory Existing Systems and Equipment

Compile an inventory based on a physical inspection of the major electrical and mechanical systems at the Facility, including:

- Cooling systems and related equipment
- Heating and heat distribution systems
- Automatic temperature control systems and equipment
- Air distribution systems and equipment
- Outdoor ventilation systems and equipment
- Kitchen and associated dining room equipment, if applicable
- Exhaust systems and equipment
- Domestic Hot water systems
- Electric motors 5 HP and above, transmission and drive systems. Although motors under 5HP may not be inventoried, options for upgrading these motors shall still be considered (ECM type motors, etc.).
- Interior and exterior lighting
- Laundry equipment, if applicable
- Water consumption end uses, such as restroom fixtures, water fountains, irrigation, etc.
- Other major energy-using systems, if applicable
- Existing on-site generation/distributed generation systems/assets
- Renewable energy systems.

Address the following considerations:

- The loads, proper sizing, efficiencies or hours of operation for each system; (Where measurement costs, facility operating or climatic conditions necessitate, engineering estimates may be used, but for

large fluctuating loads with high potential savings, appropriate measurements are required unless waived by Owner).

- Current operating condition for each system;
- Remaining useful life of each system;
- Feasible replacement systems
- Hazardous materials and other environmental concerns
 - Please note that the ESCO will not be responsible for removal of existing hazardous materials (ex: asbestos).

Use data loggers and conduct interviews with facility operation and maintenance staff regarding systems operation, occupancy patterns and problems with comfort levels or equipment reliability.

Establish Baseline

Estimate Loads

- Estimate loads, usage and/or hours of operation for all major end uses of total facility consumption including: lighting, heating, cooling, motors (fans and pumps), plug loads, kitchen equipment, water, and other major energy and water using equipment.
- Where loading or usage are highly uncertain (including variable loads such as cooling), ESCO will use its best judgment, use of existing EMCS capabilities for trend data, or measurements from data loggers. ESCO should not assume that equipment run hours equal the operating hours of the building(s) or facility staff estimates.

Estimate Baseline Usage

- Examine utility supply contracts and utility rate structure applicable to each building.
- If building-specific utility data is not available or not useful, then provide other means (for example sub meters and/or data loggers) to establish baseline consumption. Establish base year and/or baseline consumption.
- Present base year and/or baseline consumption in terms of energy or water units (kWh, kW, ccf, Therms, gallons, or other units used in bills), in terms of dollars, and in terms of dollars per square foot.
- Describe the process used to determine the base year and/or baseline consumption and demand (averaging, selecting most representative contiguous 12 months, or sampling; sampling may include temporary sub meters or data loggers where needed).
- Consult with facility personnel to account for any anomalous schedule or operating conditions on billings or equipment conditions that could skew the base year and/or baseline representation.
- ESCO will (as best as possible) account for periods of time when equipment was broken or malfunctioning in calculating the base year or baseline definition period.

Reconcile Estimates

- Reconcile annual end-use estimated consumption and demand with the metered data collected during the IGA phase and extrapolated to reflect the annual base year consumption. The purpose of this is to place reasonable limits on potential savings.
- Reconcile the annual end use estimated consumption with the annual Base Year consumption to within 5% for electricity (kWh), fossil fuels and water.
- Reconcile the contribution to electric peak demand for each end use within 5% of the annual Base Year peak.
- The “miscellaneous” category shall not be more than 5%.
- This reconciliation will place reasonable “real-world” limits on potential savings.

Baseline Adjustments

- Propose adjustments to the baseline for energy and water saving measures that will be implemented in the future.
- Baseline adjustments may be made only with advance approval by Owner.

1.2 60% Phase - Initial Analysis of Measures

Identify Potential Measures

Interviews: Interview the facility manager and a sampling of maintenance staff, subcontractors and occupants of each building regarding:

- Facility operation, including energy management and operating procedures
- Equipment maintenance problems
- Comfort problems and requirements
- Equipment reliability
- Projected equipment needs
- Occupancy and use schedules for the facility and specific equipment.
- Facility improvements – past, planned and desired
- Other project sustainability goals, metrics or standards (i.e. LEED, ENERGY STAR, Net Zero Energy, etc.)

Surveys: Survey major energy and water-using equipment, including:

- lighting (indoor and outdoor)
- heating and heat distribution systems
- cooling systems and related equipment
- automatic temperature control systems and equipment
- air distribution systems and equipment
- outdoor ventilation systems and equipment
- exhaust systems and equipment
- domestic hot water systems
- electric motors
- transmission and drive systems
- electrical transformers
- special systems (kitchen/dining equipment, etc.)
- renewable energy systems
- Other energy using systems
- water consuming systems (restroom fixtures, water fountains, irrigation systems, etc.)
- plug loads

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

Assess potential measures:

Consider the following for each system:

- Comfort and maintenance problems
- Energy use, loads, proper sizing, efficiencies and hours of operation
- How the measures work together (i.e. lighting upgrades can introduce less heat which requires less space cooling)
- Current operating condition
- Remaining useful life
- Feasibility of system replacement and replacement costs
- Owner's future plans for equipment replacement or building renovations
- Facility operation and maintenance procedures that could be affected
- Capability to monitor equipment or system performance and verify savings

List Measures: Develop a preliminary list of potential energy and water saving measures.

