

**STATE OF MINNESOTA
ENERGY SAVINGS STUDY SERVICES
MASTER CONTRACT**

This Master Contract is between the State of Minnesota, acting through its Commissioner of Commerce (“State”) and «OrganizationName», «RepAddress1» «RepAddress2», «RepCity», «RepState», «RepZipCode» (“Contractor”).

Recitals

1. Under Minn. Stat. §15.061 and Minn. Stat. §216C.02 the State is empowered to engage such assistance as deemed necessary.
2. The State is in need of energy savings study services.
3. The Contractor represents that it is duly qualified and agrees to perform all services described in this Master Contract and performed under Work Order Contracts to the satisfaction of the State.

Master Contract

1. Term of Master Contract

- 1.1. **Effective Date:** 7/1/2016, or the date the State obtains all required signatures under Minn. Stat. § 16C.05, subd. 2, whichever is later.

The Contractor must not accept work under this Master Contract until this Master Contract is fully executed and the Contractor has been notified by the State’s Authorized Representative that it may begin accepting Work Order Contracts.

- 1.2. **Work Order Contracts.** The term of work under any Work Order Contracts issued under this Master Contract may not extend beyond the expiration date of this Master Contract.
- 1.3. **Expiration Date:** 6/30/2019.
- 1.4. **Survival of Terms.** The following clauses survive the expiration or cancellation of this Master Contract and all Work Order Contracts: 9. Indemnification; 11. State Audits; 12. Government Data Practices and Intellectual Property; 15. Publicity and Endorsement; 16. Governing Law, Jurisdiction, and Venue; and 20. Data Disclosure.

2. Definitions for use throughout this agreement:

- 2.1. **“Investment Grade Audit” or “IGA”** means a detailed audit of State Institution facilities, conducted by the Contractor, to identify Energy Conversation Measures ECMs and quantify the associated implementation cost and estimated savings, which serves as the basis for an energy savings project proposal; in accordance with the requirements set forth in Exhibit A, Section I.
- 2.2. **“Energy”** means energy or water use, or demand.
- 2.3. **“State Institution”** means any political subdivision or governmental unit who has entered into a joint powers agreement with the State and executed a Work Order Contract under this Master Contract for Local Energy Efficiency Program.
- 2.4. **“Work Order Contract”** means the Work Orders issued under this Master Contract.
- 2.5. **“Energy Savings Platform® (ESP)”**- means the user-configurable application for energy savings tracking, which contains automated calculators for quantifying energy savings based on algorithms found within Minnesota’s Technical Reference Manual (TRM).

3. Scope of Work

The Contractor, who is not a state employee, may be requested to perform any of the following services under individual Work Order Contracts:

The Scope of Work for this Master Contract may include one or all of the following as described. A complete detailed description of required work will be furnished in each Work Order Contract issued.

Local Energy Efficiency Program Project Phases

Phase 1: Marketing and Preliminary Project Intake & Evaluation

Commerce will actively market the LEEP to potential local units of government, providing the pre-qualified list of Providers along with the LEEP guidelines and program documentation. Commerce, through its marketing and project intake processes, will evaluate potential sites for best fit with other

Commerce energy savings programs. If it is determined that LEEP is the best fit, the Participant and Commerce will sign a Joint Powers Agreement and move on to Provider Selection by issuing a Site-Specific RFP (SSRFP) to the pre-qualified list of Providers.

Pre-qualified Providers under contract with Commerce are encouraged to directly market their services under the LEEP to potential local units of government as well. When a potential project is identified, the Provider shall work with the local units of government to engage Commerce for project support. Once a local units of government has engaged Commerce to develop a SSRFP, no further Provider-initiated contact related to that site will be allowed.

Phase 2: Investment Grade Audit

The Provider and Participant will execute the Work Order Contract Attachment 2: (SAMPLE LEEP Work Order Contract). This Work Order Contract sets specific expectations and provides a detailed process for both the Contractor and the State Institution. The Work Order Contract also defines the deliverables to the State Institution and establishes the basis for engineering design, construction bidding, and implementation to follow, which will be executed by the State Institution outside the LEEP process. It incorporates current state statutes that directly relate energy improvement for local units of government; current state statute on Energy Improvement Financing Programs for Local Government projects can be found at <https://www.revisor.mn.gov/statutes/?id=216C.42> and <https://www.revisor.mn.gov/statutes/?id=216C.43>.

The Investment Grade Audit will identify and evaluate Energy Conservation Measures and define an estimated project scope, cost, savings and cash-flow over a proposed financing term.

When applicable, the State may require the use of the ESP in calculating Energy Conservation Measures for the Investment Grade Audit.

The Contractor understands that only the receipt of a fully executed Work Order Contract authorizes the Contractor to begin work under this Master Contract. Any and all effort, expenses, or actions taken before the Work Order Contract is fully executed is not authorized under Minnesota Statutes and is under taken at the sole responsibility and expense of the Contractor. A sample Work Order Contract and Sample Amended Work Order Contract are attached and incorporated into this Master Contract as Exhibits A and B.

The Contractor understands that this Master Contract is not a guarantee that the State or a State Institution will enter into a Work Order Contract with the Contractor. The State has determined that it may generally have a need for the services described in and under this Master Contract, but does not commit to selecting the Contractor for a project or spending any money with the Contractor.

