



STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

1500 Jefferson St. SE, Olympia, WA 98501
PO Box 41476, Olympia, WA 98504-1476

ESCO Contract No. 2024-771 G (1-1)
Project Olympia Armory Ph. 1
Energy Upgrades
Agency City of Olympia
Date October 23, 2025

STATE OF WASHINGTON
ENERGY SERVICE COMPANY (ESCO) CONSTRUCTION CONTRACT
For the DEPT. OF ENTERPRISE SERVICES, ENERGY PROGRAM

This Energy Service Company (ESCO) Construction Contract, made and entered into this 23rd day of October, 2025, shall be the agreed basis of performing the following work by and between the State of Washington, City of Olympia acting through the Department of Enterprise Services, Energy Program, hereinafter referred to as the Owner, and

Ameresco, Inc.
6811 S. 240th St., Suite 210
Kent, WA 98032
Telephone (206) 708-2834
E-mail AmerescoWADES@ameresco.com

hereinafter referred to as the ESCO or Contractor.

WITNESSETH: Whereas the parties hereto have mutually covenanted and by these presents do covenant and agree with each other as follows:

FIRST: The said ESCO agrees to furnish all permits, material, labor, tools, equipment, apparatus, facilities, etc., necessary to perform and complete in a workmanship like manner the work called for in the attached Scope of Work, Energy Services Proposal dated October 22, 2025 for:

Energy Services Authorization No. 2024-771 A (1)
Main Energy Services Agreement No. 2023-185 A (1)

Audits and Proposals for this project were prepared by the ESCO according to the terms of the Contract Documents which include, but are not limited to, the Main Energy Services Agreement, Energy Services Authorization(s), the accepted Proposal, *General Conditions for Washington*

State Energy Savings Performance Contracting, Addenda, Specifications, Drawings, Bond, and this Construction Contract.

SECOND: Time of Completion: The work to be performed under this contract shall commence as soon as the ESCO has been officially notified to proceed and shall be substantially complete within 600 consecutive calendar days after the date of Notice to Proceed.

THIRD: The apprenticeship labor hours required for this project are 15% of the total labor hours. The undersigned agrees to utilize this level of apprentice participation. A monetary incentive of \$1,000 will be paid to the contractor meeting the apprentice utilization requirement. A monetary penalty will be applied to the contractor failing to meet the utilization requirement and failing to demonstrate a Good Faith Effort. The penalty will be applied to every hour of short-fall of the minimum number of required apprentice hours using the applicable published wage of a Step 1 apprentice laborer. The penalty will not exceed five percent (5%) of the total Contract Sum. Voluntary workforce diversity goals for this apprentice participation are identified in the *General Conditions for Washington State Energy Savings Performance Contracting*.

FOURTH: In consideration of the Performance of the Work, herein contained on the part of the ESCO, the Owner hereby agrees to pay the ESCO for said work completed according to the Contract Documents, for not more than the sum of \$10,954,824.00, plus 9.8% state sales tax consisting of the following:

ESCO Contract Cost	\$10,954,824.00
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The ESCO shall bond this contract in accordance with Section 2.04 of the General Conditions for Washington State Energy Savings Performance Contracting. The construction value plus contingency is a guaranteed maximum not-to-exceed cost and final payment to the ESCO shall be reconciled to reflect the actual installed cost provided it does not exceed the guaranteed maximum cost.

FIFTH: ESCO payments to subcontractors and materialmen shall not be contingent upon the ESCO receiving payment from the Owner. Unless otherwise agreed upon, payment to the ESCO shall be made only after completion of the energy efficiency measure(s) and the ESCO has issued a Notice of Commencement of Energy Savings and the Owner has accepted such Notice.

SIXTH: Consistent with RCW 39.12.120, ESCO and its subcontractors shall keep accurate payroll records for three years from the date of acceptance of the project and file a copy of its certified payroll records using the Department of Labor and Industries' online system at least once per month. If the Department of Labor and Industries' online system is not used, a contractor, subcontractor, or employer shall file a copy of its certified payroll records directly with the Department of Labor and Industries at least once per month in a format approved by the Department of Labor and Industries. A contractor, subcontractor, or employer's noncompliance with this section constitutes a violation of RCW 39.12.050.

SEVENTH: Civil Rights

Contractor represents and warrants that Contractor complies with all applicable requirements regarding civil rights. Such requirements prohibit discrimination against individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, or national origin.

EIGHTH: Non-Discrimination

1. Nondiscrimination Requirement. During the term of this Contract, Contractor, including any subcontractor, shall not discriminate on the bases enumerated at RCW 49.60.530(3). In addition, Contractor, including any subcontractor, shall give written notice of this nondiscrimination requirement to any labor organizations with which Contractor, or subcontractor, has a collective bargaining or other agreement.
2. Obligation to Cooperate. Contractor, including any subcontractor, shall cooperate and comply with any Washington state agency investigation regarding any allegation that Contractor, including any subcontractor, has engaged in discrimination prohibited by this Contract pursuant to RCW 49.60.530(3).
3. Default. Notwithstanding any provision to the contrary, Agency may suspend Contractor, including any subcontractor, upon notice of a failure to participate and cooperate with any state agency investigation into alleged discrimination prohibited by this Contract, pursuant to RCW 49.60.530(3). Any such suspension will remain in place until Agency receives notification that Contractor, including any subcontractor, is cooperating with the investigating state agency. In the event Contractor, or subcontractor, is determined to have engaged in discrimination identified at RCW 49.60.530(3), Agency may terminate this Contract in whole or in part, and Contractor, subcontractor, or both, may be referred for debarment as provided in RCW 39.26.200. Contractor or subcontractor may be given a reasonable time in which to cure this noncompliance, including implementing conditions consistent with any court-ordered injunctive relief or settlement agreement.
4. Remedies for Breach. Notwithstanding any provision to the contrary, in the event of Contract termination or suspension for engaging in discrimination, Contractor, subcontractor, or both, shall be liable for contract damages as authorized by law including, but not limited to, any cost difference between the original contract and the replacement or cover contract and all administrative costs directly related to the replacement contract, which damages are distinct from any penalties imposed under Chapter 49.60, RCW. Agency shall have the right to deduct from any monies due to Contractor or subcontractor, or that thereafter become due, an amount for damages Contractor or subcontractor will owe Agency for default under this provision.

IN WITNESS WHEREOF: The said Department of Enterprise Services, Energy Program, has caused this ESCO Construction Contract to be subscribed in its behalf, and the said ESCO has signed this ESCO Construction Contract the day and year first above written.

ESCO:
Ameresco, Inc.

Owner:
City of Olympia
acting through the
Department of Enterprise Services
Energy Program

By _____
Name _____
Title _____
Date _____

By _____
Name Kimberly Sockle
Title Interim Assistant Director
Date _____

WA State Contractor's License No. AMEREI*004PZ

UBI Number 602-062-980

2024771Gcontko

October 23, 2025

SCOPE OF WORK

ESCO Contract No. 2024-771 G (1-1)

Olympia Armory Phase 1 Energy Upgrades
City of Olympia

Furnish and install the energy efficiency measures, including any and all necessary ancillary equipment, as described in the City of Olympia Energy Services Proposal dated October 22, 2025.



STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

1500 Jefferson St. SE, Olympia, WA 98501
PO Box 41476, Olympia, WA 98504-1476

October 23, 2025

RETAINAGE INVESTMENT

ESCO Contractor Ameresco, Inc.
ESCO Contract No. 2024-771 G (1-1)
Description Olympia Armory Phase 1 Energy Upgrades
Client Agency City of Olympia

Pursuant to R.C.W. 60.28, you are required to exercise your option, IN WRITING, on whether or not monies reserved from the amounts due you on the above contract shall be placed in escrow. You are therefore directed to complete and return this form with the signed copy of the above contract to the Energy Program.

Should you desire to have the retained monies invested, it will then be necessary that you enter into an escrow agreement with a bank, trust or savings and loan company, and the above Client Agency.

This form will be transmitted to the Client Agency for further action in preparing the escrow agreement.

ENERGY SERVICES CONTRACTOR'S OPTION

_____ I do not request retainage on the above contract to be invested.
_____ I hereby request retainage on the above contract be invested.
_____ I hereby request retainage on the above contract be invested and converted into
bonds and sureties.
_____ Retainage Bond.

Signature

Date

Title



City of Olympia Armory Creative Campus Energy Services Proposal

Prepared for

City of Olympia, Washington

October 22th 2025

Prepared for

City of Olympia, Washington

October 22th, 2025



Submittal

Energy Services Proposal

DES/L&I Project 2024-771 A(1)

Ameresco Project 1008164

Presented by

Brad Kastelitz, PE, LEED AP BD+C – Sr. Development Engineer

Kyle Jones, Director – Construction

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Executive Summary

Summary & Project Services

Ameresco is pleased to present this proposal for the implementation of facility improvement and upgrades at the Olympia Armory.

This Proposal follows the outline contained in Section II of the Main Energy Services Agreement (MESA). It presents the contractual terms under which Ameresco, Olympia Armory, and the Department of Enterprise Services Energy Program (DES Energy Program) will work together over the term of the project. This Proposal describes the scope, costs, guarantees, and other aspects of the project.

The services in this Proposal include design, construction, system verification, and Measurement and Verification (M&V) services for the first year. Although Olympia Armory will operate and maintain the facility improvements, Ameresco will provide M&V services during the first year to help ensure the predicted savings are achieved. Ongoing M&V services are offered for an additional cost at the Owner's (Olympia Armory's) request.

Project Description

This project provides the required improvements and upgrades to reopen the Armory in a safe, accessible and functional manner.

Ameresco is pleased to present a recommended package that encompasses a suite of measures essential for opening the Armory as a safe, accessible, and functional facility. The Safety & Occupancy Package not only focuses on the necessary upgrades needed for the Armory to commence operations but also capitalizes on grant-funded opportunities. Most importantly, this package represents a critical first phase that lays the groundwork for future energy efficiency and sustainability upgrades. Without these foundational improvements, subsequent phases of energy-related enhancements would not be feasible or effective.

The package includes life safety improvements, such as seismic structural enhancements, fire suppression systems, and fire alarms. It also covers accessibility improvements, including the installation of an elevator, exterior Americans with Disabilities (ADA)-compliant ramps, and necessary interior ADA modifications. Additional upgrades include remodeling the bathrooms in the basement level, ventilation improvements, electrical and lighting upgrades, and making significant site improvements, such as infrastructure upgrades, required landscaping, and the installation of sidewalk bulb-outs. This approach ensures that the Armory meets all required standards and functions for its intended uses.

This project represents Phase 1 of a multi-phase effort to improve the facility. Due to current funding limitations, the majority of the work in this phase focuses on addressing critical infrastructure needs to ensure the building is code compliant, safe, accessible, and suitable for occupancy.

While energy efficiency remains a key long-term objective, many of the associated upgrades will be addressed in future phases. These subsequent phases will build upon the foundational

improvements made in Phase 1 and are expected to incorporate targeted energy conservation measures to meet broader sustainability and performance goals.

Ameresco will continue to collaborate with the Olympia Armory and the City of Olympia to identify and pursue funding opportunities that support implementation of the remaining scope outlined in the Investment Grade Audit (IGA), April 8th 2025.

The project scope includes the following:

- ARM-M1 HVAC System Upgrade - Mechanical Retro Commissioning – This ECM includes a budget allowance to retro-commission the existing HVAC system, as no major mechanical upgrades are part of the current scope. Retro-commissioning efforts will focus on optimizing system performance (Boiler, Pumps, Air Handling Equipment, etc.) verifying proper operation of equipment and controls and identifying opportunities for energy savings. This process will help ensure that the HVAC system operates efficiently and reliably, extending equipment life and improving occupant comfort.
- ARM-M2 Kitchen Improvements – Kitchen Hood Fan Only
- ARM-W1 Plumbing Improvements – Basement Restroom Remodel/Addition and Plumbing tenant space plumbing improvements and Main and 2nd Floor ADA Restroom Improvements.
- ARM-L1 Interior Lighting Upgrade – Basement and Drill Hall and selected areas on Level 1 and Level 2.
- ARM-G1 Elevator
- ARM-G3 Roof Improvements – Structural improvements, insulation improvements, new membrane roof and preparations to support a roof solar photovoltaic system. While the PV system will be installed under a separate project, its implementation depends on the successful completion of this energy conservation measure (ECM).
- ARM-G4 Electrical Upgrade (Utility Service Upgrade, Main Distribution Upgrades). This energy conservation measure also include the installation of a Fire Sprinkler and Fire Alarm System.