- List all potential opportunities that will be considered for the ESPC.

- Consider technologies in a comprehensive approach including, but not limited to: lighting systems, heating/ventilating/air conditioning equipment and distribution systems, controls systems, building envelope, motors, kitchen equipment, pools, renewable energy systems, other special equipment, irrigation systems, and water saving devices.
- Identify measures which appear likely to be cost effective and therefore warrant detailed analysis

Evaluate Measures:

- Estimate the cost, savings and life expectancy of each proposed measure.
- Conduct a preliminary analysis of potential measures using life cycle cost analysis and examining the value of non-energy benefits of specific measures

Present Findings

- Submit the preliminary findings and list of measures to Owner based on the agreed upon schedule.
- Meet with Owner to present preliminary findings prior to thorough analysis.
- Describe how the project economics, savings, and financials will meet Owner's terms for completing the IGA phase. Discuss assessment of energy use, savings potential, and project opportunities. Owner shall have the option to reject calculations of savings, potential savings allowed, or project recommendations or request recalculations of savings, potential savings allowed, or related to project recommendations.
- Develop a list of recommended measures with Owner for further analysis.

1.3 90% Phase - Further Analysis for Investment Grade Audit

Further estimate the cost, savings and life expectancy of each proposed measure.

Savings Analysis

- Follow the methodology of ASHRAE or other nationally-recognized authority following the engineering principle(s) identified for each retrofit option
- Utilize assumptions, projections and baselines which best represent the true value of future energy or operational savings. Include accurate marginal costs for each unit of savings at the time the audit is performed, documentation of material and labor cost savings, adjustments to the baseline to reflect current conditions at the facility, calculations which account for the interactive effects of the recommended measures.
- Use best judgment regarding the employment of instrumentation and recording durations so as to achieve an accurate and faithful characterization of energy use
- Provide analysis methodology, supporting calculations and assumptions used to estimate savings.
- Manual calculations should disclose essential data, assumptions, formulas, etc. so that a reviewer could replicate the calculations based on the data provided
- For savings estimates using computer simulations, Company shall provide access to the program and all inputs and assumptions used, if requested by Owner.
- Provide detailed calculations for any rate savings proposals
- Provide detailed supporting calculations for any proposed maintenance savings
- Estimate any environmental costs or benefits of the proposed ECMs (e.g. disposal costs, avoided emissions, water conservation, etc.)
- Specify Facility operations and maintenance procedures which will be affected by the installation/implementation of the proposed ECMs.
- Establish standards of comfort for each building which will be discussed and agreed to by all parties and included in the IGA report.

Inflation & Escalation Rates

Any general inflation rates and/or escalation rates will be pre-approved by Owner and mutually agreed upon. Escalation rates shall be justified and at a minimum based on DOE's Energy Escalation Rate Calculator (EERC) based on Energy Information Administration (EIA) energy price projections. A calculator may be used to determine the maximum value as developed by the National Institute of Standards and Technology (NIST) and the US Department of Energy's Federal Energy Management Program (FEMP). The energy escalation calculation tool can be found at the following website (<https://pages.nist.gov/eerc/>). Owner may authorize ESCO to utilize additional resources to further vet escalation values.

Cost Estimates

Provide detailed estimates of costs associated with the installation, implementation and commissioning of each of the ECMs proposed in the Audit including breakouts for labor, materials, and equipment. Markups and fees must be consistent with those presented in **ESCO's RFP Response and those documented in Exhibit D-4.**

Provide estimates of monthly and/or costs associated with sustaining the project performance including breakouts for maintenance fees, measurement and monitoring fees, and training fees.

Measurement and Verification Plan

- Provide a final draft measurement and verification plan for each proposed ECM
- Develop a measurement and verification plan for each measure
- Follow additional guidelines for analysis and report preparation given below.
- ESCO will use best industry standards for M&V plan development. At a minimum IPMVP shall be used and additional standards including FEMP M&V guidelines should be considered.

Commissioning Plan

- Provide a preliminary commissioning plan for the proposed ECMs.

Operations and Maintenance Plan

- Develop a preliminary Operations and Maintenance Plan.

Training Plan

- Develop a preliminary Training Plan for proposed ECMs.

1.4 100% Phase - Final Investment Grade Audit Report

The final Investment Grade Audit Scope of work shall be completed within 180 days of the date of execution of this Contract.

Investment Grade Audit Report

The Investment Grade Audit report includes:

Overview

- Contact information
- Executive Summary

- Description of the facility, measures evaluated, analysis methodology, results
- Summary table presenting the cost and savings estimates for each measure and for the project as a whole.
- Summary table of recommended energy and water saving measures, including total and itemization for each measure of total design and construction cost, annual maintenance costs, the first year cost avoidance (in dollars and energy units), simple payback and equipment service life
- Any cost savings due to changes to utility rates or commodity costs due to changes in metering, commodity procurement, etc.
- Summary of annual energy and water use and costs by fuel type and costs of existing or base year condition
- Calculation of energy and cost savings expected if all recommended measures are implemented, and total percentage savings of total facility energy cost.
- Description of the existing facility, mechanical and electrical systems
- Summary description of measures, including estimated costs and savings for each as detailed above
- Summary of recommended Owner related actions (i.e. internal occupant energy reduction programs or competitions, plug load reduction measures, procurement recommendations- laptops not desktops, etc.)
- Discussion of measures considered but not investigated in detail
- Summary of the value beyond energy cost savings (i.e. improvement to learning environment, student engagement, campus sustainability goals, greenhouse gas reduction, employee retention and recruiting benefits, employee productivity benefits, etc.). Qualitative at a minimum, quantitative would be best.
- Conclusions and recommendations