4. Time

The Contractor must comply with all the time requirements described in Work Order Contracts.

5. Consideration and Payment

5.1. **Consideration.** The State Institution will pay for all services satisfactorily performed by the Contractor for all Work Order Contracts issued under this Master Contract unless recommendations provided in the Investment Grade Audit are not, in the sole discretion of the State, deemed reasonable and viable. Fees must be in accordance with the Cost and Pricing maximums contained in the Contractor's Fee Schedule (Exhibit C), which is attached and incorporated into this contract.

5.2. **Travel Expenses.** Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Contractor as a result of any Work Order Contract will be reimbursed in same manner and in no greater amount than provided in the current "Commissioner's Plan" promulgated by the commissioner of Employee Relations. The Contractor will not be reimbursed for travel and subsistence expenses incurred outside Minnesota unless it has received the State Institution's prior written approval for out of state travel. Minnesota will be considered the home state for determining whether travel is out of state.

5.3. Payment

5.3.1. **Invoices.** The State Institution will promptly pay the Contractor after the Contractor presents an itemized invoice for the services actually performed and the State's Authorized Representative accepts the invoiced services. Invoices must be submitted timely no more frequently than monthly.

6. Conditions of Payment

All services provided by the Contractor under a Work Order Contract must be performed to the State's satisfaction, as determined at the sole discretion of the State's Authorized Representative and in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations. The Contractor will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, state, or local law.

7. Authorized Representatives and Project Managers

The State's Authorized Representative for this Master Contract is **Alex Cecchini**, State Program Administrator, Principal - Local Energy Efficiency Program, 651-539-1707, or his successor, and has the responsibility to monitor the Contractor's performance.

The State Institution's Project Manager will be identified in each Work Order Contract.

The Contractor's Authorized Representative is «Rep», «RepTitle», «RepPhone», or their successor. If the Contractor's Authorized Representative changes at any time during this Master Contract, the Contractor must immediately notify the State Institution.

The Contractor's Project Manager will be identified in each Work Order Contract.

8. Assignment, Amendments, Waiver, and Contract Complete

- 8.1. **Assignment.** The Contractor may neither assign nor transfer any rights or obligations under this Master Contract or any Work Order Contract without the prior consent of the State and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this Master Contract, or their successors in office.
- 8.2. **Amendments.** Any amendment to this Master Contract or any Work Order Contract must be in writing and will not be effective until it has been executed and approved by the same parties who executed and approved the original contract, or their successors in office.
- 8.3. **Waiver.** If the State fails to enforce any provision of this Master Contract or any Work Order Contract, that failure does not waive the provision or its right to enforce it.
- 8.4. **Contract Complete.** This Master Contract and any Work Order Contract contain all negotiations and agreements between the State and the Contractor. No other understanding regarding this Master Contract or Work Order Contract, whether written or oral, may be used to bind either party.

9. Indemnification

In the performance of this contract by Contractor, or Contractor's agents or employees, the Contractor must indemnify, save, and hold harmless the State, its agents, and employees, from any third-party claims or causes of action, including attorney's fees incurred by the State, to the extent caused by Contractor's or Contractor's agents or employees:

- 1) Intentional, willful, or negligent acts or omissions; or
- 2) Actions that give rise to strict liability; or
- 3) Breach of contract or warranty.

The indemnification obligations of this section do not apply in the event the claim or cause of action is the result of the State's sole negligence. This clause will not be construed to bar any legal remedies the Contractor may have for the State's failure to fulfill its obligation under this contract.

10. Limitation of Liability

NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, IN NO EVENT SHALL EITHER PARTY, ITS OFFICERS, DIRECTORS, AFFILIATES OR EMPLOYEES BE LIABLE FOR ANY FORM OF INDIRECT, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF USE, LOSS OF PRODUCTION, LOSS OF PRODUCT, LOSS OF REVENUE, PROFITS OR LOSS OF DATA DAMAGES WHETHER SUCH DAMAGES ARISE IN CONTRACT OR TORT, IRRESPECTIVE OF FAULT, NEGLIGENCE OR STRICT LIABILITY OR WHETHER SUCH PARTY HAS BEEN ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES.

NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT AND TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE MAXIMUM LIABILITY OF CONTRACTOR FOR DAMAGES HEREUNDER SHALL NOT EXCEED

\$2,000,000.00. THIS LIMITATION OF LIABILITY DOES NOT APPLY TO DAMAGES FOR PERSONAL INJURY OR DEATH.

11. State Audits

Under Minnesota Statute § 16C.05, subdivision 5, the Contractor's books, records, documents, and accounting procedures and practices relevant to any work order contract are subject to examination by the State and/or the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this master contract.

12. Government Data Practices and Intellectual Property

12.1. **Government Data Practices.** The Contractor and State must comply with the Minnesota Government Data Practices Act, Minnesota Statute Ch. 13, as it applies to all data provided by the State under any work order contract, and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Contractor under the work order contract. The civil remedies of Minnesota Statute § 13.08 apply to the release of the data referred to in this clause by either the Contractor or the State.

If the Contractor receives a request to release the data referred to in this Clause, the Contractor must immediately notify the State. The State will give the Contractor instructions concerning the release of the data to the requesting party before the data is released.