Project scope revisions since the IGA:

- Lighting Upgrades: As outlined in the updated project scope, lighting improvements will be implemented in the Basement, Drill Hall, and select areas on Level 1 (Ground Floor) and Level 2 (Second Floor). Energy savings calculations have been revised to reflect the proposed scope of work and are included in the guaranteed savings. Refer to Appendix F.
- HVAC System Upgrade: The HVAC scope has been refined to include only the installation of dedicated outdoor air systems (DOAS) serving the Basement. This upgrade will provide code-compliant ventilation to the space. Please note that this improvement does not contribute to the guaranteed energy savings. Because the basement is currently not ventilated the implementation will provide necessary ventilation but will also increase the energy usage within the building. The implementation of the heat recovery unit and Dedicated Outdoor Air System (DOAS) is estimated to increase annual electrical energy usage by approximately 36,000 kWh. Based on the electric rates and hours of operation outlined in the relevant sections of this Energy Service Proposal (ESP), this corresponds to an estimated cost increase of \$4,000 per year.

- The project also has benefits beyond energy efficiency, including improved lighting quality and reduced maintenance. These benefits will help improve occupants' visual comfort while reducing time and funds spent on maintenance of lighting systems.

Equipment To Be Installed

The equipment list provided in **Table 1** outlines the current plan for the installation of Mechanical, Electrical, and Plumbing (MEP) equipment. This list is subject to modification based on equipment availability, lead times, or adjustments resulting from ongoing engineering analysis and coordination. For detailed specifications, layouts, and schedules, please refer to the Mechanical, Electrical, and Plumbing drawings and associated documentation in **Appendix A**.

Table 1. Proposed Equipment Summary

Tag	Equipment Type / Description	Capacity / Size	Location / Serves	Notes
HRU-1	Packaged rooftop heat-recovery unit (Trane WHK210)	6,500 CFM / 245 MBH cooling	Roof – Community Hall	Energy Recovery Wheel, 73% Sensible Efficiency
DOAS-1	Energy-recovery DOAS (RenewAire HE1.5XRT)	1,165 CFM	Roof – North Wing	Sensible Heat Recovery, 68% Efficiency
DOAS-2	Energy-recovery DOAS (RenewAire HE1.5XRT)	1,125 CFM	Roof – North Wing	Sensible Heat Recovery, 68% Efficiency
DOAS-3	Energy-recovery DOAS (RenewAire HE1.5XRT)	920 CFM	Roof – South Wing	Sensible Heat Recovery, 68% Efficiency
DOAS-5	Energy-recovery DOAS (RenewAire HE1.5XRT)	995 CFM	Roof – East Wing	Sensible Heat Recovery, 68% Efficiency
DOAS-6	Energy-recovery DOAS (RenewAire HE1.5XRT)	1,095 CFM	Roof – East Wing	Sensible Heat Recovery, 68% Efficiency
AC-010	Mini-split ductless HP (Mitsubishi PKA/PUZ-A30)	30 MBH cooling	Elevator Machine Room 010	
EF-212	Ceiling exhaust fan (Greenheck CSP-200)	212 CFM	Restroom 212	
DH-1-6	Electric duct heaters (Indeeco QUA)	9-12 kW	DOAS supply ducts	
UH-1/2	Unit heaters (Indeeco UHIR)	2.5 kW	Mechanical Room 002	
P-1A-D	Water Closet	WaterSense	Building Restrooms	Refer to Plumbing drawings and specifications
P-3A-B	Lavatory	WaterSense	Building Restrooms	Refer to Plumbing drawings and specifications
P-5A-C	Sink		Building	Refer to Plumbing drawings and specifications
P-6A	Service Sink		Building	Refer to Plumbing drawings and specifications
P-8A	Drinking Fountain		Building	Refer to Plumbing drawings and specifications
P-10A-B	Wall Hydrant		Building	Refer to Plumbing drawings and specifications
P-11A-C	Floor Drain or Receptor		Building	Refer to Plumbing drawings and specifications
P-12A-B	Emergency Eyewash		Basement	Refer to Plumbing drawings and specifications
SP-1	Sump Pump (Stancor SE50)	50 GPM	Basement	
LP-1	Lift Pump (Liberty Pumps 406)	10 GPM	Basement	
CP-1	Recirculation Pump (Bell & Gossett Series ECO)	5 GPM	Basement	

WH-1	Water Heater (A.O. Smith DVE-120)	18 kW	Building HW	
Lighting	Luminaire Schedule	Various	Basement/Drill Hall/Restrooms	Refer to Electrical drawings and specifications.
MDP	Switchboard w/ main breaker & utility metering	480/277 V 3Ø 4W 2,000 A	Basement Elec Room	Refer to Electrical drawings and specifications.
SD-600	600 A fused service disconnect (208/120 V)	600 A	Adjacent MDP	Refer to Electrical drawings and specifications.
T-B	225 kVA dry-type XFMR 480 208/120 V	225 kVA	Basement Elec Room	Refer to Electrical drawings and specifications.
T-1	150 kVA dry-type XFMR 480 208/120 V	150 kVA	Basement Elec Room	Refer to Electrical drawings and specifications.
Panel LB-A / LB-B	400 A 42-cct 208/120 V panelboards	400 A	Basement Elec Room	Refer to Electrical drawings and specifications.
L1-A	600 A 208/120 V branch panel	600 A	Basement Elec Room	Refer to Electrical drawings and specifications.
HB	480 V distribution panel, 600 A	600 A	Mezzanine Elec Alcove	Refer to Electrical drawings and specifications.
Panel EV	208 V 150 A panel serving EV chargers	150 A	Site pull-box to MDP	Refer to Electrical drawings and specifications.
EV-CHG	Dual-port Level-2 EV chargers (bollard mount)	--	South Lot	Refer to Electrical drawings and specifications.
FAC	Fire Alarm Control Panel (addressable, 2-loop)	--	IT Room 109	Refer to Electrical drawings and specifications.
FAA	Remote fire-alarm annunciator	--	Main Lobby 108	Refer to Electrical drawings and specifications.
MDF-Rack	48U network rack w/ 48-port fiber switch	--	IT Room 109	Refer to Electrical drawings and specifications.
Cafe Panel	50 A Panelboard	50 A		Refer to Electrical drawings and specifications.
Panel EL	100 A 208/120 V Panelboard	100 A	Machine Room 010	Refer to Electrical drawings and specifications.

Project Contact List

Client Contact:
E-mail Address:
Phone Number:

Valerie Roberts
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(360) 753-8468

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Ameresco Contact:
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Department of Enterprise Services (DES):
E-mail Address:
Phone Number:

Sarah Thomasson
Sarah.Thomasson@des.wa.gov
(360) 480-3419

Utility Contact:
E-Mail Address:
Phone Number:

Puget Sound Energy
customercare@pse.com
1-800-225-5773

Project Benefits

Energy Savings Performance Contracting (ESPC) offers significant benefits for capital-intensive energy-efficiency projects, including:

1. **Accelerated Project Timeline:** The project is initiated and completed without a lengthy and complex RFP process, especially as it relates to pressing deadlines like seasonal constraints and urgent repair needs.
2. **Direct – Select Collaboration:** Procurement of preferred contractors and vendors fostering improved communication, customization, and reliable performance. Additional benefits include reduced administrative and bidding costs.
3. **Guaranteed Energy Savings:** Clearly defined expected savings, and energy services company’s (ESCO’s) obligation to cover shortfalls if Energy Savings Guarantee is not met.
4. **Fixed Project Cost:** Not-to-exceed project cost ensures cost overruns are the responsibility of the ESCO.
5. **Open-Book Financials:** Access to detailed costs, pricing, and savings calculations for accountability.

Overall, ESPC mitigates the risks associated with complex energy retrofits by transferring responsibility to the ESCO while promoting sustainability goals and ensuring quality project execution and performance.

Financial Benefits

Project costs, and savings related to this project are detailed in subsequent sections. The guaranteed maximum project cost is **\$15,335,689**. Including sales tax, utility fees, and DES Energy Program project management fees, the total project cost is **\$17,113,068**. The awarded grant funding for the project is \$1,000,000. The estimated utility incentive for the project is **\$5,550**. The estimated net cost to the Owner is **\$16,107,568**.

Construction Cost Savings

All construction costs will be open book to the Owner, and any cost savings related to savings on the ESCO’s (Energy Services Company) (Ameresco) labor and material costs will revert to the Owner at the end of the project.

Energy Cost Savings

Table 2 shows the estimated annual electricity, gas, and water savings related to this project. The estimated annual energy cost savings is **\$2,027**, while the guaranteed annual energy cost savings at 90% of the estimated savings is **\$1,824**.

The proposed measures that will reduce energy consumption by an estimated 19,118 kWh and increase gas consumption due to interactive effect of lighting wattage reduction by not more than 53 therms. The annual energy savings total approximately \$2,027/yr based on the average local utility rate of \$0.11004/kWh and \$1.33/therm. The rate is based on PSE Schedule 25 Electrical Rate as of 10/1/24 and PSE Schedule 31G Natural Gas Rate as of 11/1/24. It is anticipated that the Armory’s electrical rate will change from Schedule 24 to 25 with the anticipated facility improvements.

Ameresco guarantees 90% of the above energy savings related to the improvements totaling an annual savings of 17,206 kWh and -76 therms relating to \$1,824. Savings related to electrical demand (kW) are not guaranteed for this project based on the complexity of demand fluctuations and rate changes.

Table 2. Project Benefits Overview

ECM	Calculated Annual Savings				Guarantee Savings				
	kWh	kW	Therms	\$	Safety Factor	kWh	kW	Therms	Savings
ARM-L1: Armory Lighting Upgrade	18,526	64	(143)	\$1,848	90%	16,1673	58	(157)	\$1,663
ARM-G3: Roof Improvements	592	8	90	\$179	90%	533	7	81	\$161
Total	19,118	72	(53)	\$2,027	90%	17,206	65	(76)	\$1,824
*Note: ECM's ARM-M1, ARM-M2, ARM-W1, ARM-G1, ARM-G4 will not result in energy savings.									

Operations and Maintenance Related Benefits

This project does not offer measurable operations and maintenance (O&M) savings. Although the facility improvement will replace aged equipment, the improvements do not deliver quantifiable or guaranteed O&M benefits.

Environmental Benefits

This energy savings ECM's will help reduce the facilities energy usage and buildings Energy Use Intensity (EUI). To the degree that fossil fuels are included in the energy mix provided by Puget Sound Energy, this will also lead to a reduction in greenhouse gas emissions (GHG). The estimated GHG reduction using the EPA GHG equivalencies calculator is 13.6 metric tons of CO₂ equivalent.

Guarantees

Ameresco guarantees that the project cost, related specifically to energy savings and the project scope, will not exceed the maximum price of **\$15,335,689** (project cost before sales tax, utility fees, and DES Energy Program project management fee).

Ameresco guarantees that the energy savings for ARM-L1 and ARM-G3 will not be less than 17,206 kWh/year and an increase of not more than 76 therms/year for the period of warranty related.

Conclusion

This project represents an excellent opportunity for the Olympia Armory to improve the facility a suite of measures essential for opening the Armory as a safe, accessible, and functional facility. The project provides **over \$15M** in facility improvements. Ameresco looks forward to working with Olympia Armory and the DES Energy Program to make this project a success.

Facility Description

The buildings below will be affected by the outlined scope of work. Please reference the IGA Report for detailed building and systems descriptions.

Table 3. Facilities Affected

Building No.	Description	Sq. Ft.
Armory	515 Eastside St SE, Olympia, WA 98501	41,447
Annex	1002 Legion Way SE, Olympia, WA 98501	9,700
Site	515 Eastside St SE, Olympia, WA 98501	N/A
Total		51,147

Energy Conservation Measures (ECMs) to be Implemented

This section outlines the scope of work included in this proposal. Details on the Measurement & Verification protocol can be found in **Appendix B: Measurement & Verification Plan**.

ARM-M1 HVAC System Upgrade & Mechanical Retro Commissioning

This measure will be the first phase of improvements to the HVAC system within the Armory facility. The improvements will provide tempered air to the basement community space and provide ventilation to the renovated classroom spaces and exhaust from the proposed restroom area. In addition, this measure will provide an allotment to provide retro commissioning to the existing HVAC system. This measure includes:

Demolition:

- Removal of the existing exhaust system serving existing basement.