Baseline and/or base year energy use

- Description and itemization of current billing rates, including schedules and riders.
- Summary of all utility bills for all fuel types and water.
- Identification and definition of base year consumption and description of how established
- Provide detail on baseline adjustments, if any, as approved by Owner.
- Reconciliation of estimated end use consumption (i.e. lighting, cooling, heating, fans, plug loads, etc.) with base year (include discussion of any unusual findings)

Description of each operational, energy and water saving measure

Written description

- Existing conditions
- Description of equipment to be installed and how it will function
- Detailed descriptions for each measure including analysis method, supporting calculations (submitted in appendices), results, proposed equipment and implementation issues, including a discussion of facility operations and maintenance procedures that will be affected by installation/implementation.
- Plan for installing or implementing the recommendation.
- Discussion of the conclusions, observations and caveats regarding cost and savings calculations.

Savings calculations

- Base year energy use and cost
- Post-retrofit energy use and cost
- Savings calculations including analysis methodology, supporting calculations and assumptions used.

- Annual savings calculations. The cost savings for all energy saving measures must be estimated for each year during the contract period. Savings must be able to be achieved each year (cannot report average annual savings over the term of the contract).
- Savings calculations must be limited to savings allowed by Owner as described above.
- Percent cost-avoidance projected
- Description and calculations for any proposed rate changes
- Explanation of how savings interactions between retrofit options is accounted for in calculations.
- Operation and maintenance savings, including detailed calculations and description. Ensure that maintenance savings are only applied in the applicable years and only during the lifetime of the particular equipment.
- If computer simulation is used, include a short description and state key input data and software used. If requested by Owner, access will be provided to the program and all assumptions and inputs used, and/or printouts shall be provided of all input files and important output files and included in the Financial Grade Operational Audit with documentation that explains how the final savings figures are derived from the simulation program output printouts
- If manual calculations are employed, formulas, assumptions and key data shall be stated.
- Conclusions, observations, caveats

Cost estimate

- A detailed narrative of the construction scope of work and open book pricing model that builds up the cost to a total fixed-firm price. Include all anticipated costs associated with installation and implementation. Provide specifications for major mechanical components as well as detailed lighting and water fixture counts.
- Engineering/design costs
- ESCO/vendor estimates for labor, materials, and equipment; include special provisions, overtime, etc., as needed to accomplish the work with minimum disruption to the operations of the facilities.
- Permit costs
- Construction management fees
- Environmental costs or benefits (disposal, avoided emissions, handling of hazardous materials, etc.)
- Note that all markups and fees stated in **Exhibit D-4** shall be used in the cost estimates, unless otherwise documented and justified due to change in scope or size of project or other unforeseen circumstances agreed to by Owner in writing.
- Conclusions, observations, caveats
- Other cost categories as defined above under “markups” in Section 3b above.

Other

- Estimate of average useful service life of equipment
- Preliminary commissioning plan
- Preliminary measurement and verification plan, following the current version of the International Performance Measurement and Verification Protocol (IPMVP), explaining how savings from each measure is to be measured and verified (description of Option A, B, C, or D will be implemented for the measure).

- Discussion of impacts that facility would incur after contract ends. Consider operation and maintenance impacts, staffing impacts, budget impacts, etc., and identify who is responsible for maintenance.
- Compatibility with existing energy management control and/or building automation systems.
- Complete appendices that document the data used to prepare the analyses. Describe how data were collected.

Report Submissions and Review Process (recommended but can be modified based upon IGA development tracking).

- 30% IGA Report (shall be completed within 90 calendar days after execution of this Contract). Facility descriptions (general, envelope, lighting, HVAC, controls, water); baseline lighting and water audit; equipment inventories; baseline EMS trending and data logger measurements (if completed, acceptable to submit at 60% report). This is to be submitted after the Scope of Work in Section 1.1 of this document is completed.
- 60% IGA Report (shall be completed within 150 calendar days after execution of this Contract) – Used as a scoping document to outline potential ECMs that will be feasible to include in performance contract and those that will not; high-level cost and savings analysis; draft pro forma/financial models; draft M&V plan; submission of supporting data including EMS trending analyses and data logger results; baseline energy simulation model (if applicable) input files and output reports.
This is to be submitted after the Scope of Work in Section 1.2 of this document is completed.
- 90% IGA Report (shall be completed within 210 calendar days of the date of execution of this Contract) – Baseline energy and water consumption/cost analysis per site and per building; utility consumption allocation by end-use; building EUI and other performance metrics; Executive summary with ECM list economics and pro forma; facility descriptions; energy and water analysis; ECM section with detail descriptions existing conditions and proposed upgrades; final M&V plan; final ECM costs following open-book pricing model; final ECM savings analyses – spreadsheet models or energy models (input and outputs if applicable); appendices for supporting data including EMCS trending data. This is to be submitted after the Scope of Work in Section 1.3 of this document is completed.
- 100% IGA Report, which shall incorporate all necessary engineering, economic, financial, and overall scope of work changes, as well as all Owner and 3rd Party comment resolutions, shall be completed within 270 calendar days of the execution of this Contract. This is to be submitted after the Scope of Work in Section 1.4 of this document is completed.