12.2. *Intellectual Property Rights and Obligations*

12.2.1. **Pre-Existing Intellectual Property.** State and Contractor shall each retain ownership of, and all rights, title and interest in, their respective pre-existing intellectual property that was created prior to the effective date of this contract by each party respectively, or Intellectual Property created by the Contractor that outside of the scope of this contract and not paid for under this contract ("Contractor's Intellectual Property") and all derivative works arising there from, subject to any license rights and ownership rights contained herein or otherwise executed between the parties. Contractor grants the State a royalty free, non-exclusive, perpetual, irrevocable license for Contractor's Intellectual Property that is incorporated into the State's deliverables under this contract.

12.2.2. **Intellectual Property Rights.** The State owns all rights, title, and interest in all of the intellectual property rights, including copyrights, patents, trade secrets, trademarks, and service marks in the Works and Documents *created and paid for under Work Order Contracts*. Works means all inventions, improvements, discoveries (whether or not patentable), databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, and disks conceived, reduced to practice, created or originated by the Contractor, its employees, agents, and subcontractors, either individually or jointly with others in the performance of this Master Contract or any Work Order Contract. Works includes "Documents." Documents are the originals of any databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks, or other materials, whether in tangible or electronic forms, prepared by the Contractor, its employees, agents, or subcontractors, in the performance of a Work Order Contract. The Documents will be the exclusive property of the State and all such Documents must be immediately returned to the State by the Contractor upon completion or cancellation of the Work Order Contract. To the extent possible, those Works eligible for copyright protection under the United States Copyright Act will be deemed to be "works made for hire." The Contractor assigns all right, title, and interest it may have in the Works and the Documents to the State. The Contractor must, at the request of the State, execute all papers and perform all other acts necessary to transfer or record the State's ownership interest in the Works and Documents.

12.2.3. *Obligations*

12.2.3.1 **Notification.** Whenever any invention, improvement, or discovery (whether or not patentable) is made or conceived for the first time or actually or constructively reduced to practice by the Contractor, including its employees and subcontractors, in the performance of the Work Order Contract, the Contractor will immediately give the State's

Authorized Representative written notice thereof, and must promptly furnish the Authorized Representative with complete information and/or disclosure thereon.

11.2.3.2 Representation. The Contractor must perform all acts, and take all steps necessary to ensure that all intellectual property rights in the Works and Documents are the sole property of the State, and that neither Contractor nor its employees, agents, or subcontractors retain any interest in and to the Works and Documents. The Contractor represents and warrants that the Works and Documents do not and will not infringe upon any intellectual property rights of other persons or entities. Notwithstanding Clause 8, the Contractor will indemnify; defend, to the extent permitted by the Attorney General; and hold harmless the State, at the Contractor's expense, from any action or claim brought against the State to the extent that it is based on a claim that all or part of the Works or Documents infringe upon the intellectual property rights of others. The Contractor will be responsible for payment of any and all such claims, demands, obligations, liabilities, costs, and damages, including but not limited to, attorney fees. If such a claim or action arises, or in the Contractor's or the State's opinion is likely to arise, the Contractor must, at the State's discretion, either procure for the State the right or license to use the intellectual property rights at issue or replace or modify the allegedly infringing Works or Documents as necessary and appropriate to obviate the infringement claim. This remedy of the State will be in addition to and not exclusive of other remedies provided by law.

13. Workers' Compensation and Other Insurance

- A. Contractor shall not commence work under the contract until they have obtained all the insurance described below and the State of Minnesota has approved such insurance. Contractor shall maintain such insurance in force and effect throughout the term of the contract.
- B. Contractor is required to maintain and furnish satisfactory evidence of the following insurance policies:
 - 1. **Workers' Compensation Insurance:** Except as provided below, Contractor must provide Workers' Compensation insurance for all its employees and, in case any work is subcontracted, Contractor will require the subcontractor to provide Workers' Compensation insurance in accordance with the statutory requirements of the State of Minnesota, including Coverage B, Employer's Liability. Insurance **minimum** limits are as follows:
 - \$100,000 – Bodily Injury by Disease per employee
 - \$500,000 – Bodily Injury by Disease aggregate
 - \$100,000 – Bodily Injury by Accident

If Minnesota Statute 176.041 exempts Contractor from Workers' Compensation insurance or if the Contractor has no employees in the State of Minnesota, Contractor must provide a written statement, signed by an authorized representative, indicating the qualifying exemption that excludes Contractor from the Minnesota Workers' Compensation requirements.

If during the course of the contract the Contractor becomes eligible for Workers' Compensation, the Contractor must comply with the Workers' Compensation Insurance requirements herein and provide the State of Minnesota with a certificate of insurance.