Installation:

- DOAS System
 - Provide and Install DOAS-1, DOAS-2, and DOAS-3, DOAS-5, and DOAS-6 Equipment.
 - Ductwork and connection for DOAS units.
 - Installation of Duct Heaters (DH-1, DH-2, DH-3, DH-5 and DH-6).
- Heat Recovery Unit (HRU-1)
 - Provide and Install HRU-1 serving Community Hall 026.
 - Supply and Return Ductwork for HRU.
 - Controls for HRU with CO₂-based demand control ventilation.
- Mini Split (AC-010)
 - Provide and Install AC-010A and all associated equipment with controls in Machine Room 010

- Provide and Install AC-010B and all associated equipment.
- Exhaust Fan (EF-212)
 - Provide and Install EF-212 serving Bathroom 212.
 - Exhaust ductwork and grilles as shown and scheduled on sheet
- Temperature Controls
 - New temperature control system shall be installed Division 25 Specifications.
- Provide unit heater UH-1 and UH-2 with wall brackets and controls for Mechanical 002.
- Allocate \$150,000 to perform a comprehensive retro-commissioning (RCx) of the facility's hydronic heating plant. The RCx team will:
 - Functionally test, calibrate, and optimize the existing hot-water boilers, primary/secondary circulation pumps, isolation and control valves, and all connected fan-coil units and unit heaters.
 - Verify and correct sensor accuracy, restore proper sequencing and setpoints in the building-automation system, balance water flows, and repair or replace minor components (e.g., leaking valves, failed actuators) as needed to return the system to design performance.
 - Document pre- and post-RCx operating parameters (supply/return temperatures, ΔT , pump kW, terminal coil ΔT) and provide a final report outlining deficiencies found, and corrective actions taken. If deficiencies are identified that exceed the available budget allowance for corrective actions, those outstanding items will be clearly documented in the final report for future consideration.
 - All deficiencies will be thoroughly documented, including the nature of the issue, its impact on system performance, and any relevant operating data. Each issue will be assessed with the team to determine whether corrective action can be completed within the allocated RCx budget allowance. If the issue falls within the budget scope, corrective measures will be implemented promptly, and the resolution will be documented in the final RCx report. The boiler system will be prioritized to ensure proper operation and compliance with inspection requirements at the completion of this phase of work. If the issue exceeds the available budget or requires more extensive repair or replacement, it will be clearly identified in the final report as an outstanding item. Recommendations for future action, including estimated costs and potential energy impacts, will be provided to support planning and decision-making.
 - The \$150 k allowance covers RCx engineering labor, temporary data-logging instrumentation, TAB support, and minor materials.

ARM-M2 Kitchen Improvements – Kitchen Hood Fan Only

This measure includes the furnishing and installation of a commercial-grade kitchen exhaust hood fan, complete with wall-mount brackets and side panels. The installation will restore full functionality to the kitchen exhaust system, ensuring proper exhaust ventilation and compliance with applicable codes and performance standards.

Demolition:

- Removal of the existing exhaust fan motor.

Installation:

- Provide and install new exhaust fan motor, tied into existing exhaust controls.

ARM-W1 Plumbing Improvements – Restroom Renovations/Addition

This measure's planned upgrades at the Armory are focused on interior renovations to improve functionality and enhance the user experience, with specific adjustments to meet the needs of tenants. This includes the expansion and remodeling of existing restroom facilities to accommodate a higher number of users, which is essential for securing high occupancy permits and ensuring compliance with current accessibility standards. To support the new bathroom installations, it will be necessary to upgrade the building's plumbing, water, and drainage systems to handle the increased fixture count. Additionally, interior spaces will be thoughtfully reconfigured to optimize flow and usability, tailored to the activities and operational requirements of tenants. These enhancements are vital for transforming the Armory into a functional, multi-use venue that can generate revenue through space rentals and cater to a wide array of community activities. This measure includes:

Demolition:

- Basement:
 - Remove existing fixtures, carriers, partitions.
 - Remove existing piping serving existing basement equipment.
 - Saw cut and remove floor slab, and trench, in preparation for installation of new plumbing.
 - Selective Architectural removal per drawing A2.10.
 - Remove an existing window in Café 028 per A2.10.
- Level 1 (Ground):
 - Selective demolition of existing waste & vent and domestic hot and cold-water piping to connection point for reconnection to existing plumbing fixtures.
 - Selective removal of walls, interior doors, bathroom furnishings per drawing A2.11
- Level 2:
 - Selective demolition of existing waste & vent and domestic hot and cold-water piping to connection point for reconnection to existing plumbing fixtures.
 - Selective Removal of walls, interior doors, bathroom furnishings per drawing A2.12

Installation:

- Basement:
 - Furnish and install a complete sanitary waste-and-vent network together with domestic hot- and cold-water supply piping, plumbing fixtures, carriers, trim, and all related accessories. Execute the work in accordance with Mechanical Drawings M0.01, M0.05, M2.00, M3.00, M3.10, M3.20, M3.2, and the Division 22 mechanical specifications.
 - Construct new interior walls and partitions, supply and install interior doors, frames, and hardware; and apply all specified finishes as detailed on Architectural Sheet A2.20, A2.30, and its associated call-outs and finish schedules.
 - Historic doors will be retained in place. If they are required for removal due to access or fire safety, the City of Olympia Staff will retain them in storage until a new use can be identified.
 - Install new door into Café 028 as shown on drawing A2.20 and scheduled on drawing A801.
 - Install new garage door entering Community Room 026.
- Level 1 (Ground):
 - Furnish and install a complete sanitary waste-and-vent network together with domestic hot- and cold-water supply piping, plumbing fixtures, carriers, trim, and all related accessories. Execute the work in accordance with Mechanical Drawings M0.01, M0.05, M3.01, M3.20, M3.21, and the Division 22 mechanical specifications.
 - The northeast single bathroom off existing office will be reconfigured to meet ADA requirements and will have a new access door off of the hallway in order to meet plumbing fixture requirements. Current custodial closet and bathroom adjacent will be converted into a public restroom accessed by the hallway. Doors will be retained where we can, if they need to be upgraded for current fire code standards, doors will be used in other locations or retained for future use.
 - Construct new interior walls and partitions, supply and install interior doors, frames, and hardware; and apply all specified finishes as detailed on Architectural Sheet A2.21 and its associated call-outs and finish schedules.
- Level 2:
 - Furnish and install a complete sanitary waste-and-vent network together with domestic hot- and cold-water supply piping, plumbing fixtures, carriers, trim, and all related accessories. Execute the work in accordance with Mechanical Drawings M0.01, M0.05, M3.02, M3.20, M3.21, and the Division 22 mechanical specifications.
 - Construct new interior walls and partitions, supply and install interior doors, frames, and hardware; and apply all specified finishes as detailed on Architectural Sheet A2.22 and its associated callouts and finish schedules.

ARM-L1 Lighting Upgrade

This measure will be the first phase of improvements to the lighting system within the Armory Facility. This measure involves removing the existing lighting fixtures in the basement and some spaces on Level 1 (Ground) and Level 2 and replacing them with new LED fixtures and controls, tailored to support future needs. This measure includes:

Demolition:

- Basement:
 - Remove all the lights in the basement.
- Level 1 (Ground):
 - Selective removal of lighting in Bathroom 111, Bathroom 119A, and Drill Hall 129. All other lights shall remain in service.
- Level 2:
 - Selective removal of lighting in Bathroom 202 and Bathroom 212. All other lights shall remain in service.
- General:
 - Historical Lights. Prior to demolition Ameresco will coordinate with Olympia Armory on any lights that have historical significance, and they will be removed and salvaged to the owner where they can be repurposed.

Installation:

- Basement:
 - Furnish and install lighting and controls. Execute the work in accordance with Electrical Drawings E0.01, E0.03, E2.00, its associated callouts and finish schedules and the Division 26 Electrical specifications.
 - Lighting improvements excluded from Café 028.
- Level 1 (Ground):
 - Furnish and install lighting and controls in the following spaces (Lobby 108, Storage 130, Storage 131, Bathroom 111, Office 118, Office 119, Bathroom 119A, Drill Hall 129). Execute the work in accordance with Electrical Drawings E0.01, E0.03, E2.01, its associated callouts and finish schedules and the Division 26 Electrical specifications.
 - Notes:
 - Storage 131 Shall include the installation of two (2) S1 fixture (or equal).
 - The room numbers listed above reference the room numbers as shown on the architectural sheets.
- Level 2:
 - Furnish and install lighting and controls in the following spaces (Women's Bathroom 218, Family Bathroom 202, Lobby 206, Bathroom 212). Execute the work in accordance with Electrical Drawings E0.01, E0.03, E2.02, its associated callouts and finish schedules and the Division 26 Electrical specifications.
 - Notes:
 - The room numbers listed above reference the room numbers as shown on the architectural sheets.

ARM-G1 Elevator

This measure will improve accessibility throughout the Armory. A new elevator will be installed to provide access to all three levels of the Armory, ensuring that every floor is accessible to people with varying mobility needs. The elevator will be a hydraulic service elevator with three stops, accommodating the building's layout and usage demands. This measure includes:

Demolition:

- Basement:
 - Selective removal of concrete slab floor, walls, and interior doors per drawing A2.11
- Level 1 (Ground):
 - Selective removal of floor, walls, and interior doors per drawing A2.12
- Level 2:
 - Selective removal of balcony floor, walls, railings and interior doors per drawing A2.13
- Roof:
 - Selective removal of roof and membrane per drawing A2.14

Installation:

- Basement:
 - Construct new elevator pit, elevator shaft walls, supply and install interior doors, frames, and hardware; and apply all specified finishes as detailed on Architectural Sheet A2.20 and its associated call-outs and finish schedules.
- Level 1 (Ground):
 - Construct new elevator shaft walls and interior walls at landing. Apply all specified finishes as detailed on Architectural Sheet A2.21 and its associated call-outs and finish schedules.
- Level 2:
 - Construct new elevator shaft walls and interior walls at landing. Supply and install interior doors, frames, and hardware. Apply all specified finishes as detailed on Architectural Sheet A2.22 and its associated call-outs and finish schedules.
- Roof:
 - Construct new elevator shaft walls and roof as detailed on Architectural Sheet A2.23 and its associated call-outs and finish schedules.

ARM-G3 Roof Improvements

The proposed roof improvements will be the first phase of improvements to address structural vulnerabilities by strengthening the existing structural framework and enhancing its ability to withstand seismic events. The plan will prioritize maintaining the historical integrity of the building while implementing necessary modern safety features to protect the building's occupants and structure in the event of a future seismic event. This measure includes the installation of new roof insulation, which will significantly improve the building's thermal performance. By reducing heat loss in winter and heat gain in summer, the upgraded insulation will lower HVAC energy consumption, resulting in improved energy efficiency and long-term operational cost savings. This measure includes:

Demolition:

- Basement:
 - Refer to Architectural Sheet A2.10 and Structural Sheet S2.00. Remove designated sections of slab-on-grade and adjacent concrete or masonry walls to open paths for new footings, columns, and utility penetrations shown on S2.00.
- Level 1 (Ground Floor):
 - Selective removal for implementation of structural work as outlined per drawing S2.01.
 - Saw cut floor as required for ductwork opening.
 - Open ceiling and wall as required for future column and support installation.
- Level 2:
 - Selective removal for implementation of structural work as outlined per drawing S2.02.
 - Refer to Structural Sheet S2.04. Remove selected areas to prepare for blocking, and equipment supports required on S2.04.
 - Remove Drill Hall 129 Ceiling and Interior Lighting. Per Historical Treatment Plan (Appendix C) Mitigation for the ceiling will be to document, photograph the ceiling and retain a section of the ceiling for display and future interpretation.
 - Open ceiling and wall as required for future column and support installation.
- Roof:
 - Remove existing roof membrane and cover board to prepare for new roofing per A2.13
- Annex Roof:
 - Remove existing roof membrane and cover board to prepare for new roofing.

Installation:

- Basement:
 - Construct the new structural elements per drawing S2.00, including all related detail sheets, call-outs, and general notes.
 - Provide structural bracing and columns at new wall openings
 - Jacket Existing Concrete columns for increase axial strength. Increase spread footing bearing area.
 - Provide new walls along grid line G at grid lines 2, 3, 4, 5 to support future structural opening to be installed in future phases.

- Install structural columns for support of future mezzanine improvements in a future phase.
 - Provide new wall along grid line B between grids 3 and 5.
 - Install new raised floor between grids 3 and 4,
 -
- Level 1 (Ground Floor):
 - Construct the new structural elements per drawing S2.01, including all related detail sheets, call-outs, and general notes.
 - Install structural support ductwork penetrations.
 - Install steel channels for support of future HVAC equipment.
 - Install columns for new wall openings
- Level 2:
 - Construct the new structural elements per drawing S2.02, including all related detail sheets, call-outs, and general notes.
 - Construct new structural elements per drawing S2.03, including all related detail sheets, call-outs, and general notes.
 - Install structural framing and install sister supports.
- Roof:
 - Construct the new structural elements per drawing S2.04, including all related detail sheets, call-outs, and general notes.
 - Provide and install roof insulation and roof membrane per drawing A2.23, including all related detail sheets, call-outs, and general notes.
 - Installation of roof structural improvements, insulation, and the membrane system will be carefully coordinated to support the future installation of the solar photovoltaic (PV) system. Although the PV system will be installed by Ameresco under a separate project, all roofing work will be completed with the necessary provisions to ensure compatibility and readiness for the PV system.
 - A safety tie-off system will be installed to support construction activities and will remain in place for use during the installation of the solar PV system, which will be completed under a separate project. The system will also be retained to facilitate safe access for future roof maintenance.
- Annex Roof
 - Provide and install roof membrane.
 - Installation of new roof membrane system will be carefully coordinated to support the future installation of the solar photovoltaic (PV) system. Although the PV system will be installed by Ameresco under a separate project, all roofing work will be completed with the necessary provisions to ensure compatibility and readiness for the PV system.
 - A safety tie-off anchors will be installed to support construction activities and will remain in place for use during the installation of the solar PV system, which will be completed under a separate project. The system will also be retained to facilitate safe access for future roof maintenance.