Following submission of the 30%, 60%, and 90% IGA Reports, the Owner shall have a maximum of **ten (10) business days** to review and either (a) approve the report for progression to the next phase or (b) return written comments, questions, or requested revisions to the ESCO. If the Owner fails to respond within the ten (10) business day period, the report shall be deemed approved for the purpose of continuing to the next milestone, unless the Owner provides written notice within such period requesting a specific extension, not to exceed five (5) additional business days. Upon receipt of Owner comments, ESCO shall respond within five (5) business days, and a conference call shall be scheduled promptly to resolve any outstanding issues. Milestone progression shall occur only after Owner has provided written approval or the report is deemed approved as outlined above.

EXHIBIT D-2

NOTICE OF ACCEPTANCE OF INVESTMENT GRADE AUDIT REPORT

Notice of Acceptance

Date of Notice _____

Notice is hereby given that ***Owner*** accepts the Investment Grade Audit and Project Development Proposal by ESCO, as contemplated in **Section 2 of the Investment Grade Audit \ Contract** dated _____.

Owner Name

By _____

Date

When completely executed, this form is to be sent by certified mail to the ESCO by Owner Name.

EXHIBIT D-3

SAVINGS MEASUREMENT AND VERIFICATION PLAN

The M&V plan will be developed per the most recent IPMVP guidelines for M&V of annual guaranteed savings. This plan and report shall be thoroughly reviewed by Owner and its 3rd Party Owner's Representative. Energy-related cost savings shall be measured and/or calculated as specified in the savings M&V Plan. Upon acceptance of construction by Owner, an annual M&V Report shall be provided to Owner for the previous performance year to provide verification of savings. The M&V report shall be submitted within 60 days of the anniversary of the performance period Commencement Date.

In the event the Energy and Cost Savings achieved during such guarantee year are less than the Guaranteed Energy and Cost Savings as defined in the agreed to Savings Guarantee, the ESCO shall pay the Owner an amount equal to the shortfall. The ESCO shall remit such payments to the Owner within an agreed upon time frame (in days) of written notice by the Owner of such monies due. The ESCO shall also be obligated to remedy the ECM deficiencies causing the shortfall at no cost to the Owner.

Prepare the M&V Plan as outlined below.

List of Processes and Tables:

Risk, Responsibility and Performance Matrix.

M&V Plan and Savings Calculation Methods

- Proposed Annual Savings Overview
- Site Use and Savings Overview (Optional)
- M&V Plan Summary
- Schedule of Verification Reporting Activities
- Proposed Annual Savings For ECM
- Expected Year 1 Savings for ECM

Risk, Responsibility and Performance Matrix.

The ESCO shall complete and include the matrix below to summarize the allocation of responsibility for key items related to M&V.

RISK, RESPONSIBILITY AND PERFORMANCE MATRIX

RESPONSIBILITY/DESCRIPTION	CONTRACTOR PROPOSED APPROACH
1. Financial	
a. Interest rates: Neither the contractor nor the Owner has significant control over prevailing interest rates. Higher interest rates will increase project cost, financing/project term, or both. The timing of the TO signing may impact the available interest rate and project cost.	
b. Construction costs: The contractor is responsible for determining construction costs and defining a budget. In a fixed-price design/build contract, the Owner assumes little responsibility for cost overruns. However, if construction estimates are significantly greater than originally assumed, the contractor may find that the project or measure is no longer viable and drop it before TO award. In any design/build contract, the Owner loses some design control. Clarify design standards and the design approval process (including changes) and how costs will be reviewed.	