- 2. **Commercial General Liability Insurance:** Contractor is required to maintain insurance protecting it from claims for damages for bodily injury, including sickness or disease, death, and for care and loss of services as well as from claims for property damage, including loss of use which may arise from operations under the Contract whether the operations are by the Contractor or by a subcontractor or by anyone directly or indirectly employed by the Contractor under the contract. Insurance **minimum** limits are as follows:
 - \$2,000,000 – per occurrence
 - \$2,000,000 – annual aggregate
 - \$2,000,000 – annual aggregate – Products/Completed Operations

The following coverages shall be included:

Premises and Operations Bodily Injury and Property Damage

Personal and Advertising Injury

Blanket Contractual Liability

Products and Completed Operations Liability

Other; if applicable, please list _____

State of Minnesota named as an Additional Insured, to the extent permitted by law

3. **Commercial Automobile Liability Insurance:** Contractor is required to maintain insurance protecting it from claims for damages for bodily injury as well as from claims for property damage resulting from the ownership, operation, maintenance or use of all owned, hired, and non-owned autos which may arise from operations under this contract, and in case any work is subcontracted the contractor will require the subcontractor to maintain Commercial Automobile Liability insurance. Insurance **minimum** limits are as follows:

\$2,000,000 – per occurrence Combined Single limit for Bodily Injury and Property Damage

In addition, the following coverages should be included:

Owned, Hired, and Non-owned Automobile

4. **Professional/Technical, Errors and Omissions, and/or Miscellaneous Liability Insurance**

This policy will provide coverage for all claims the contractor may become legally obligated to pay resulting from any actual or alleged negligent act, error, or omission related to Contractor's professional services required under the contract.

Contractor is required to carry the following **minimum** limits:

\$2,000,000 – per claim or event

\$2,000,000 – annual aggregate

- C. Any deductible will be the sole responsibility of the Contractor and may not exceed \$50,000 without the written approval of the State. If the Contractor desires authority from the State to have a deductible in a higher amount, the Contractor shall so request in writing, specifying the amount of the desired deductible and providing financial documentation by submitting the most current audited financial statements so that the State can ascertain the ability of the Contractor to cover the deductible from its own resources.
- D. The retroactive or prior acts date of such coverage shall not be after the effective date of this Contract and Contractor shall maintain such insurance for a period of at least three (3) years, following completion of the work. If such insurance is discontinued, extended reporting period coverage must be obtained by Contractor to fulfill this requirement.
- E. Additional Insurance Conditions:
- Contractor's Commercial General Liability and Automobile Liability policy(ies) shall be primary insurance to any other valid and collectible insurance available to the State of Minnesota with respect to any claim arising out of Contractor's performance under this contract;
 - Contractor will notify the State of Minnesota within thirty (30) days of its receipt of written notice from an applicable insurer that a policy required hereunder will be canceled;
 - Contractor is responsible for payment of Contract related insurance premiums and deductibles;
 - If Contractor is self-insured, a Certificate of Self-Insurance must be attached;
 - Contractor's policy(ies) shall include legal defense fees in addition to its liability policy limits, with the exception of B.4 above;
 - Contractor shall obtain insurance policy(ies) from insurance company(ies) having an "AM BEST" rating of A- (minus); Financial Size Category (FSC) VII or better, and authorized to do business in the State of Minnesota; and

- An Umbrella or Excess Liability insurance policy may be used to supplement the Contractor's policy limits to satisfy the full policy limits required by the Contract.

- F. The State reserves the right to immediately terminate the contract if the contractor is not in compliance with the insurance requirements and retains all rights to pursue any legal remedies against the contractor. All insurance policies must be open to inspection by the State.
- G. The Contractor is required to submit Certificates of Insurance acceptable to the State of MN as evidence of insurance coverage requirements prior to commencing work under the contract.

14. Publicity and Endorsement

- 14.1 **Publicity.** Any publicity regarding the subject matter of a Work Order Contract must identify the State as the sponsoring agency and must not be released without prior written approval from the State's Authorized Representative. For purposes of this provision, publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Contractor individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from a Work Order Contract.
- 14.2 **Endorsement.** The Contractor must not claim that the State endorses its products or services.

15. Governing Law, Jurisdiction, and Venue

Minnesota law, without regard to its choice-of-law provisions, governs this Master Contract and all Work Order Contracts. Venue for all legal proceedings arising out of this Master Contract and/or any Work Order Contracts, or any amendment thereto, or its breach, must be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

16. Subcontractors

- 16.1 **Subcontractual Relations.** By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume towards the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.
- 16.2 **Payment to Subcontractors.** (If applicable) As required by Minn. Stat. § 16A.1245, the prime contractor must pay all subcontractors, less any retainage, within 10 calendar days of the prime contractor's receipt of payment from the State Institution for undisputed services provided by the subcontractor(s) and must pay interest at the rate of one and one-half percent per month or any part of a month to the subcontractor(s) on any undisputed amount not paid on time to the subcontractor(s).

17. Minn. Stat. § 181.59

The vendor will comply with the provisions of Minn. Stat. § 181.59 which requires:

Every contract for or on behalf of the state of Minnesota, or any county, city, town, township, school, school district, or any other district in the state, for materials, supplies, or construction shall contain provisions by which the contractor agrees: (1) That, in the hiring of common or skilled labor for the performance of any work under any contract, or any subcontract, no contractor, material supplier, or vendor, shall, by reason of race, creed, or color, discriminate against the person or persons who are citizens of the United States or resident aliens who are qualified and available to perform the work to which the employment relates; (2) That no contractor, material

supplier, or vendor, shall, in any manner, discriminate against, or intimidate, or prevent the employment of any person or persons identified in clause (1) of this section, or on being hired, prevent, or conspire to prevent, the person or persons from the performance of work under any contract on account of race, creed, or color; (3) That a violation of this section is a misdemeanor; and (4) That this contract may be canceled or terminated by the state, county, city, town, school board, or any other person authorized to grant the contracts for employment, and all money due, or to become due under the contract, may be forfeited for a second or any subsequent violation of the terms or conditions of this contract.