ARM-G4 Electrical Upgrade (Utility Service Upgrade, Main Distribution Upgrades)

The electrical upgrades will involve replacing the existing electrical service with a more robust system capable of handling increased loads and ensuring compliance with current electrical codes. Main switchgear components will be upgraded to improve reliability and safety. The distribution system in the basement level will be thoroughly updated with new wiring and panels to support both existing and future uses of the building. This measure will install a full fire suppression system and fire alarm system throughout the Armory, site improvements and city required upgrades. This measure includes:

Demolition:

- Basement:
 - Remove existing electrical in basement in preparation for installation electrical power and signal per drawings E3.00 and E4.00.
- Level 1 (Ground Floor):
 - Selective removal in preparation for installation electrical power and signal per drawings E3.01 and E4.01.
- Level 2:
 - Selective removal in preparation for installation of electrical power and signal per drawings E3.02 and E4.02.
- Site:
 - Selective demolition and trenching per Drawing EC-01.

Installation:

- Basement:
 - Installation of electrical main distribution panel, sub panels, electrical distribution conduit and wiring, and outlets per drawing E3.00 including all related detail sheets, call-outs, general notes, and Division 26 specifications.
 - Installation of electrical connections to existing hot water fan coils.
 - Installation of signal connection per drawing E4.00 including all related details, call-outs, general note and Division 27 specifications.
 - Installation of Fire Suppression system per Division 21 specifications.
 - Installation of Fire Alarm system per division 28 specifications.
 - Fire suppression and fire alarm systems will be installed with consideration to minimize visual impact on existing interior spaces. The design and placement of components will aim to preserve the historical character of the building while meeting modern life safety requirements. For additional historical details, refer to Appendix C.
 - Installation of interior ADA ramp and supporting performance platform structure per drawing A2.20 related detail sheets, callouts, and notes.
 - *Note: The VRF system is not being installed in this phase so the associated electrical wiring and connections to Wall Cassette, Ceiling Cassette, and Fan Coils is excluded from Phase 1 and will be executed under a future project phase.*

- Level 1 (Ground Floor):
 - Installation of electrical transformers, panel, distribution conduit and wiring per drawing E3.01 to new and existing electrical panels including all related detail sheets, callouts, general notes, and Division 26 specifications.
 - Installation of signal connection per drawing E4.00 including all related details, call-outs, notes and Division 27 specifications.
 - Installation of Fire Suppression system per Division 21 specifications.
 - Installation of Fire Alarm system per division 28 specifications
 - Fire suppression and fire alarm systems will be installed with consideration to minimize visual impact on existing interior spaces. The design and placement of components will aim to preserve the historical character of the building while meeting modern life safety requirements. For additional historical details, refer to Appendix C.
- Level 2:
 - Installation of electrical distribution conduit and wiring per drawing E3.22 to feed existing electrical panels including all related detail sheets, callouts, notes, and Division 26 specifications.
 - Installation of Fire Suppression system per Division 21 specifications.
 - Installation of Fire Alarm system per division 28 specifications.
 - Fire suppression and fire alarm systems will be installed with consideration to minimize visual impact on existing interior spaces. The design and placement of components will aim to preserve the historical character of the building while meeting modern life safety requirements. For additional historical details, refer to Appendix C.
- Site:
 - Installation of Electrical conduit, wirings, and EV chargers per drawing E1.00 including all related detail sheets, callouts, notes, and Division 26 specifications.
 - Installation of site ADA ramp at the front entrance of the Armory per drawings SP-01, CG-01, A2.21 and related detail sheets, callouts, and notes.
 - Installation of site improvements per SP-01, CG-01, CG-02, UT-01 and all related detail sheets, callouts, and notes.
 - Asphalt and concrete repair/replacement where construction impacts the paved surfaces.
 - Landscaping to repair areas where construction impacted the existing landscape.
 - Planting of plants and trees as scheduled per L1.01.
 - *Note: Construction related to the undergrounding of existing overhead utilities around the site is excluded from Phase 1 and will be executed under a future project phase. The undergrounding deviation request was approved on 4/23/25 by Steve Sperr, PE, Assistant City Engineer.*
- General:
 - Install owner provided badge access system on two exterior doors and an interior door. Locations to be identified by the owner.
 - Install owner provided cameras in 5 locations. Location to be provided by the owner.

- Install twelve (14) wireless access points provided by owner. Locations to be provided by the owner.
 - Install two (2) owner provided Cisco Catalyst switches. Switch's are to be installed IT Room location to be coordinated with owner and existing conditions.
- Note: Puget Sound Energy (PSE) is actively collaborating with Ameresco and the design team on the planned electrical upgrade. Jamie Silverson, the assigned PSE Project Manager, is serving as the primary point of contact and can be reached at (360) 353-6005.

Clarifications

- a) **Basement VRF system** – Supply and installation of the complete variable-refrigerant-flow (VRF) package, including heat-pump condensers, wall or ceiling cassettes, fan-coil units, branch selector boxes, refrigerant piping, controls, and condensate drainage, are not included in the Phase 1 project.
- b) **Building-wide HVAC replacement** – Replacement of the existing hot-water boiler plant, distribution piping, terminal fan-coil units, cabinet heaters, or associated hydronic controls are not included in the scope of work for Phase 1.
- c) **Kitchen Makeup Air System** – Installation of a new dedicated kitchen makeup air system is not included in the current scope of work. Makeup air for the kitchen exhaust will continue to be provided through existing pathways, utilizing air from adjacent spaces.
- d) **Ceiling replacement on Levels 1 & 2** – Hard-lid gypsum ceilings and lay-in acoustic grid will remain. Drill hall ceiling will be removed and will not be replaced. Only limited tile removal and reinstallation is included for fire-sprinkler, duct, or conduit routing; damaged ceilings will be repaired or replaced in-kind.
- e) **Exterior window replacement** – Removal of existing windows, repair of window frames, installation of new windows, or upgrades to improve thermal performance, or historic appearance are not included in the Phase 1 scope of work except as indicated in ARM-W1
- f) **Lighting upgrades on Levels 1 & 2** – Removal, retrofit, or replacement of existing interior luminaires, lighting controls, or branch wiring is excluded for the Ground (Level 1) or Second (Level 2) floors unless noted in ECM ARM-L1. If any existing fixtures must be temporarily removed to facilitate access to work areas, they are planned to be carefully removed and reinstalled in their original locations upon completion of the work. Conditions of lighting that is temporarily removed will be documented and operation status will be coordinated with owner and DES.
- g) **Exterior door replacement** – The following existing doors: 001B, 023A, 026A, 104C, 106, 115A, 115B, 115C, 121, 201A, and 215A, as identified on Architectural Drawings A2.20, A2.21, A2.22 and the Door Schedule on Sheet A801, are to remain in place. The replacement of these doors, including associated hardware and thresholds, is excluded from the scope of Phase 1. Except for two exterior doors, to be identified by the Owner, which will receive new badge access systems and associated hardware as part of this phase.
- h) **Flooring replacement (all levels)** – Existing resilient tile, hardwood, concrete topping, or carpet will remain unless explicitly noted. No surface demolition, leveling, moisture mitigation, or new floor-finish installation is covered in the Phase 1 scope of work.
- i) **Irrigation System Upgrades** - Modifications, repairs, or upgrades to existing irrigation systems are not included in this proposal. Any irrigation-related work must be contracted independently.

- j) **Solid Waste Management** – Ameresco is not responsible for providing the solid wasters noted on the SP0-1 and a 1.01. Waste Management dumpsters and disposal services shall after construction shall be the responsibility of the City. Waste management of construction material during construction will be the responsibility of Ameresco.
- k) **Existing Columns** – The existing columns in the basement are deemed historical will be retained. Unless work is required as defined in the structural drawings they shall be kept as is. Refer to Appendix C for more information.
- l) **Room 028 Café fit-out** – Only shell improvements are provided: capped domestic water, sanitary stub-outs, dedicated electrical panel space, and HVAC supply/return duct stubs. Architectural build-out, millwork, equipment, lighting, and final utilities are not included.
- m) **Utility undergrounding** – The City of Olympia has provided approve for the waiver request on April 23, 2025 for the requirement to underground the power/telecom lines adjacent to the property. The underground work and all work associated with relocating overhead power/telecom lines underground around the site are not required in this Phase 1 project.
- n) **Annex Facility Improvement** – The Annex will receive a new roof membrane as part of Phase 1, in preparation for the installation of a solar photovoltaic (PV) system, which will be completed under a separate project by Ameresco. Any work within the Annex facility that is not directly associated with or required to support the PV system installation is not included in the Phase 1 scope of work.
- o) **Utility Fee** – The estimated utility fee for the new service, as provided by Puget Sound Energy, is included in the project cost table. The service fee may include voltage line extension costs, transformation costs, service line cost, exceptional transmission and substation costs, permitting costs, and specialized and dedicated facilities costs. This fee has been identified as a direct cost to the owner.
- p) **Delays outside of Contractor’s Control** - Any delays caused by the Authority Having Jurisdiction (AHJ), utility providers, labor disputes, strikes, epidemics, force majeure events, extreme weather, or other conditions beyond the Contractor’s control may result in an extension of the project schedule and associated cost adjustments.

Exclusions

Maximum project costs DO NOT include the following:

- a) **Wall-finish upgrades on Levels 1 & 2** – Painting, paneling, wallpaper removal, or installation of new wall finishes is excluded beyond patching directly necessitated by Phase 1 construction activities or unless noted in contract documents.
- b) **Wall finish upgrade on Basement Level** – Painting, Paneling, wallpaper removal and patching of existing walls that remain is excluded beyond patching directly necessitated by Phase 1 construction activities or unless noted in the contract documents.
- c) **Landscaping and irrigation** – Removal, relocation, or installation of trees, shrubs, lawn, planting beds, site irrigation piping, or site furnishings other than that landscaping scope identified in ARM-G4 is excluded from this phase of work.
- d) **Comprehensive hazardous-materials abatement** – Asbestos, lead-based paint, and other hazardous-material abatement is limited strictly to areas disturbed by Phase 1 energy-conservation measures and identified in the AHERA report. Pricing has been included for the identified abatement that is required to complete the phase 1 scope of work. Any additional abatement in undisturbed areas is excluded. Ownership of hazardous materials remains the property of Armory through disposal and does not become the property of Ameresco.
- e) **Utility Infrastructure Beyond the Building Envelope** -Ameresco is not responsible for any existing utility infrastructure located outside the building footprint or beyond the designated utility connection points. This includes, but is not limited to, water, sewer, gas, electrical, and telecommunications systems that extend into the public right-of-way or are managed by external utility providers.
- f) **Right-of-Way Utility Modifications** - The scope does not include the relocation, modification, or upgrade of any utilities situated within the public right-of-way.
- g) **Site Grading Related to Utility Installation** - Ameresco will not be responsible for modifying or changing site grades or topography that may be impacted by the installation of new or upgraded utilities.
- h) **Controls** – Any controls scope extending beyond the mechanical system, fire alarm system, and occupancy lighting control is excluded from this project phase. This list may include but is not limited to Audio, Video and Theatrical Lighting for example. Ameresco will install the provide badge entry system, owner provided camera system, and will confirm proper installation but operation of these control systems shall be the responsibility of the owner.
- i) **Electrical Scope** - Electrical work included in this proposal is limited to upgrades within the building, specifically the utility service entrance, main distribution panels, and associated internal systems necessary to support the proposed improvements. Ameresco will not be responsible for any electrical infrastructure outside the building or beyond the utility connection point. No modifications will be made to utility poles, or underground service lines not directly tied to the building's internal systems.

- j) **Concrete wall and columns** - Due to the age of the existing concrete, any structural integrity failures discovered during Phase 1 implementation that fall outside the ESP defined scope and structural plan are not included in this phase.
- k) **Archaeological and cultural resource artifacts** - Additional costs and schedule impacts if Archaeological and cultural resource artifacts are encountered.
- l) **Temporary Heat** - Temporary heat for occupancy requirements will not be provided. Temporary heat will be provided for building infrastructure protection.
- m) **Snow/Ice Removal** - Snow/ice removal beyond maintaining safe access to the active work area.
- n) **Work Schedule** - Overtime, shift work, premium time, and off-hours/weekend/holiday work are not anticipated and have not been included in the project budget.

The City of Olympia has been presented with, understands, acknowledges, and accepted the above ECM-specific and general clarifications and exclusions as of 10/20/25.