<p>c. M&V confidence: The Owner assumes the responsibility to determine the confidence that it desires to have in the M&V program and energy savings determinations. The desired confidence will be reflected in the resources required for the M&V program, and the ESCO must consider the requirement prior to submittal of the final proposal. Clarify how project savings are being verified (e.g., equipment performance, operational factors, energy use) and the impact on M&V costs.</p>	
<p>d. Energy Related Cost Savings: The Owner and the contractor may agree that the project will include savings from <i>recurring</i> and/or <i>one-time</i> costs. This may include one-time savings from avoided expenditures for projects that were appropriated but will no longer be necessary. Including one-time cost savings before the money has been appropriated may involve some risk to the Owner. Recurring savings generally result from reduced O&M expenses or reduced water consumption. These O&M and water savings must be based on actual spending reductions. Clarify sources of nonenergy cost savings and how they will be verified.</p>	
<p>e. Delays: Both the contractor and the Owner can cause delays. Failure to implement a viable project in a timely manner costs the Owner in the form of lost savings, and can add cost to the project (e.g., construction interest, re-mobilization). Clarify schedule and how delays will be handled.</p>	
<p>f. Major changes in facility: The Owner controls major changes in facility use, including closure. Clarify responsibilities in the event of a premature facility closure, loss of funding, or other major change.</p>	
<p>2. Operational</p>	
<p>a. Operating hours: The Owner generally has control over operating hours. Increases and decreases in operating hours can show up as increases or decreases in “savings” depending on the M&V method (e.g., operating hours multiplied by improved efficiency of equipment vs. whole-building/utility bill analysis). Clarify whether operating hours are to be measured or stipulated and what the impact will be if they change. If the operating hours are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>	
<p>b. Load: Equipment loads can change over time. The Owner generally has control over hours of operation, conditioned floor area, intensity of use (e.g., changes in occupancy or level of automation). Changes in load can show up as increases or decreases in “savings” depending on the M&V method. Clarify whether equipment loads are to be measured or stipulated and what the impact will be if they change. If the equipment loads are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>	
<p>c. Weather: A number of energy efficiency measures are affected by weather. Neither the contractor nor the Owner has control over the weather. Should the Owner agree to accept risk for weather fluctuations, it shall be contingent upon aggregate payments not exceeding aggregate savings. Clearly specify how weather corrections will be performed.</p>	
<p>d. User participation: Many energy conservation measures require user participation to generate savings (e.g., control settings). The savings can be variable and the contractor may be unwilling to invest in these measures. Clarify what degree of user participation is needed and utilize monitoring and training to mitigate risk. If performance is stipulated, document and review assumptions carefully and consider M&V to confirm the capacity to save (e.g., confirm that the controls are functioning properly).</p>	
<p>3. Performance</p>	
<p>a. Equipment performance: The contractor has control over the selection of equipment and is responsible for its proper installation, commissioning, and performance. The contractor has responsibility to demonstrate that the new improvements meet expected performance levels including specified equipment capacity, standards of service, and efficiency. Clarify who is responsible for initial and long-term performance, how it will be verified, and what will be done if performance does not meet expectations.</p>	

b. Operations: Performance of the day-to-day operations activities is negotiable and can impact performance. However, the contractor bears the ultimate risk regardless of which party performs the activity. Clarify which party will perform equipment operations, the implications of equipment control, how changes in operating procedures will be handled, and how proper operations will be assured.	
c. Preventive Maintenance: Performance of day-to-day maintenance activities is negotiable and can impact performance. However, the contractor bears the ultimate risk regardless of which party performs the activity. Clarify how long-term preventive maintenance will be assured, especially if the party responsible for long-term performance is not responsible for maintenance (e.g., contractor provides maintenance checklist and reporting frequency). Clarify who is responsible for performing long-term preventive maintenance to maintain operational performance throughout the contract term. Clarify what will be done if inadequate preventive maintenance impacts performance.	
d. Equipment Repair and Replacement: Performance of day-to-day repair and replacement of contractor-installed equipment is negotiable, however it is often tied to project performance. The contractor bears the ultimate risk regardless of which party performs the activity. Clarify who is responsible for performing replacement of failed components or equipment replacement throughout the term of the contract. Specifically address potential impacts on performance due to equipment failure. Specify expected equipment life and warranties for all installed equipment. Discuss replacement responsibility when equipment life is shorter than the term of the contract.	

M&V PLAN AND SAVINGS CALCULATION METHODS OUTLINE

Fill in the following tables or provide equivalent information.

PROPOSED ANNUAL SAVINGS OVERVIEW

[Include all applicable fuels/commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MBtu/yr)**	Water savings (gallons/yr)	Other energy savings (MBtu/yr)**	Total energy and water cost savings, Year 1 (\$/yr)	Other energy-related O&M cost savings, Year 1 (\$/yr)	Total cost savings, Year 1 (\$/yr)
Total savings									
First Year Guaranteed Cost Savings: \$									
Notes *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings. MBtu=10 ⁶ Btu. **If energy is reported in units other than MBtu, provide a conversion factor to MBtu for link to cost schedules (e.g., 0.003413 MBtu/kWh).									

SITE USE AND SAVINGS OVERVIEW

	Total energy savings (MBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MBtu/yr)**	Water savings (gallons/yr)	Other energy savings (MBtu/yr)**
--	--------------------------------	----------------------------------	----------------------------------	---------------------------------	----------------------------	----------------------------------

Total proposed project savings						
Usage for entire site**						
% Total site usage saved						
Project square footage (KSF)						
Total site square footage (KSF)						
% Total site area affected						
Notes MBtu=10 ⁶ Btu *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings. **If energy is reported in units other than MBtu, provide a conversion factor to MBtu for link to cost schedules (e.g., 0.003413 MBtu/kWh). ***Define usage period. KSF = 10 ³ square feet.						

M&V PLAN SUMMARY

ECM No.	ECM Description	M&V Option Used*	Summary of M&V Plan

*M&V options include A, B, C, and D of the International Performance Measurement and Verification Protocol (IPMVP).

SCHEDULE OF VERIFICATION REPORTING ACTIVITIES

Item	^a Recommended time of submission	^a Owner's review and acceptance period
Post-Installation Report	30 to 60 days after acceptance	30 days
Annual Report	30 to 60 days after annual performance period	30 days

^aTimes are recommended based on industry practice; modify as needed.