18. Termination

- 18.1 **Termination by the State.** The State or Commissioner of Administration may cancel this Master Contract and any Work Order Contracts at any time, without cause, upon 30 days' written notice to the Contractor. Upon termination, the Contractor will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed.
- 18.2 **Termination for Cause.** Either Party may cancel this Master Contract and applicable Work Order Contracts, with cause, upon 30 days' written notice to the other Party setting forth the grounds for termination. Upon receipt of written notice, the allegedly breaching shall have 30 days to cure.
- 18.3 **Termination for Insufficient Funding.** The State may immediately terminate this Master Contract and any Work Order Contract if it does not obtain funding from the Minnesota legislature or other funding source; or if funding cannot be continued at a level sufficient to allow for the payment of the services covered here. Termination must be by written or fax notice to the Contractor. The State is not obligated to pay for any services that are provided after notice and effective date of termination. However, the Contractor will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed to the extent that funds are available. The State will not be assessed any penalty if the Master Contract or work order is terminated because of the decision of the Minnesota legislature or other funding source, not to appropriate funds. The State must provide the Contractor notice of the lack of funding within a reasonable time of the State's receiving that notice.

19. Data Disclosure

Under Minnesota Statute § 270C.65, Subdivision 3 and other applicable law, the Contractor consents to disclosure of its social security number, federal employer tax identification number, and/or Minnesota tax identification number, already provided to the State, to federal and state agencies and state personnel involved in the payment of state obligations. These identification numbers may be used in the enforcement of federal and state laws which could result in action requiring the Contractor to file state tax returns, pay delinquent state tax liabilities, if any, or pay other state liabilities.

20. Order of Precedent

Should the terms of this Contract conflict with the terms of any Exhibit, Appendix, or Attachment hereto, the terms set forth in this Contract shall prevail. Parties agree that the terms of any subsequent Work Order shall not be drafted nor construed to diminish or derogate the terms and conditions set forth in this Contract, unless explicitly stated herein.

(Signatures continued on page 9)

1. STATE ENCUMBRANCE VERIFICATION

Individual certifies that funds have been encumbered as required by Minnesota Statutes, Sections 16A.15 and 16C.05 (with delegated authority)

Signed:

Date:

CFMS:

2. «OrgName»

The Contractor certifies that the appropriate person(s) have executed the contract on behalf of the Contractor as required by applicable articles, bylaws, resolutions, or ordinances.

By:

Title:

Date:

By:

Title:

Date:

3. MN DEPARTMENT OF COMMERCE

Individual certifies that funds have been encumbered as required by Minnesota Statutes, Sections 16A.15 and 16C.05 (with delegated authority)

By:

Title:

Date:

4. MN DEPT. OF ADMINISTRATION

As delegated to Materials Management Division

By:

Date:

Distribution:

MN Dept. of Commerce, Accounting Dept.
MN Department of Administration, MMD
Contractor
State Authorized Representative

Exhibit A: Sample Work Order Contract

STATE OF MINNESOTA PROFESSIONAL AND TECHNICAL SERVICES WORK ORDER CONTRACT

This work order contract is between the [FILL IN NAME OF STATE INTITUION], acting through its [FILL IN THE NAME OF YOUR AGENCY OR BOARD. EXAMPLE: "commissioner of _____" OR "director of _____."] ("State Institution") and [GIVE THE FULL NAME OF THE CONTRACTOR INCLUDING ITS ADDRESS] ("Contractor"). This work order contract is issued under the authority of Master Contract T-Number _____, CFMS Number _____, and is subject to all provisions of the master contract which is incorporated by reference.

Work Order Contract

1 Term of Contract

1.1 **Effective date.** [SPELL OUT FULL DATE (e.g., April 1, 2001)], or the date the State Institution obtains all required signatures under Minn. Stat. § 16C.05, subd. 2, whichever is later.

The Contractor must not begin work under this contract until this contract is fully executed and the Contractor has been notified by the State's Authorized Representative to begin the work.

1.2 **Expiration date.** [SPELL OUT FULL DATE (e.g., April 1, 2001)], or until all obligations have been satisfactorily fulfilled, whichever occurs first.

2 Contractor's Duties

The Contractor, who is not a state employee, will perform the duties specified in Exhibit A which is attached and incorporated into this work order contract.

3 Consideration and Payment

3.1 **Consideration.** The State Institution will pay for all services performed by the Contractor using the Fee Schedule specified in Exhibit B, which is attached and incorporated into this work order contract.

The Contractor will be paid for actual eligible costs, not to exceed (**Written Amount**) dollars (\$x.xx). consistent with the breakdown of costs contained in Exhibit B which is attached and incorporated into this work order, at rates not to exceed the hourly rates listed below:

Travel Expenses. Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Contractor as a result of this work order contract will not exceed (**Written Amount**) dollars (\$x.xx).

Total Obligation. The total obligation of the State Institution for all compensation and reimbursements to the Contractor under this work order contract will not exceed (**Written Amount**) dollars (\$x.xx).

3.2. **Invoices.** The State Institution will promptly pay the Contractor after the Contractor presents an itemized invoice for the services actually performed and the State Institution's Authorized Representative accepts the invoiced services. Invoices must be submitted timely and according to the following schedule outlined in Exhibit A.