ESCO Services

Ameresco will provide the following services:

Energy Audit

The energy audit is complete, and details and conclusions are available in the IGA report dated April 8, 2025.

Design Services

Complete detailed architectural, engineering, and survey design as needed to obtain Owner and DES review and approval of the proposed system and to obtain competitive bids and necessary permits to construct. Provide construction support services, start-up, and testing. Provide as-built drawings relevant O&M manuals.

An updated list of assets will be provided for all systems included in Phase 1 of the project. This list will be formatted to comply with the City's Asset Management System, including any applicable labeling and categorization standards. It is assumed that all existing equipment has already been documented in the City's system; therefore, any new or modified assets included in Phase 1 will be updated and a list provided to the city with the closeout package.

Construction

Provide, or cause to be provided, all material, labor, and equipment, including paying for remaining permits, fees, bonds, and insurance, required for the complete and working installation of the ESCO equipment.

- a) The ESCO may perform portion of the construction work or may subcontract portion to qualified firms. In either case, the ESCO will share information regarding the actual cost of the work with the Owner.
- b) Ameresco will abide by the applicable Washington State Department of Labor & Industries prevailing wage for the county of the work.
- c) At the conclusion of the last phase of the project and when the ESCO has completed the installation and commissioning of the Equipment, including start-up and operation verification and training in accordance with the Proposal, the ESCO will provide to the Owner a "Notice of Commencement of Energy Savings" (NCES) and submit a "Notice of Substantial Completion"; as defined in the General Conditions Section 6.09.

Construction Project Management

Provide construction project management services required to manage Ameresco's labor force or its subcontractors to coordinate, purchase, and install equipment as applicable in the construction contract. These include but are not limited to contract administration, preparation of meeting minutes, schedule creation, submittal processing, purchasing, invoicing, as-built drawings, and close-out documentation. ESCO is responsible to review, approve, and submit Shop Drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the

activities of Owner or separate contractors. ESCO's submittal schedule shall allow a reasonable time for Owner review.

Construction project management will facilitate regular progress meetings with the ESCO, design team, Owner and DES, to be coordinated following the initial kick off meeting. These meetings will serve to review progress, agree on any necessary redirection, and maintain quality control throughout the project. The ESCO is expected to maintain a written record of all discussions and decisions made during these meetings and distribute meeting minutes to all parties in a timely manner. The Owner is expected to coordinate day-to-day communications with tenants and any scheduling of tenant relocations in and around occupied areas. This is not supervision as provided by the site superintendent.

Site Superintendent

Provide site superintendent services as necessary to facilitate and coordinate on-site construction activities. Site supervision includes, but is not limited to, all activities executed by an employee of the ESCO in the active on-site supervision of its own labor force and its subcontractors. All project records shall be managed through the Procore construction management software. The Procore project site shall be updated at on a regular basis noting all changes and shall be always available to Owner, DES, and subcontractors. The Procore project site shall include copies of the Drawings, Specifications, addenda, reviewed Shop Drawings, and permits, permit drawings, and meeting minutes.

Operation Training

Ameresco will provide on-going training for the building staff during construction and after the systems are installed. To ensure that efficient systems operations are well documented, Ameresco will provide training materials and instructional sessions to the appropriate members of the Customer's staff and contractors. The training materials and manuals are developed by suppliers and may be customized to reflect the specific application, as appropriate. Ameresco's training efforts will address systems and equipment that Ameresco installs, modifies, or influences through the implementation of the improvements. Training may include hands-on classroom style training sessions, on-going communication and involvement, and/or documentation and manuals. All training sessions will be in person and will be recorded, and the recordings will be made available to the city for future reference. In addition, maintenance manuals for all applicable systems will be provided. A complete list of facility assets associated with Phase 1 will be submitted in a format that complies with the City's Asset Management software and categorization standards.

Measurement & Verification

The ESCO will provide ongoing measurement and verification to help ensure the guaranteed performance is achieved throughout the first year of the agreement. Specific tasks will include:

- a. Year One: Post installation Measurement and Verification (M&V) will be performed based on the International Performance Measurement and Verification Protocol (IPMVP). The Measurement and Verification tables identifies the method that will be followed to complete the measurement and verification for each ECM.

- b. A Year 1 M&V report will be delivered within 60 days of the end of Year 1. The ESCO will attend one annual meeting to review the Measurement & Verification results and reconcile the energy savings.
- c. Existing premeasurements for each ECM will be performed prior to construction activities.
- d. Post-installation Measurement and Verification (M&V) will be performed after installation.

Refer to Appendix C: Measurement and Verification Plan

Equipment Maintenance

The ESCO will provide no equipment maintenance or repairs after the warranty period. Following the completion of the installation and Owner acceptance of the Equipment, the Owner shall provide all necessary services, repairs, and adjustments to the Equipment so that the Equipment will perform in the manner and to the extent set forth in the Proposal. The ESCO shall have no obligation to service or maintain the Equipment after the warranty period.

Operations & Maintenance Procedures

None provided for existing equipment. An operation and maintenance manual will be provided for the installed equipment.

Warranty

The ESCO will warrant labor and materials for one year following Notice of Substantial Completion and Notice of Commencement of Energy Savings.

Notice of Substantial Completion will be issued at the end of the project, when conservation measures are completed, saving energy, and accepted by DES and the owner. Substantial completion will be confirmed with DES and Owner prior to issuance of the notice.

Notice of Commencement of Energy Savings will be submitted subsequent to project completion and will be effective the first day of the month following its submission. Its effective date marks the start of Year 1 of the performance period.

A warranty log will be kept that outlines completed and accepted conservation measures with warranty start and end dates.

Hazardous Waste

The cost for removal and disposal of identified hazardous waste, including PCB ballasts, has been included in the project cost in the areas disturbed the implementation of the Energy Conservation Measures (ECM) implemented in the projects scope of work. Should the project require additional removal or disposal of any identified or unidentified hazardous material, the ESCO may have the hazardous material or substances removed and disposed of at the request of the Owner. The ESCO will not assume ownership of the material but may act on behalf of the

Owner to properly remove and dispose of the material. The Owner shall pay the ESCO for the cost of the additional work. The cost of any additional hazardous material abatement and disposal is not included in this proposal. For additional information, please refer to section 5.20 of the General Conditions.

As part of the project a Good Faith Survey was requested from the Armory Creative Campus for the area where work is to be performed. The Good Faith Survey received was dated 6/12/24.

Site Safety Requirements

Ameresco and its subcontractors will develop site-specific safety plans once means and methods are determined after design implementation.

Project Costs

Maximum Project Cost

The ESCO guarantees that the Maximum Project Cost will not exceed **\$15,335,689**. This cost does not include sales tax, Utility Fees, or DES Energy Program project management fees. With sales tax, Estimated Utility Fees, and DES Energy Program project management fees, the Total Project Cost is **\$17,113,068**. The ESCO does not guarantee the value of sales tax, Utility fee or DES Energy Program project management fees.

NOTE: The proposed Total Project Cost is valid for 60 days from the date of this proposal. Beyond 60 days, Ameresco reserves the right to adjust pricing to reflect current labor and material cost.

Project Cost Table

Table 4: Project Cost Table

Project Cost Category	Project Cost
Engineering Audit	\$ 344,000
Labor and Material Cost	\$ 10,309,891
M,W,G Design at 10.12% of Labor & Material	\$ 1,043,495
Construction Management at 6% of Labor & Material	\$ 618,593
Site Supervision	\$ 490,285
Bonding at 1.5% of Labor & Material	\$ 154,648
ESCO Overhead at 10% of Labor & Material	\$ 1,030,989
ESCO Profit at 8% of Labor & Material	\$ 824,791
1st Year of M&V - Ameresco	\$ 2,500
Additional Years of M&V - Ameresco	-
Subtotal-Construction Costs	\$ 14,819,194
Construction Contingency at 5% of Construction Costs	\$ 515,495
Apprenticeship Incentive	\$ 1,000
Maximum Project Cost	\$ 15,335,689
Sales Tax at 9.8% of Maximum Project Cost	\$ 1,452,379
Puget Sound Energy (PSE) Utility Fees	\$ 135,000
0 Years of M&V - DES	\$ -
DES Project Management Fees	\$ 190,000
Total Project Price to Customer	\$ 17,113,068
Estimated Utility Incentive	\$5,550
Estimated Grant Funding	\$1,000,000
Estimated Project Net Cost	\$16,107,568

Items Included in Maximum Project Cost

Maximum project costs include the following: (Refer to Section II. A. in the MESA for details)

- a) Engineering audit, including the cost for preparation of this proposal, is a fixed fee.
- b) The pre design of Architectural and Engineering Design for Architectural, mechanical, plumbing, and general measures as part of the Engineering Audit.
- c) The architectural and engineering design fee for mechanical, plumbing, and general measures is calculated at 5% of labor and material. This is a fixed fee.
- d) The construction management service fee is calculated at 6% of labor and material. This is a fixed fee.
- e) The site superintendent services will be invoiced based on actual hours per the Main Energy Services Agreement (MESA).
- f) Installation of the ESCO Equipment including the following costs:
 - (1) All costs paid by the ESCO for the installation of the ESCO Equipment. This includes costs paid to subcontractors or directly to ESCO personnel when related to installation or system verification of the ESCO Equipment.
 - (2) The portion of reasonable travel, lodging, and meal expenses of the ESCO or of its officers or employees incurred while traveling in the discharge of duties connected with the work; per Section B of the MESA and OFM guidelines.
 - (3) Cost of all equipment, materials, and supplies incorporated in the work, including costs of transportation thereof.
 - (4) Cost or rental charges, including transportation and maintenance, of all materials, supplies, equipment, temporary facilities, and hand tools not owned by the workers which are consumed in the performance of the Work. All such cost and charges shall be in accordance with the General Conditions. If desired by the Owner, any materials and supplies purchased but not consumed during the performance of the work will remain the property of the Owner.
 - (5) Cost of premiums for all bonds and insurance, which the ESCO is required to purchase and maintain.
 - (6) Permit fees, royalties, and deposits lost for causes other than the ESCO's negligence.
 - (7) Losses and expenses not compensated by insurance or otherwise sustained by the ESCO in connection with the Work, provided they have resulted from causes other than the fault or neglect of the ESCO or its subcontractors. Such losses shall include settlements made with the written consent and approval of the Owner. If, however, such loss requires reconstruction and the ESCO is placed in charge thereof, the ESCO shall be paid for its services a fee.
 - (8) Demolition cost and cost of removal of all debris.

- (9) Costs incurred due to an emergency affecting the safety of persons and property.
- (10) Other costs incurred in the performance of the Work if and to the extent approved in advance in writing by the Owner.
- (11) The cost of construction financing including contingency and an allowance for Owner-initiated scope improvements only if agreed to by the Owner and DES Energy Program in advance.
- (12) Cost of equipment startup, training, system verification, and balancing performed by the ESCO.
- (13) Bonding, Liability Insurance, and Builder's Risk Insurance.
- (14) Overhead and Profit. This includes the ESCO's remuneration for compensation of personnel, expenses, risks related to the project, and profit. Overhead is calculated at 10% of the labor and material, and profit is calculated at 8% of labor and material. These are fixed fees.
- (15) Metering equipment costs for any permanent metering or monitoring equipment left on site.
- (16) The ESCO shall provide a Schedule of Values at the end of construction bidding and prior to the first application of payment. The schedule of values will include all costs related to the installation of the ESCO equipment except fixed fee items; refer to General Conditions section 6.02 for details.

Construction Contingency

A construction contingency of **\$515,495** (not including sales tax) has been established for this project. Sales tax on construction contingency is not included in the total project cost. The contingency is for items, including cost increases on project materials, necessary to complete the original scope of work upon approval by the Owner, DES Energy Program, and in accordance with the general conditions. Such approval for the use of contingency funds for work in the original scope shall not be unreasonably withheld. The ESCO shall not be allowed to mark-up contingency funds expended for items included in the original scope of this project. The ESCO, Owner, and DES will jointly manage any contingency left after the project scope is completed. The ESCO shall be allowed to mark-up items beyond the original scope as approved by Owner and DES. All unused construction contingency funds shall reduce the overall project cost to the Owner.

Ongoing Services

Ongoing measurement and verification for the first year is included in the project fees. After the end of Year 1, the ESCO will present a proposal to the Owner for ongoing measurement and verification services for future years, at the owner's request. These services will verify energy savings and provide engineering assistance in maintaining the savings. The owner may cancel these services at any time. Such cancellation will also terminate the energy savings guarantee.

Accounting Records

The ESCO shall check all material, equipment, and labor entering into the Work and shall keep such full and detailed accounts as may be necessary for proper financial management under this Agreement. The accounting system shall be satisfactory to the Owner. The Owner and DES shall be afforded access to all the ESCO's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to this Contract, and the Contractor shall preserve all such records for a period of six (6) years, or for such longer period as may be required by law, after the final payment. Refer to General Conditions Section 10.08 for details.