PROPOSED ANNUAL SAVINGS FOR EACH ECM

[Include all applicable fuels/commodities for project, such as: electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

	Total energy use (MBtu/yr)	Electric energy use (kWh/yr)	Electric energy cost, Year 1 (\$/yr)	Electric demand* (kW/yr)	Electric demand cost, Year 1 (\$/yr)	Natural gas use (MBtu/yr)**	Natural gas cost, Year 1 (\$/yr)	Water use (gallons/yr)	Water cost, Year 1 (\$/yr)	Other energy use (MBtu/yr)**	Other energy cost, Year 1 (\$/yr)	Other energy-related O&M costs, Year 1 (\$/yr)	Total costs, Year 1 (\$/yr)
Baseline use													
Post-installation use													
Savings													

Notes

*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.

MBtu = 10⁶ Btu.

**If energy is reported in units other than MBtu, provide a conversion factor to MBtu for link to cost schedules (e.g., 0.003413 MBtu/kWh).

ECM-SPECIFIC M&V PLAN AND SAVINGS CALCULATION METHODS

Develop section for each ECM.

- Summarize the scope of work, location, and how cost savings are generated. Describe source of all savings including energy, water, O&M, and other (if applicable).
- Specify the M&V guideline and option used from the International Performance Measurement and Verification Protocol (IPMVP).
- Provide an overview of M&V Activities for ECM. Explain intent of M&V plan, including what is being verified.
- Provide an overview of savings calculations methods for ECM. Provide a general description of analysis methods used for savings calculations.

Proposed Energy and Water Savings Calculations and Methodology

- Provide detail description of analysis methodology used. Describe any data manipulation or analysis that was conducted prior to applying savings calculations.
- Detail all assumptions and sources of data, including all stipulated values used in calculations.
- Include equations and technical details of all calculations made. (Use appendix and electronic format as necessary.) Include description of data format (headings, units, etc.).
- Details of any savings or baseline adjustments that may be required.
- Detail energy and water rates used to calculate cost savings. Provide post-acceptance performance period energy and water rate adjustment factors.
- Detail proposed savings for this energy conservation measure for post-acceptance performance period. Include table - Proposed Annual Savings for Each ECM.

Operations and Maintenance Cost Savings

- Provide justification for O&M cost savings. Describe how savings are generated. Detail cost savings calculations.
- Provide post-acceptance performance period other cost savings adjustment factors.

Details of other savings (if applicable)

- Provide justification for cost savings. Describe how savings are generated. Detail cost savings calculations.
- Provide post-acceptance performance period other cost savings adjustment factors.

Post-Installation M&V Activities - Describe the intent of post-installation verification activities, including what will be verified.

- Describe variables affecting post-installation energy or water use. Include variables such as weather, operating hours, set point changes, etc. Describe how each variable will be quantified, i.e., measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.
- Define key system performance factors characterizing the post-installation conditions such as lighting intensities, temperature set points, etc.
- Define requirements for Owner witnessing of measurements if different than whole project data requirements.
- Provide details of post-installation data to be collected, including: Parameters to be monitored, Details of equipment to be monitored (location, type, model, quantity, etc.), Sampling plan, including details of usage groups and sample sizes, Duration, frequency, interval, and seasonal or other requirements of measurements, Monitoring equipment to be used, Installation requirements for monitoring equipment, Calibration requirements/procedures, Expected accuracy of measurements/monitoring equipment, Quality control procedures to be used, Form of data to be collected (.xls, .csvs, etc.), Sample data collection forms (optional)
- Detail data analysis to be performed.

Post-Acceptance Performance Period Verification Activities

- Describe variables affecting post-acceptance performance period energy or water use. Include variables such as weather, operating hours, set point changes, etc. Describe how each variable will be quantified, i.e., measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.
- Define key system performance factors characterizing the post-acceptance performance period conditions. Include factors such as comfort conditions, lighting intensities, temperature set points, etc.
- Describe the intent of post-acceptance performance period verification activities – what will be verified.
- Provide detailed schedule of post-acceptance performance period verification activities and inspections.
- Define requirements for Owner witnessing of measurements if different than whole project data requirements.
- Provide details of post-acceptance performance period data to be collected, including: Parameters to be monitored, Details of equipment to be monitored (location, type, model, quantity, etc.), Sampling plan, including details of usage groups and sample sizes, Duration, frequency, interval, and seasonal or other requirements of measurements, Monitoring equipment to be used, Installation requirements for monitoring equipment, Calibration requirements/procedures, Expected accuracy of measurements/monitoring equipment, Quality control procedures to be used, Form of data to be collected (.xls, .csv, etc.), Sample data collection forms (optional)
- Detail data analysis to be performed.
- Define O&M and repair reporting requirements. Detail verification activities and reporting responsibilities of Owner and contractor on operations and maintenance items. Define reporting schedule.