4 Project Managers

The State Institution's Project Manager is [NAME, TITLE, ADDRESS, TELEPHONE NUMBER]. The State Institution's Authorized Representative will certify acceptance on each invoice submitted for payment.

The Contractor's Project Manager is [NAME, TITLE, ADDRESS, TELEPHONE NUMBER]. If the Contractor's Project Manager changes at any time during this work order contract, the Contractor must immediately notify the State Institution.

5 E-Verify Certification (In accordance with Minn. Stat. §16C.075)

For services valued in excess of \$50,000, Contractor certifies that as of the date of services performed on behalf of the State, Contractor and all its subcontractors will have implemented or be in the process of implementing the federal E-Verify program for all newly hired employees in the United States who will perform work on behalf of the State. Contractor is responsible for collecting all subcontractor certifications and may do so utilizing the E-Verify Subcontractor Certification Form available at <http://www.mmd.admin.state.mn.us/doc/EVerifySubCertForm.doc>. All subcontractor certifications must be kept on file with Contractor and made available to the State upon request.

Contractor's Duties for Investment Grade Audit

The Contractor shall do all things necessary to complete an Investment Grade Audit (IGA) for the following facilities (the Facilities):

- *List facilities from SSRFP*
- *Facility X*
- *Facility Y*

In the performance of its duties, the Contractor shall provide all services necessary and reasonable to complete the following tasks. When these duties permit the Contractor to determine if an action is necessary, the Contractor will make such determination as would a reasonable and prudent person possessing knowledge and expertise of the subject matter. Upon reasonable and timely request, to the extent permitted by the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, the State Institution agrees to provide to the Contractor relevant information, data, drawings and plans held by or accessible to the State Institution, and to provide access to the Facilities and its staff and occupants at reasonable, mutually agreed times.

Task 1 – Preliminary Assessment of Needs and Opportunities

- 1.1 Meet with State Institution representative(s) to establish work plans, schedules and milestones, communication procedures, and meet and confer requirements.
- 1.2 Collect data and background information from the State Institution concerning facilities operation and energy use for the most recent three years from the effective date of this Work Order Contract. The State Institution shall provide to the Contractor, upon reasonable request, accurate and complete data and information held by or accessible to the State Institution. Where information is not available from the State Institution, Contractor will make a diligent effort to collect such information through the other means such as facility inspection, staff interviews and utility -providers' records. The State Institution shall provide data release authorization(s) to the Contractor for relevant data held by other entities, including but not limited to utility, fuel, material and service providers. Contractor shall assess the validity and accuracy of information provided and to confirm or correct as needed.

Data and background information to be collected includes but is not limited to:

- 1.2.1 Building square footage;
 - 1.2.2 Construction data of buildings and major additions including building envelope;
 - 1.2.3 Utility provider invoices;
 - 1.2.4 Occupancy and usage information;
 - 1.2.5 Descriptions of all energy-consuming or energy-saving equipment used energy management procedures practiced at or by the Facilities;
 - 1.2.6 Description of any energy or water use related improvements completed or currently being implemented;
 - 1.2.7 Description of any changes made to the structure of the Facilities or its energy-using or water-using equipment during the baseline period;
 - 1.2.8 Description of future plans regarding building modifications or equipment modifications and replacements;
 - 1.2.9 Drawings, as available including mechanical, plumbing, electrical, building automation and temperature controls, structural, architectural, modifications and remodels;
 - 1.2.10 Original construction submittals and factory data such as specifications and pump curves as available.
 - 1.2.11 Operating engineer logs, maintenance work orders and like materials, as available.
 - 1.2.12 Records of maintenance expenditures for energy-using or related equipment, including service contracts.
 - 1.2.13 Prior completed energy audits or studies, if any.
- 1.3 Perform a preliminary walk-through of the Facilities and interview staff and occupants to identify potential energy and water saving measures.
 - 1.3.1 Interview the Facilities management, maintenance staff, subcontractors and occupants of each building regarding:
 - a) Facilities operation, including energy management procedures.
 - b) Equipment maintenance problems;
 - c) Comfort problems and requirements;
 - d) Equipment reliability;
 - e) Projected equipment needs;
 - f) Occupancy and use schedules for the Facilities and specific equipment therein; and
 - g) Completed, current, planned and anticipated Facility improvements.

- 1.3.2 Survey major energy-using equipment, including but not limited to:
- a) Lighting (indoor and outdoor);
 - b) Heating and heat distribution systems;
 - c) Cooling systems and related equipment;
 - d) Automatic temperature control systems and equipment;
 - e) Air distribution systems and equipment, outdoor air ventilation systems and equipment, exhaust systems and equipment;
 - f) Hot water systems;
 - g) Electric motors, transmission and drive systems;
 - h) Special systems such as kitchen/dining equipment;
 - i) Water consuming systems such as restroom fixtures, water fountains, irrigation systems;
 - j) Renewable energy systems; and
 - k) Any other major energy using systems,
- 1.3.3 Perform surveys outside of normal business hours and/or on weekends when necessary, and subject to prior approval of the State Institution, to verify Facilities systems and occupancy schedules.
- 1.3.4 Develop a preliminary list of potential energy and water saving measures, with consideration given to the following for each system:
- a) Comfort and maintenance problems;
 - b) Energy use, loads, proper sizing, efficiencies and hours of operation;
 - c) Current operating condition;
 - d) Remaining useful life;
 - e) Feasibility of system replacement;
 - f) Hazardous materials or other environmental concerns that may be present;
 - g) Future plans for equipment replacement or building renovations and use;
 - h) Facilities operation and maintenance procedures that could be affected; and
 - i) Capability to effectively monitor performance and verify savings.