Reconciliation of Labor and Material Costs

The financed amount is based on an estimate of Labor & Material costs. In recognition that actual Labor & Material costs may vary from the estimate, the following procedures are established to reconcile this difference:

- a) When actual labor and material costs exceed the estimated labor and material costs (plus contingency), the additional expense will be borne by the ESCO without affecting the Owner's payment.
- b) When actual labor and material costs are less than the estimated labor and material cost (plus contingency), the remaining funds will be retained by the Owner.

For any work self-performed by Ameresco, applicable labor rates will be submitted to DES for review and approval prior to the commencement of work.

Project Diverse Business Participation Goals

Ameresco supports the State of Washington's diverse business inclusion plan targets and recognizes the ability of the DES ESCO program to participate in contributing to these goals. Ameresco understands the unique nature of ESCO work and acknowledges the responsibility to DES and the client agency to provide a project that meets the client's needs while providing the guaranteed savings as agreed to and contracted. To support diverse business outreach in Washington State, Ameresco has established the following diverse business participation goals for this project:

Table 5: Diverse Business Participation Goals.

State Certified Categories	Original Contract Percentages	Percentage for construction (This Project)	Percentage for services (This Project)
Minority-owned business	10%	10%	0%
Women-owned business	6%	6%	0%
Veteran-owned business	5%	5%	0%
Small/mini/micro business	5%	5%	0%

The following actions will be undertaken to support and advance the Disadvantaged Business Enterprise (DBE) goals for this project:

- Development of a DBE Recruitment Plan in consultation with:
 - The Minority Contractor Success Program Lead
 - Ameresco's Western Region Diversity, Equity & Inclusion (DE&I) Working Group

At this stage, Ameresco typically does not engage subcontractors until the Energy Service Proposal (ESP) has been formally accepted by the client. Therefore, we are currently unable to provide a definitive assessment of our ability to meet the project's Disadvantaged Business Enterprise (DBE) participation goals. While we remain committed to pursuing these goals, they are aspirational and subject to practical constraints. Our foremost priority is to select subcontractors who meet the required standards of quality and performance and whose services align with the project budget. As such, although we will make every reasonable effort to engage qualified DBEs, the actual level of participation may be influenced by these critical factors.

Minimum Levels of Apprenticeship

The ESCO shall comply with the requirements from the 2023 General Conditions for Washington State Energy Savings Performance Contracting: Section 10.16 Minimum Levels of Apprenticeship Participation. For contracts greater than or equal to \$1 million in construction cost, ESCOs meeting or exceeding the 15% apprenticeship utilization requirement will receive a \$1,000 incentive (plus sales tax) which is included in the Guaranteed Maximum Project Cost. The ESCO who fails to meet the utilization requirements and fails to demonstrate a Good Faith Effort is subject to penalties, not to exceed five percent (5%) of the Total Contract Sum.

The ESCO shall provide an Apprentice Utilization Plan demonstrating how and when the ESCO intends to meet the requirements prior to submitting the first construction invoice for construction labor.

Client Agency Funding Requirements

The Client has received funding from the Washington State Historical Society through the Historical Capital Project Grant. The funding is earmarked "Facility Design and Construction." The funding amount totals \$1,000,000. This project associated work will need to remain in compliance with this grant and adhere to the Historical Treatment Plan. Refer to Appendix C.

IMPORTANT: Ameresco is not an authority on the grant funding eligibility of taxes or DES fees. On this type of grant, DES fees of up to 3% of the total budget are usually allowable, while taxes typically are not. The Client will be responsible for ineligible costs.

The estimated utility incentive of \$5,550 will constitute a net gain for the Client if taxes and DES fees are eligible for grant funding. If not, these estimated incentives will help to offset the ineligible costs. Ameresco does not guarantee utility incentive estimates. Ameresco will take responsibility for completing the utility incentive application and refund process and providing relevant documentation to the Client.

Recommendations for Replacement of Existing Equipment

As part of the Investment Grade Audit (IGA), Ameresco evaluated a range of additional energy and infrastructure improvement measures beyond the scope of these current ESP. Detailed findings and recommendations related to these additional opportunities are documented in the Investment Grade Audit Report, dated April 8, 2025.

The current project scope includes a comprehensive package of measures designed to enhance occupancy, safety, and accessibility at the Olympia Armory. These improvements address critical facility needs and lay the groundwork for future enhancements.

Should additional funding become available, Ameresco will collaborate with the Olympia Armory to identify and prioritize further phases of work based on the IGA findings. These future phases may include, but are not limited to:

- Expanded energy efficiency upgrades
- Deferred maintenance items
- Additional accessibility improvements
- Resilience and sustainability enhancements

Once a new scope of work is defined, Ameresco will prepare a formal change order proposal for review and approval. This process will ensure that any additional work aligns with project goals, funding requirements, and stakeholder priorities.

Standards of Comfort and Service

HVAC Comfort

The proposed heating, ventilation, and air conditioning systems will provide comfort and indoor air quality in accordance with the standards below. These standards will pertain only to the buildings and areas of the building in which Ameresco is installing new HVAC equipment that has direct control over space comfort conditions. HVAC comfort conditions cannot be guaranteed when operable windows are open. Additionally, the standards of comfort are for typical spaces and may vary depending on usage. Standards for HVAC comforts are as follows:

Table 6. Standards of HVAC Comfort

Area	Occupied		Unoccupied		Humidity	
	Min.	Max	Heating	Cooling	Min.	Max
Classroom	68	75	60	80	40%	60%
Office	68	75	60	80	40%	60%
Corridor	68	75	60	80	40%	60%
Drill Hall	68	75	60	80	40%	60%
Community Space	68	75	60	80	40%	60%
Storage	68	75	55	80	40%	60%

The dedicated outdoor air system (DOAS) shall provide the minimum outside air per occupant in accordance with ASHRAE standards, Chapter 4 of the International Mechanical Code, and Washington State Mechanical Code. The DOAS system shall be controlled to operate during scheduled occupied hours. Occupied hour schedule will be coordinated with the owner.

Illumination Levels

Lighting retrofits will be designed to provide lighting levels of not less than recommendations by IESNA. The project will remove and lawfully recycle/dispose of existing lamps and PCB ballasts. Existing egress lighting or emergency lighting may remain as-is, and upgrades to these systems are not automatically included in the scope of work unless specifically included in an associated measure.

Baseline Energy Consumption

Monthly Average Energy Use

Table 7 presents the combined average monthly energy and water consumption for the Armory Main Building and the Annex since the facility was transferred to the City of Olympia. Electricity and natural gas usage data spans from April 2022 through August 2024, while water consumption data covers the period from April 2022 through January 2025.

Detailed energy use and cost data are provided below. Please note that Electric Schedule 24E-C does not include a demand charge. Additionally, while the Armory's water utility bill from the City of Olympia includes charges for stormwater and solid waste collection, these costs have been excluded from the calculations presented here.

Table 7. Monthly Average Energy Use

	Energy Usage			Cost			
	Electric	Natural Gas	Water	Electric	Natural Gas	Water	Total
Month	kWh	Therms	Cubic Feet	\$	\$	\$	\$
January	7,974	1,954	613	\$1,121.81	\$2,360.39	\$140.23	\$3,622.43
February	8,039	1,850	665	\$1,153.06	\$2,275.82	\$141.84	\$3,570.72
March	5,789	1,217	645	\$846.15	\$1,439.16	\$141.22	\$2,426.53
April	8,612	1,669	1,310	\$1,160.66	\$1,986.00	\$161.90	\$3,308.56
May	4,361	506	1,013	\$614.76	\$591.61	\$152.67	\$1,359.04
June	3,481	184	827	\$500.52	\$243.37	\$146.87	\$890.76
July	3,393	77	1,010	\$489.58	\$128.21	\$152.57	\$770.36
August	4,201	103	610	\$603.30	\$174.34	\$140.13	\$917.77
September	3,299	173	707	\$479.52	\$235.08	\$143.14	\$857.74
October	4,175	503	1,017	\$576.58	\$633.04	\$152.78	\$1,362.40
November	4,700	1,140	760	\$639.10	\$1,303.30	\$144.80	\$2,087.20
December	5,241	1,248	537	\$716.70	\$1,437.44	\$137.85	\$2,291.99
Total:	63,265	10,624	9,714	\$8,901.74	\$12,807.76	\$1,756.00	\$23,465.50

Energy Consumption by Building and Fuel

Table 8 shows the energy consumption of Armory site, broken down by building and by fuel. The Main Building's energy consumption is higher than that of the Annex, both overall and proportionally per square foot. The bulk of the main building's energy supply comes from gas, so that the overall gas consumption of the site is five times its electric consumption, despite the fact that the annex has no gas supply at all. Overall, electrification of the gas systems in the main building represents a significant opportunity for both energy savings and greenhouse gas (GHG) emissions reduction.

Table 8. Armory Annual Consumption Breakdown by Building and Resource

Facility	Area (ft ²)	Annual Electrical Usage		Annual Gas Usage		Electric EUI	Nat. Gas EUI	Overall EUI
		kWh	kBtu	Therms	kBtu	kBtu/ft ²	kBtu/ft ²	kBtu/ft ²
Main Building	41,447	61,049	208,361	10,623	1,062,298	5	26	30.7
Annex	9,700	2,217	7,567	0	0	1	0	0.8

Utility Rates

Table 9 shows the current energy rates for the Armory and Annex site based on the PSE-24 electric rate schedule and PSE-31 Gas schedule and City of Olympia water and wastewater rates based on the dates listed in the table.

Table 9. Puget Sound Energy Utility Rates for the Olympia Armory

	Utility Item Description	Oct-Mar	Apr-Sept	Average	Usage Rate	Indicate when updated/effective time period, initial
Electricity	Rate 24E-C Basic Charge	\$25.9500	\$25.9500	\$ 25.950		Effective 10/1/2024
	Total Electricity Charge	\$0.116451	\$0.113251	\$ 0.115		
	Power Cost Adj Clause & Supp Rate	\$0.013646	\$0.013646	\$ 0.014		
	Elec Conservation Svc Rider	\$0.005352	\$0.005352	\$ 0.005		
	Federal Wind Power Credit	-	-	-		
	Renewable Energy Credit	\$0.000007	\$0.000007	\$ 0.000		
	Total per kWh	\$0.135456	\$0.132256	\$ 0.134		
Natural Gas	Rate 31G-C Basic Charge	-			\$38.89/mo	Effective 11/1/2024
	Rate 31G-C Delivery Charge				\$0.80743	
	Gas Cons. Program Charge				\$0.03656	
	State Carbon Reduction Credit				\$(75.78)/mo	
	Gas Cost				\$0.48808	
	Total Per Therm				\$1.33207	
Water & Wastewater	Ready to Serve Fees				\$48.12/mo	2024 Rate
	Consumption Charge Winter Rate (Nov-June)				\$3.11 per CF	
	Consumption Charge Summer Rate (July-Oct)				\$4.64 per CF	
	City Fee, Fixed Up To 1,400 cf				\$26.81/mo	
	City Fee, per 100 cf over 1,400 cf				\$3.83	
	LOTT Fee, Fixed Up To 1,800 cf				\$46.14/mo	
	City Fee, per 100 cf over 1,800 cf				\$5.13	

The utility rates in Table 10 were used in energy cost savings calculations. Demand savings were excluded at the request of DES.

With the proposed improvements and the expected increase in occupancy, it is likely that the Olympia Armory site will require a new utility rate schedule. Specifically, the rate may change from Schedule 24E-C to Schedule 25E-C, which applies to customers with demand exceeding 50 kW but below 350 kW. This transition would include demand charges under the new schedule.

The electricity and natural gas rates for the Armory, as presented below, reflect current information provided by Puget Sound Energy (PSE) and may be subject to change. These rates form the basis of the energy savings calculations within the Investment Grade Audit. Actual utility rates are applied to ARM-G3 energy calculations. The average rate was used for ARM-L1 energy calculations. The average rate was calculated averaging the four-rate cases, Oct-Mar First 20,000 kWh, Oct-Mar Over 20,000 kWh, Apr-Sept First 20,000 kWh, and Apr-Sept Over 20,000 kWh. The water-related energy conservation measure calculations utilize the 2024 water rates outlined in the table above. The anticipated savings are defined as the difference between the estimated energy consumption at projected occupancy levels.