EXHIBIT D-4

PROJECT PRICING

The below schedule is a deliverable that summarizes the pricing structure and the proposed project costs and price. ESCO shall complete this chart as a project deliverable as described in **Exhibit D-1– Scope of Work**

Cost Markups (as provided in the ESCO Proposal)

	Project Budget Category	Maximum Percentage	Price/Cost
a	Subcontractor Costs (Contractor Costs to ESCO)	N/A	
b	Other Direct Purchases of Equipment, Material, Supplies (Supplier Costs to ESCO)		
c	Total of Hard Costs		$c = a + b$
d	Project Development	2.50%	
e	Design/Engineering	7.50%	
f	Project Management	7.00%	
g	Permits	0.00%	
h	Performance Bond	0.00%	
i	Payment Bond	0.00%	
j	Commissioning	3.00%	
K	Measurement & Verification	1.00%	
l	Training	0.50%	
m	Contingency	3.00%	
n	Warranty Service	0.50%	
o	Total of Hard Costs & ESCO Fees	25.00%	$o = c + \text{sum}(d:n)$
p	Overhead	9.5%	
q	Profit	5.0%	
r	PROJECT PRICE SUB TOTAL w/OH &P	39.5%	$r = o + p + q$

Assumptions for Cost Markup Table Above
Rows D - N are calculated as a percent of Row C
Rows P & Q are calculated as a percent of Row O

Self-Performed Work Fees

The table below provides the position descriptions and hourly rates (with Overhead and Profit applied) for labor and services as performed by your company. The purpose of this is to enable confirmation through open book pricing.

Position	Rate
Project Development Manager	\$169
Lead Project Engineer	\$162
Project Engineer	\$141
Construction Manager	\$134
Construction Superintendent	\$115
Operations & Maintenance Manager	\$107
Measurement & Verification Manager	\$113
HVAC Skilled Trades Professional	\$121
Electrical Skilled Trades Professional	\$132

Audit Fee

Below is the Not-to-Exceed fee to conduct the Investment Grade Audit, on a cost per square foot basis and total price.

NTE AUDIT FEES			
a	Investment Grade Audit	\$0.14/SQFT	
b	Total Square Feet (SQFT)	5,965,703	
c	Total Price for IGA	\$835,198	c = a x b

COVER LETTER

April 10, 2025

Kenya Chatman, Executive Director of Facilities

Oakland Unified School District (OUSD)

Willdan commends OUSD on its call to action with the 2020 Climate Emergency Action Resolution and current development of a Sustainability Policy and subsequent Sustainability Plan. OUSD has implemented impressive sustainability-focused projects including 3.6 megawatts of rooftop and parking lot solar photovoltaic systems at 16 schools, the first fully electrified district-wide bus fleet in the United States, significant installations of electric vehicle charging stations, and recent zero net energy new construction projects at Cole Administration and the Central Kitchen/Instructional Farm.

Willdan is excited to partner with OUSD and build on those impressive successes by bringing a fresh and innovative approach to energy savings performance contracting (ESPC) that goes far beyond the basic auditing, "low-hanging fruit only" solutions, and lackluster implementation that has tarnished the traditional energy services company (ESCO) industry in the past. Our difference starts upfront by establishing a true "Sustainability Road Map" including facility, energy, and decarbonization master planning. This Road Map will be the foundation for OUSD and Willdan to systematically plan, develop, budget, and execute projects that accomplish your goals of 100% clean electricity by 2030 and phasing out fossil fuels use by 2040. Willdan's key differentiators for OUSD include:

- **NATIONWIDE DECARBONIZATION MASTER PLANNING LEADER:** Willdan has been at the forefront of energy, decarbonization, and electrification planning since it began gaining popularity in the early 2000's. Our team has developed hundreds of specialized strategic master plans for similar K-12, higher education, and local government clients, including New York City (NYC) to establish its 4,000 building [Local Law 97 Decarbonization Master Plan](#).
- **PROVEN TRACK RECORD WITH LARGE METROPOLITAN K-12 DISTRICTS:** Willdan has partnered with four of the largest districts in the country: Los Angeles USD, Clark County School District (Las Vegas), NYC Public Schools, and Chicago Public Schools, on contracts all valued over \$100M+. We understand the challenges large urban districts face to implement district-wide efforts.
- **EXPERTS IN MAXIMIZING FUNDING:** Willdan uses a dedicated, in-house team of accredited funding specialists and our Willdan Financial Services division exhausts all national, state, and local funding sources. We are also the leading administrator of utility incentive programs in California. In the last 15 years, we secured \$3B+ in financing, incentives, and grants for our customers.
- **WE ARE NOT A TRADITIONAL ESCO:** With our 60-year history as an engineering-centric firm, Willdan develops unbiased, innovative solutions. Our team began providing ESPC projects 15 years ago with the goal of overcoming the stigmas of the traditional ESCO model: we provide detailed engineering, sound implementation, full transparency, and a true guarantee.
- **SUCCESSFUL HISTORY IN OAKLAND:** Willdan has completed ESPC and turnkey performance-based projects in and around Oakland for years now including multiple phases of work at the Elihu Harris State Building, a major Alameda county-wide ESPC currently in development, and PG&E GK12 utility incentive electrification program retrofits. Our team invests in the communities we serve, and emphasizes equitable opportunity and participation, as evidenced by our record exceeding SLBE/SLRBE/LBE requirements for recent local projects.
- **LOCAL BUSINESS INCUBATOR:** Willdan proposes to partner with Oakland USD to create a local business incubator to support both the facility projects and the community. Establishing this incubator will be an integral component of our offering with the sole objective of increasing the number of qualified local businesses to meet the needs of this project and future projects of the district. Potential energy and operational savings could be used to fund this initiative for the duration of our construction phase. We welcome the opportunity to brainstorm the feasibility of this concept with Oakland USD.