Contractor shall assess the validity and accuracy of information provided and shall verify or correct the information as needed.

- 1.4 Meet with State Institution representative(s) to present preliminary findings and negotiate agreement on energy and water saving measures to be analyzed.

List of Deliverables for Task 1:

- Report of site information and details to be verified by State Institution
- Preliminary Findings and Recommendations to be negotiated

2.Task 2 – Preliminary Analysis of Measures

- 2.1 Establish base year consumption and reconcile with end-use consumption estimates.
- 2.1.1 Establish base year consumption by examining relevant utility and fuel provider bills for the past three years, including but not limited to electricity, building heating fuels, steam and water. Establish base year consumption as appropriate in:
- a) energy units such as kilowatt-hours of usage, kilowatts of demand;
 - b) physical units of fuel, such as “hundred cubic feet” (ccf) or gallon;
 - c) energy content, such as therms or British thermal units (Btus);
 - d) cost structure, such as firm or interruptible;
 - e) cost per unit and cost per billing period; and
 - f) cost per square foot of conditioned space.

The Contractor shall consult with facility personnel or other parties as needed to identify and account for any anomalous schedule or operating conditions that could affect an accurate base year representation, such as significant occupancy or use changes or periods of time when relevant equipment was malfunctioning, repaired or replaced.

- 2.1.2 Estimate loading, usage and/or hours of operation for all major end uses of total facility energy and water consumption, including but not limited to:
- a) lighting,
 - b) heating,
 - c) cooling,
 - d) motors (fans and pumps),
 - e) plug loads, and
 - f) other major energy and water using equipment.

Where loading or usage is highly variable (such as cooling loads), the Contractor may use its best judgment to determine if direct measurement or monitoring is appropriate. However, the Contractor may not assume that equipment run hours equal the operating hours of the building(s) or facility staff estimates.

- 2.1.3 Reconcile actual annual end-use loads and consumption with the calculated base year loads and consumption and modify calculated base year values as needed to conform actual loads and consumption.
 - 2.1.4 Propose adjustments to the baseline for energy and water saving measures that will be implemented in the future.
 - 2.1.5 Provide a detailed description of the process(es), calculations, variables and adjustment factors used to establish the base year consumption .
- 2.2 Within ninety (90) days of the effective date of this Work Order Contract, develop and submit to the State Institution a preliminary analysis of potential energy and water saving measures.
- 2.2.1 Provide a comprehensive list of all potential energy and water saving measures including but not limited to: lighting systems, heating/ventilating/air conditioning equipment and distribution systems, controls systems, building envelope, motors, kitchen equipment, pools, renewable energy systems, other special equipment, irrigation systems, water saving devices, and retro-commissioning.
 - 2.2.2 For each measure, prepare a preliminary estimate of energy or water cost savings including description of analysis methodology, supporting calculations and assumptions used to estimate savings.
 - 2.2.3 Identify those measures which are reasonably likely to be cost effective and therefore warrant detailed analyses. For each measure, include equipment purchase, installation, and retro-commissioning cost estimates as well as an estimate for engineering design work required to obtain construction or other bids.
- 2.3 Meet with State Institution representative(s) to present preliminary findings and recommendations, and to establish agreement on measures, if any, to include in the detailed analysis and audit report. Provide information on potential project economics, including but not limited to an assessment of energy use, savings potential, project opportunities, recommended measures for further analysis, and the Contractor's assessment of its potential to develop an energy savings contract proposal that conforms to the requirements of this Work Order Contract. The State Institution may accept in whole or in part, or may reject the Contractor's analysis or recommendations if the Contractor's analysis or recommendations do not meet the requirements of the State's Work Order Contract.

List of Deliverables for Task 2:

- Report detailing Base Year Consumption and Methodology
- Preliminary Analysis and Recommendations Report

Contractor's Fee Schedule

1. Contractor's Fees for Investment Grade Audit

As specified in this Work Order Contract, the Contractor shall provide an Investment Grade Audit as part of a three-stage process including the Preliminary Assessment of Needs and Opportunities, the Preliminary Analysis of Measures, and the Detailed Analysis and Investment Grade Audit.

1.1 Preliminary Assessment & Analysis

In the table below provide the maximum fee to conduct the Preliminary Assessment & Analysis portion of the Investment Grade Audit, on a cost per square foot basis. The Contractor agrees that the proposed maximum fee shall incorporate its responsibility to adhere to and complete the full scope of work as presented in Exhibit A of this Work Order Contract, including any subcontracted work not performed by the Contractor.

	Proposed Maximum Cost per sq.ft.
Investment Grade Audit Preliminary Assessment & Analysis	\$/sq.ft.