Table 10. Puget Sound Anticipated Energy Utility Rates for the Olympia Armory

	Utility Item Description	Oct-Mar		Apr-Sept		Average	Usage Rate	Indicate when updated/ effective time period.
Electricity	Rate 25E-C Basic Charge	\$53.95		\$53.95		\$ 53.95		Effective 1/1/2025
	Total Demand Charge	First 50 KW	Over 50 KW	First 50 KW	Over 50 KW			
		2.62	12.74	2.62	9.37	\$ 6.8375		
	Total Electricity Charge	First 20k kWh	Over 20k kWh	First 20k kWh	Over 20k kWh			
		\$0.109431	\$0.083414	\$0.100485	\$0.083414	\$ 0.094186		
	Power Cost Adj Clause & Supp Rate	\$0.010489	\$0.010489	\$0.010489	\$0.010489	\$0.010489		
	Elec Conservation Svc Rider	\$0.005365	\$0.005365	\$0.005365	\$0.005365	\$0.005365		
	Federal Wind Power Credit	-	-	-	-	-		
Natural Gas	Renewable Energy Credit	-	-	-	-	-		
	Total per kWh	\$0.125285	\$0.099268	\$0.116339	\$0.099268	\$0.11004		
	Rate 31G-C Basic Charge						\$38.89/mo	Effective 11/1/2024
	Rate 31G-C Delivery Charge						\$0.80743	
	Gas Cons. Program Charge						\$0.03656	
	State Carbon Reduction Credit						\$(75.78)/mo	
	Gas Cost						\$0.48808	
	Total Per Therm						\$1.33207	

Estimated Annual Savings Amount & Utility Incentive

Electrical

The ESCO calculates that annual electrical costs will be reduced by \$2,098. This calculation is based on annual consumption being reduced by 19,118 kWh and 72 kW. Demand (kw) savings are not included in the calculated or guaranteed energy and cost savings.

Natural Gas

The ESCO calculates that annual gas cost will increase by \$71. This calculation is based on the annual consumption being increased by 53 therms due to the interactive effect of lighting wattage reduction.

Utility Incentive

The ESCO estimates that an incentive in the amount of \$5,550 will be provided by Puget Sound Energy for lighting improvements.

Method of Calculating Energy Savings & Energy Cost Savings

Energy Audit

The energy savings calculations were included in the IGA Report. These savings calculations have been reviewed and accepted by the DES Energy Program project management, the Owner and the ESCO. The Energy Audit results are included in the IGA dated April 8, 2024

Method of Calculation of Savings

For each building exterior, building interior, or site lighting measure, the proposed kWh estimate was subtracted from the baseline kWh estimate to determine a preliminary estimated savings figure. For each building interior, this figure was then adjusted by subtracting the heating penalty and adding the cooling credit. The penalty or credit for a given building is the sum of the penalties/credits determined for each individual space within the building. The penalties/credits for individual spaces were calculated using heating and cooling interactive coefficients dependent on the estimated percentage of coincident lighting and HVAC operational times.

Methodological Exclusions

1. The Owner, DES, and the ESCO agree that the energy savings exists if the ESCO equipment meets the KPIs as measured per Appendix B. Detailed calculation methodology is outlined in the IGA Report.
2. The Owner agrees to notify the ESCO within two working days of detecting any non-performing ESCO installed equipment with a follow-up in writing within three business days; refer to the Project Contact List for contact information.
3. The ESCO shall promptly repair the equipment upon notification to maintain compliance of the energy savings guarantee.
4. Modifications to Baseline by Owner: The Owner shall maintain all existing facilities and installed equipment during the term of this contract at or above current maintenance levels. Owner agrees to maintain the energy efficiency of the systems installed.
5. The DES recommends excluding demand savings from energy cost savings calculations. As a result, these savings have not been included in the reported estimates. However, Ameresco's measurement and verification efforts have shown a high level of confidence in the achievement of demand savings as a result of this type of project. . Therefore, the real cost savings achieved through the proposed project may end up being higher than the estimated figures.

Audit Cost Effectiveness Criteria

The Phase 1 project for the Olympia Armory Facility meets the defined cost-effectiveness criteria by strategically prioritizing upgrades that directly support the building's transformation into a safe, accessible, and functional space. The improvements included in this phase are essential prerequisites for obtaining occupancy approval from the Authority Having Jurisdiction (AHJ) and

supports the implementation of future phases energy projects identified in the IGA.

The Phase 1 scope includes critical upgrades such as:

- Seismic and Structural design work, laying the groundwork for future improvements.
- Building code compliance, which is essential for AHJ approval.
- Elevator installation and ADA-compliant bathrooms, ensuring accessibility.
- Fire sprinkler and alarm systems, which are vital for life safety and occupancy.
- Electrical, HVAC, and plumbing upgrades, improving core functionality and efficiency.

These elements are essential to repurposing the building and securing occupancy approval, making them cost-effective by allowing the facility to begin serving its intended function sooner.

Historical Preservation Criteria

It is understood that the Ameresco, its partners, and its subcontractors must try to maintain the historical appearance of the building in accordance with the State Historical Preservation Office (SHPO). Below are some of the key components that will be addressed or retained as part of the Historic Treatment Plan.

- Historic Doors:
 - Historic doors will be retained in place. If they are required for removal due to fire safety, the City of Olympia Staff will retain them in storage until a new use can be identified.
 - The metal doors for the munition storage rooms will be mounted on the wall next to where they were in use.
 - Large rolling doors for the workrooms will be kept and repurposed or stored for future use.
- Ceiling Documentation in Drill Hall:
 - Mitigation for the ceiling will be to document, photograph the ceiling and retain a section of the ceiling for display and future interpretation.
- Retention of Historic Door Locations:
 - Proposed retention of the historic door locations in the hallways.
- Columns in Basement:
 - Columns will be retained and kept as is.
- Transom Window Detail in Chaplain's Quarters:
 - This door is installed where a window was in the apartment and will retain the transom from the original window.
- Design Sensitivity and Aesthetic Compatibility
 - Provide code required improvements (ramps, door hardware, etc.) that are appropriate to the building aesthetic.

- Fresh paint will be applied on the East Wall in the same white color the Drill Hall currently is.
- New flooring, where added, will be added that more closely match historic floors.
- Repair and repaint interior plaster finishes where identified. Repair and repaint wood base where identified.

For additional details, please see Appendix C: Historic Spaces Treatment Plan.

Financing

Project financing will be provided by the Owner. The Owner has been awarded grant funding in the amount of \$1 Million from the Washington State Historical Society through the Historical Capital Project Grant. The owner is responsible for the coordination of this funding. The ESCO is responsible for obtaining applicable utility incentives and for passing on those savings to the owner. The owner will fund the remaining project costs through internal funding sources. Estimated rebates amount to \$5,550 and are excluded from the total cost to customer.

Energy Savings Guarantee

The ESCO guarantees that the equipment will perform as indicated in the Method of Calculating Energy Savings & Energy Cost Savings section. This performance level is guaranteed for 1 year(s) following the notice of commencement of savings (defined as Year 1), or for the duration of the measurement and verification services, whichever is longer. Based on this performance, electrical savings will not be less than 17,206 kWh per year. This corresponds with 90% of the estimated energy savings. Increased gas consumption due to the interactive effect of lighting wattage reduction will not be more than 76.3 therms per year. This corresponds with 110% of the estimated energy increase for the lighting penalty, and 90% of the estimated energy decrease for the roof improvements.

In the event that the guaranteed performance in Year(s) 1, pursuant to the Method of Calculating Energy Savings & Energy Cost Savings section, is less than the guaranteed minimum, the ESCO shall compensate the Owner for the difference between the Energy Savings Guarantee and the measured Achieved Savings.

ESCO Compensation

Payments

1. Owner agrees to make progress payments based on construction progress and one subsequent payment for retainage. Payments are to be made within 30 days of receipt of an approved invoice from the DES Project Manager.
2. Retainage will be released within 45 days after receipt of all lien releases, L&I releases, Department of Revenue and Employment Security certificates and releases by Owner.
3. Each Application for Payment submitted by ESCO shall state that prevailing wages have been paid in accordance with the pre-filed statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.
4. Site Superintendents and construction managers who perform tasks on the project site that fit within the job classifications of WAC 296-127 will file certified payroll for all hours of labor in compliance with WAC 296-17A-4900.

Terms of Agreement

The Contract shall be effective and binding upon the parties immediately upon its execution, and the period from contract execution until the Commencement Date shall be known as the "Interim Period." All energy savings achieved during the Interim Period will be fully credited to the Customer.

The term of this the Energy Savings Guarantee shall be 1 year beginning with the first day of the month following the Notice of Commencement of Energy Savings (NCES).

Termination Value

Upon notice, the Owner may at any time terminate this Agreement. The Owner will be responsible for any costs resulting from work within the scope of the contract.

Any termination shall fully and finally terminate and extinguish all the Owner's rights and all of the ESCO's obligations under this agreement.

Project Schedule

The ESCO is scheduled to achieve substantial project completion in the spring of 2027. The anticipated duration of the project is 600 calendar days. An example draft project schedule is outlined below and may not include all construction activities. The project schedule will be updated once the Notice to Proceed is issued and may be subject to change.

#	Work Package / Milestone	Start	Finish	Duration	Key Notes
1	Kick-off & logistics plan	Day-1	Day-5	4 d	Notice-to-Proceed
2	100 % submittals & shop drawings (2 Copies provided to the city)	Day-8	Day-54	7 wks	
3	Permit / plan-review cycle	Day-22	Day-103	12 wks	Early structural/elevator
4	Long-lead procurement	Day-43	Day-174	19 wks	(elevator, switchgear, DOAS, HRU, steel) Drives Tasks 11 & 16
5	Selective structural demo	Day-57	Day-80	4 wks	Opens trenches for plumbing
6	New steel columns / frames	Day-84	Day-160	11 wks	Runs w/ plumbing
7	Roof membrane removal & temporary dry-in	Day-57	Day-82	4 wks	Weather-sensitive
8	Roof blocking & equipment curbs	Day-85	Day-103	3 wks	Follows Task 7
9	Roof membrane replacement & punch	Day-106	Day-146	6 wks	Coordinates with solar
10	Roof membrane cure / warranty sign-off	Day-147	Day-174	4 wks	Prerequisite for solar racking
11	Utility trench & transformer set	Day-99	Day-145	6 wks	Coordinate PUD outage
12	Main switchgear install & energize	Day-147	Day-200	8 wks	Switchgear from Task 4
13	Basement distribution panels & conduit	Day-203	Day-257	8 wks	
14	L1 & L2 elec / FA / FP rough-ins	Day-260	Day-334	11 wks	Overlaps restroom framing
15	Elevator pit excavation / forming	Day-176	Day-201	4 wks	
16	Elevator shaft CMU / steel	Day-204	Day-243	6 wks	
17	Elevator delivery & install	Day-245	Day-326	12 wks	Long-lead
18	State elevator inspection & cert	Day-330	Day-341	2 wks	
19	Remove existing basement exhaust	Day-176	Day-187	2 wks	
20	Rig/set DOAS & HRU + ducts	Day-190	Day-271	12 wks	Curbs ready (Task 8)
21	Duct heaters, unit heaters, controls	Day-225	Day-299	11 wks	Overlaps Task 20
22	Hydronic RCx (plant & terminals)	Day-393	Day-432	6 wks	
23	Install kitchen hood fan	Day-337	Day-355	3 wks	
24	Basement plumbing rough-in & slab	Day-211	Day-278	10 wks	Parallel with steel
25	L1 plumbing rough-in & framing	Day-281	Day-292	2 wks	
26	L2 plumbing rough-in & framing	Day-316	Day-327	2 wks	
27	Fixtures, tile & restroom finishes	Day-365	Day-390	4 wks	
28	Basement LED fixtures & controls	Day-393	Day-425	5 wks	
29	L1 & L2 LED / controls	Day-428	Day-467	6 wks	
30	Fire-sprinkler piping & trim	Day-260	Day-334	11 wks	Ceiling coordination
31	ADA ramps & EV trench	Day-554	Day-579	4 wks	Spring weather

32	Solar ready (roof & elec complete)	Day-174	Day-174	0 d	Triggers solar contractor NTP
33	Solar PV & BESS install (Separate Project)	Day-176	Day-292	—	
34	Integrated systems testing	Day-498	Day-558	8 wks	
35	Owner training & O&M turnover	Day-561	Day-572	2 wks	
36	Punch-list & AHJ inspections	Day-561	Day-586	4 wks	
37	Record docs & demobilization	Day-589	Day-593	1 wk	
38	Substantial completion and Acceptance	Day-575	Day-600	3 wks	

Extent of Subcontracting

The ESCO may subcontract the construction portion of this Contract to qualified firms as mutually agreed upon between the ESCO, owner, and DES. The ESCO will work the Owner and DES in the selection process or selection criteria of the subcontractors in accordance with the general conditions. Construction subcontracts may be awarded competitively or may be directly sourced to a selected contractor should the owner, DES, and ESCO agree. Approval of subcontracting or selection of subcontractors may not be unreasonably withheld.

The ESCO will endeavor to satisfy the MWBE goals of Washington State as described in the subsection **Project Diverse Business Participation Goals** within the **ESCO Services** section.