With 150+ team members located in the Bay Area and Northern California, the Willdan team is excited to partner with OUSD and prove that our approach to master planning and ESPC will exceed the district's sustainability, deferred maintenance, and funding goals.

Respectfully submitted,

David Daniel, AIA, LEED AP, Senior Vice President

Willdan's proposal is in response to OUSD's RFP/Q "TO PROVIDE ENERGY EFFICIENCY INVESTMENT GRADE AUDIT AND IMPLEMENTATION OF RELATED CONSERVATION MEASURES FROM ENERGY SERVICES COMPANY," and the information included in this proposal is accurate. We hereby acknowledge receipt of Addendum #1.

Primary Contact: David Daniel | 2401 E Katella Ave. Suite 300 | Anaheim, CA 92806 | ddaniel@willdan.com | 619.980.2504 | www.willdan.com





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

11/9/2025

5/22/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Insurance Brokers, LLC CA License #0B99399 777 S. Figueroa St., 52nd Floor Los Angeles CA 90017 (213) 689-0065	CONTACT NAME: PHONE (A/C, No. Ext): E-MAIL ADDRESS: FAX (A/C, No): INSURER(S) AFFORDING COVERAGE INSURER A: Travelers Property Casualty Company of America INSURER B: INSURER C: INSURER D: INSURER E: INSURER F: NAIC # 25674
INSURED 1506055 Willdan Energy Solutions 2401 East Katella Avenue Suite 300 Anaheim, CA 92806	

COVERAGES**CERTIFICATE NUMBER:** 21860190**REVISION NUMBER:** XXXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Emp. Benefits Liab. <input checked="" type="checkbox"/> Contr. Liab. Incl. GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input type="checkbox"/> OTHER:	Y	Y	P-630-A1178471-TIL-24	11/9/2024	11/9/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	N	N	810-A1161741-24-43-G	11/9/2024	11/9/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y / N <input checked="" type="checkbox"/> N / A		Y	UB-8Y032268-24-43-G	11/9/2024	11/9/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Oakland USD - 2025 ESPC IGA (910027.SSTM.032). Oakland Unified School District in Alameda County, Owner, and governing board, officers, agents, trustee, employees, and any other person or entity are included as Additional Insured(s) in accordance with the provisions of the General Liability policy. The General Liability policy evidenced herein are Primary and Non-Contributory to other insurance available to an Additional Insured, but only in accordance with the provisions of the policies. **Continue on Next Page**

CERTIFICATE HOLDER**CANCELLATION** See Attachments**21860190**Oakland Unified School District
Attention: Juanita Hunter
955 High Street
Oakland, CA 94601

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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DIVISION OF FACILITIES PLANNING & MANAGEMENT ROUTING FORM

Project Information

Project Name	Energy Efficiency Investment Grade Audit	Site	918
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Basic Directions

Services cannot be provided until the contract is awarded by the Board or is entered by the Superintendent pursuant to authority delegated by the Board.

Attachment Checklist	<input checked="" type="checkbox"/> Proof of general liability insurance, including certificates and endorsements, if contract is over \$15,000 <input checked="" type="checkbox"/> Workers compensation insurance certification, unless vendor is a sole provider
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Contractor Information

Contractor Name	Willdan Energy Solutions	Agency's Contact		David Daniel				
OUSD Vendor ID #	New	Title		Manager				
Street Address	66 Franklin Street, Suite 300	City	Oakland	State	CA	Zip	94607	
Telephone	510-686-4951	Policy Expires						
Contractor History	Previously been an OUSD contractor? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Worked as an OUSD employee? <input type="checkbox"/> Yes <input type="checkbox"/> No					
OUSD Project #	25066							

Term of Original/Amended Contract

Date Work Will Begin (i.e., effective date of contract)	6-26-2025	Date Work Will End By (not more than 5 years from start date; for construction contracts, enter planned completion date)	4-1-2026
		New Date of Contract End (If Any)	

Compensation/Revised Compensation

If New Contract, Total Contract Price (Lump Sum)		If New Contract, Total Contract Price (Not To Exceed)	\$840,000.00
Pay Rate Per Hour (If Hourly)	\$	If Amendment, Change in Price	\$
Other Expenses		Requisition Number	

Budget Information

If you are planning to multi-fund a contract using LEP funds, please contact the State and Federal Office before completing requisition.

Resource #	Funding Source	Org Key	Object Code	Amount
9657 9000	Fund 21 Measure Y	210-9657-0-9000-8200-5825-918-9180-9906-9999-25066	5825	\$840,000.00

Approval and Routing (in order of approval steps)

Services cannot be provided before the contract is fully approved and a Purchase Order is issued. Signing this document affirms that to your knowledge services were not provided before a PO was issued.

	Division Head	Phone	510-535-7038	Fax	510-535-7082
1.	Executive Director, Facilities				
	Signature			Date Approved	
2.	General Counsel, Facilities				
	Signature <i>James Traber</i>			Date Approved	05/23/2025
3.	Chief Systems & Services Officer				
	Signature <i>Preston Thomas</i>			Date Approved	05/28/2025
	Chief Financial Officer				
4.	Signature			Date Approved	
	President, Board of Education				
5.	Signature			Date Approved	