Every month for the duration of the contract, and while the contract is active in the DES Public Works Diversity Tracking & Management System, submit and accurately maintain the following payment information through the DES Public Works

Diversity Tracking & Management System:

- a. Payments received by the ESCO from the Owner
- b. Payments paid to each first-tier subcontractor and subsequent lower tiers
- c. Payments paid to each first-tier supplier and subsequent lower tiers

Subcontracts in writing and pass-through provision: All Subcontracts must be in writing. By appropriate written agreement, ESCO will require each Subcontractor for all tiers, so far as applicable to the Work to be performed by the Subcontractor, to be bound to ESCO by terms of the Contract Documents, and to assume toward ESCO all the obligations and responsibilities which ESCO assumes toward Owner in accordance with the Contract Documents. Each Subcontract must preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, ESCO must require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between ESCO and its Subcontractors with respect to insurance or bonds.

State and Local Codes

Building Codes

The following code(s) pertain to the subject project.

Washington Energy Code (WEC)

The 2021 Washington State Energy Code is found in Section 51-11C of the Washington Administrative Code. Sections pertaining to the project scope were used as a basis during development of the proposed project and meet the requirements set forth.

2021 International Building Code (IBC) with WAC Amendments

Olympia Municipal Code

Insurance and Bonding

1. The ESCO shall provide a payment and performance bond in accordance with the Main Energy Services Agreement. Builders Risk Insurance will also be provided by the ESCO.
2. For the purposes of this Agreement, the "Sum Amount of Bond" shall be **\$154,648**. This amount does not include any construction contingencies.
3. The bond amount consists of the following:
 - i. Labor & Material Bond Cost..... **\$154,648**
 - ii. Sales Tax..... **\$15,156**
 - iii. Bond Total..... **\$169,804**

(a) Certificates of General Liability Insurance will be provided prior to Contract Signing. The Owner (through the State of Washington) and the State of Washington shall be named as An Additional Insured on all insurance certificates.

4. The ESCO shall provide a payment and performance bond in the amount of 100% of the construction cost, as defined in the Energy Services Agreement Addendum. The amount shall include all authorized changes and state sales tax. The Bond shall be in the form attached to the Conditions of the Energy Services Agreement. The Contract listed on the bond form shall be the Addendum No. and Agreement No. which incorporates the work, and the "Contract Date" shall be the date of the Addendum. The full and just sum of the Bond shall be as defined above and shall include the actual cost of purchasing and installing the ESCO equipment, job superintendent, and state sales tax. The Bond shall specifically exclude coverage for those portions of the Energy Services Agreement and/or Energy Services Agreement Addendum pertaining to design services, energy cost savings guarantee, maintenance guarantee, utility incentives, efficiency guarantees, and any other clauses which do not relate specifically to construction management and supervision of work for purchasing and installing of the ESCO Equipment or for work to be accomplished by the Owner. The Bond shall be with a Surety or Bonding Company that is registered with the State of Washington Insurance Commissioner's Office.

Renegotiation

Both parties recognize that during the project implementation, the DES Energy Program Manager, Owner, and the ESCO may mutually agree to various modifications and that the energy savings may change as a result.

Exhibits & Tables

Financial Analysis

Table 11. Financial Summary of Proposed Project

Project Cost Category	Project Cost
Engineering Audit	\$ 344,000
Labor and Material Cost	\$ 10,309,891
M,W,G Design at 10.12% of Labor & Material	\$ 1,043,495
Construction Management at 6% of Labor & Material	\$ 618,593
Site Supervision	\$ 490,285
Bonding at 1.5% of Labor & Material	\$ 154,648
ESCO Overhead at 10% of Labor & Material	\$ 1,030,989
ESCO Profit at 8% of Labor & Material	\$ 824,791
1st Year of M&V - Ameresco	\$ 2,500
Additional Years of M&V - Ameresco	-
Subtotal-Construction Costs	\$ 14,819,194
Construction Contingency at 5% of Construction Costs	\$ 515,495
Apprenticeship Incentive	\$ 1,000
Maximum Project Cost	\$ 15,335,689
Sales Tax at 9.8% of Maximum Project Cost	\$ 1,452,379
Puget Sound Energy (PSE) Utility Fees	\$ 135,000
0 Years of M&V - DES	\$ -
DES Project Management Fees	\$ 190,000
Total Project Price to Customer	\$ 17,113,068
Estimated Utility Incentive	\$5,550
Estimated Grant Funding	\$1,000,000
Estimated Project Net Cost	\$16,107,568

Selected Measures

Table 12. Summary of Selected Measures

	Existing Electric Cons (kWh/Yr)	Existing Gas Cons (Therms/ Yr)	Proposed Electric Cons (kWh/Yr.)	Proposed Gas Cons (Therms/ Yr.)	Electric Cons Savings (kWh/Yr.)	Electric Gas Savings (Therms /Yr.)	Total Energy Savings (\$/Yr.)	Estimated Utility Incentives (\$)
ARM-L1	50,735	0	32,209	143	18,526	(143)	\$1,848	\$5,550
ARM-G3	386,248	5,644	381,343	5554	32,026	90	\$179	--
TOTAL	436,983	5644	417,865	5697	19,118	(53)	\$2,027	\$5,550

Notes: *ECMs ARM-M1, ARM-M2, ARM-W1, ARM-G1, ARM-G4 will not result in energy savings in this phase.

**Existing Energy Consumptions utilizes an adjusted baseline as noted in the Investment Grade Audit.

***Electrical Demand Savings were excluded from the Energy Savings calculations per DES.

Appendix

The following appendices have been included herein:

- [Appendix A. Design Development Drawings](#)
 - [A.1 Architectural 80% Construction Documents](#)
 - [A.2 Civil 80% Construction Documents](#)
 - [A.3 Electrical 80% Construction Documents and Specifications](#)
 - [A.4 Mechanical 80% Construction Documents and Specifications](#)
 - [A.5 Structural 80% Construction Documents](#)
- [Appendix B. Measurement & Verification Plan](#)
- [Appendix C. 2025 Historic Spaces Treatment Plan](#)
- [Appendix D. Asbestos Survey & Report](#)
- [Appendix E. Investment Grade Audit Report](#)
- [Appendix F. Lighting Calculations and Scope Plans](#)

Appendix A. Design Development Drawings

The following design development drawings have been included herein:

- [A.1 Architectural 80% Construction Documents](#)
- [A.2 Civil 80% Construction Documents](#)
- [A.3 Electrical 80% Construction Documents and Specifications](#)
- [A.4 Mechanical 80% Construction Documents and Specifications](#)
- [A.5 Structural 80% Construction Documents](#)
- [A.6 Landscape 80% Construction Documents](#)

A.1 Architectural 80% Construction Documents

Appendix A.1 has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

A.2 Civil 80% Construction Documents

Appendix A.2 has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

A.3 Electrical 80% Construction Documents

Appendix A.3 has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

A.4 Mechanical 80% Construction Documents

Appendix A.4 has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

A.5 Structural 80% Construction Documents

Appendix A.5 has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

A.6 Landscape 80% Construction Documents

Appendix A.6 has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

Appendix B. Measurement and Verification Plan

Lighting - ARM-L1	
Measurement & Verification Plan	
M&V Plan Description	Option A (Retrofit Isolation with Key Parameter Measurement) will be used to quantify the Energy Savings associated with the lighting upgrades.
Baseline Performance Parameters	Fixture quantities, wattage, and operating hours were determined based on a combination of field surveys, manufacturer data, assumptions, and industry standards. Wattage for a sample of existing lighting fixtures will be spot measured one (1) time prior to construction on fixture types that represent collectively more than 75% of the total connected lighting energy consumption of the facility. Measurements will follow 90/10 statistical confidence and precision criteria. All baseline performance parameters are set forth in calculation spreadsheets.
Post Installation Performance Parameters	Power level for a sample set of fixtures will be spot measured one (1) time post-construction on fixture types that represent more than 75% of the total connected lighting energy consumption of the facility. Measurements will follow 90/10 statistical confidence and precision criteria. Fixture counts will be determined utilizing the as-built quantities provided by the installing subcontractor. Operating hours will not be measured but will be the same as the baseline performance parameters unless an occupancy sensor is installed (the new operating hours are noted in the lighting audit calculations). Interactive effects are not measured. The savings calculations will be updated with the measured pre and post wattage values and actual fixture quantities.
Performance Assurance Activities	• Confirm that fixtures were installed as stated in the Scope of Services and are performing as specified prior to final acceptance. • Perform one-time pre and post installation measurements of fixture wattages as described above. • Calculate Energy Savings for the first Guarantee Year utilizing the lighting spreadsheet and document in the M&V Report. • During the Guarantee Period, Ameresco will visually inspect a sample of lamps to verify the lighting system performs as intended and the lamp types are as efficient as those proposed / installed in the Project. The visual inspection will occur one (1) time during each Guarantee Year.
Agreed-Upon Variables	Burn hours are included in the list of project assumptions. Burn hours are not changing as part of the savings calculations and given values will continue to be utilized in the post-retrofit calculations, except where occupancy sensors are added.
Metering Plan	Ameresco or Ameresco's lighting subcontractor(s) will measure the existing and proposed wattages as described above. Existing wattage measurements will occur prior to construction activities, and proposed wattage measurements will occur post installation. Measurements will be taken with an AEMC Power Clamp-on Meter Model 405. This meter has the following specifications: ○ 1000Vrms Voltage Range ○ 100Arms AC Current Range ○ 0.01V Voltage Resolution

	○ 0.01A Current Resolution ○ 1% +/- 3cts Voltage Accuracy ○ 1% +/- 3cts Current Accuracy If the specified make and model is not available, another meter will be selected with the same or better accuracy specifications as those listed above. The meter will be calibrated against the manufacturer’s original specifications or industry standards.	
Savings Reporting	Savings will be determined on an annual basis. Electricity consumption will be divided equally between 12 months; cooling and heating savings will be prorated based on seasonal heating and cooling loads. The results will be presented in accordance with this M&V plan.	
Key Performance Indicator (KPI)	Baseline Condition	Proposed Condition
Lighting Wattage	Wattage measurements of a representative sample of the various existing lighting types.	Wattage measurements of a representative sample of the various proposed lighting types.
Lighting Operating Hours	Operating Hours of Lights	Operating Hours of Lights
Installed Fixture Quantities	Lighting Audit fixture counts	As-Built fixture counts

Roof Improvement - ARM-G3	
Measurement & Verification Plan	
M&V Plan Description	Agreed-Upon savings. Due to the minimal amount of savings associated with this measure, the savings are agreed-upon.
Performance Assurance Activities	• Confirm that roofing installation is installed as expected to meet the calculated R-values utilized in the savings calculations. • Photographs will be taken of the material being installed verifying the effective R-value and thickness. Pictures will be taken of measurements of material thickness during installation to validate the desired material thickness is installed. • If the total effective R-value meets or exceeds the expected R-value, no updates will be made to the savings calculations. If the actual effective R-value is less than expected, the savings will be adjusted to reflect lower energy savings from the roofing insulation.

Appendix C. 2025 Historic Spaces Treatment Plan

Appendix C has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

Appendix D. Asbestos Survey & Report

Appendix D has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

Appendix E. Investment Grade Audit Report

Appendix E has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

Appendix F. ARM-L1 Lighting Revised Calculations.

Because the building is transitioning from being mostly unoccupied to regularly occupied, the energy conservation measures (ECMs) use an adjusted baseline to reflect this change. For the baseline calculations, occupancy hours were assumed to match the proposed future operating hours. This adjustment ensures that lighting improvements are evaluated based on reduced wattage, rather than being penalized due to the building's current low occupancy.

The proposed hours utilized for the space types are as follows. These hours were reviewed with and approved by the owner on 2/21/25.

Table 13. ARM-L1 Key Performance Indicators

Space Type	Days per Year				Burn Hours (without Lighting Controls)			
	Weekday	Weekend	Holiday	Total	Weekday Hours	Weekend Hours	Holiday Hours	Burn Hours (Hrs/Yr)
Office	250	104	11	365	8			2,000
Office Common Area	250	104	11	365	6			1,500
Common Area	250	104	11	365	9	5		2,770
Restroom	250	104	11	365	9	5		2,770
Custodial	250	104	11	365	1			250
Classroom	250	104	11	365	3	2		958
Classroom - Shop	250	104	11	365	3	2		958
Kitchen	250	104	11	365	1	2		458
Emergency or 24HPD	250	104	11	365	24	24	24	8,760
Stairs & Hallways	250	104	11	365	9	5		2,770
Shops	250	104	11	365	3	2		958
Storage	250	104	11	365	1			250
Multi-Purpose	250	104	11	365	3	4		1,166
Exterior--All Other	250	104	11	365	12	12	12	4,380
Locker Room	250	104	11	365	9	5		2,770
Community Space	250	104	11	365	8	5		2,520
Conference Room	250	104	11	365	2			500

Additional information for Appendix G has been provided in electronic format only and transmitted to the City via electronic flash drive and/or Ameresco's secure file transfer server. Electronic files represent those that are large in nature or are being submitted to preserve via their native format (e.g., Microsoft Excel).

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