The total square footage of all facilities to be evaluated in the Preliminary Assessment & Analysis is **XXXX square feet.**

This gives a maximum fee to conduct the Preliminary Assessment & Analysis of **\$XX,XXX.XX**

2. Open Book Pricing

The Contractor shall fully disclose all costs of materials and labor purchased and subcontracted by the Contractor and a list of hourly rates and position descriptions for labor or services provided by the Contractor. Estimates for number of hours required for the project and deviations of these budgeted hours shall require prior written approval by the State or shall not be paid. Contractor shall maintain cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records. Contractor shall retain these records and afford the State access thereto pursuant to Master Contract, Section 9: State Audits. Costs will be evaluated through price analysis to compare costs with reasonable criteria such as established catalog and market prices or historical prices. The pricing methodology and individual cost markups disclosed during preliminary contract negotiations will be expected to be applied, providing the scope and size of the project remain the same as assumed when markups were disclosed.

Exhibit B: Sample Amended Work Order Contract

STATE OF MINNESOTA WORK ORDER CONTRACT AMENDMENT 1

Agreement Start Date:	_____	Total Agreement Amount:	_____ \$0.00
Original Expiration Date:	_____	Original Agreement:	_____ \$0.00
Current Expiration Date:	_____	Previous Amendment(s) Total:	_____ \$0.00
Requested Expiration Date:	_____	This Amendment:	_____ \$0.00

This amendment is by and between the [FILL IN NAME OF STATE INTITUION], acting through its [FILL IN THE NAME OF YOUR AGENCY OR BOARD. EXAMPLE: "commissioner of _____" OR "director of _____."] ("State Institution") and [GIVE THE FULL NAME OF THE CONTRACTOR INCLUDING ITS ADDRESS] ("Contractor"). This work order contract is issued under the authority of Master Contract T-Number _____, CFMS Number _____, and is subject to all provisions of the master contract which is incorporated by reference.

Recitals

1. WHEREAS, the Minnesota Department of Commerce ("Commerce") entered into a Master Contract with Contractor identified as Master Contract #####, dated mm/dd/yyyy ("Original Master Contract"), for energy savings study work.
2. WHEREAS, State Institution then entered into a Work Order Contract with Contractor identified as Work Order Contract #####, dated mm/dd/yyyy ("Original Work Order Contract"), to complete energy savings study work.
3. WHEREAS, State Institution and Contractor wish to amend the Original Work Order Contract to extend the term and to add terms and conditions further defining scope of work to be performed by Contractor and payment thereof by the State Institution, and to incorporate various Exhibits and Attachments to the Original Work Order Contract, as provided below.
4. NOW, THEREFORE, State Institution and Contractor have agreed to amend the Original Work Order Contract as stated below.

Amendment(s)

REVISION 1. Clause 1. "Term of Contract" is amended as follows:

- 1.1 **Effective date.** [date], or the date the State Institution obtains all required signatures under Minn. Stat. § 16C.05, subd. 2, whichever is later.

The Contractor must not begin work under this contract until this contract is fully executed and the Contractor has been notified by the State Institution's Authorized Representative to begin the work.

- 1.2 **Expiration date.** [expiration date] [amended expiration date], or until all obligations have been satisfactorily fulfilled, whichever occurs first.

REVISION 2. Clause 3. "Consideration and Payment" is amended as follows:

3.1. Consideration

The State Institution will pay for all services performed by the Contractor an amount not to exceed the lesser of the total obligation specified in this clause or the product derived from the calculation specified in Exhibit B-1, which is attached and incorporated into this Work Order unless recommendations provided in the Preliminary Assessment and Analysis are not, in the sole discretion of the State, deemed reasonable and viable.

3.1.1 **Compensation.** The Contractor will be paid for actual eligible costs incurred, not to exceed **WORDS AMENDED WORDS Thousands** dollars (\$[Comp] [amended Comp]).

3.1.2 **Travel Expenses.** Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Contractor as a result of this Work Order will be reimbursed in same manner and in no greater amount than provided in the current "Commissioner's Plan" promulgated by the Commissioner of Minnesota Management and Budget. The Contractor will not be reimbursed for travel and subsistence expenses incurred outside Minnesota unless it has received the State Institution's prior written approval for out of state travel. Minnesota will be considered the home state for determining whether travel is out of state, and will not exceed **WORDS AMENDED WORDS Hundreds** dollars (\$[Travel] [amended Travel]).

3.1.3 **Total Obligation.** The total obligation of the State Institution for all compensation and reimbursements to the Contractor under this Work Order will not exceed **WORDS AMENDED WORDS Thousands** dollars (\$[Total] [amended Total]).

3.2. Payment

3.2.1. **Invoices.** The State Institution will promptly pay the Contractor after the Contractor presents an itemized invoice for the services actually performed and the State Institution's Authorized Representative accepts the invoiced services. Invoices must be submitted timely and according to the following schedule outlined in Exhibit A-1, which is attached hereto and incorporated into this Work Order.

3.2.2. **Retainage.** Under Minn. Stat. § 16C.08, subd. 5(b), no more than 90 percent of the amount due under any Work Order may be paid until the final product of the Work Order has been reviewed by the State Institution's

agency head. The balance due will be paid when the State's agency head determines that the Contractor has satisfactorily fulfilled all the terms of the Work Order.

REVISION 3.

Exhibit A to the Work Order is deleted and replaced in its entirety by Exhibit A-1, which is attached and incorporated into this contract.

Exhibit B to the Work Order is deleted and replaced in its entirety by Exhibit B-1, which is attached and incorporated into this contract..

REVISION 4. The following clause is added to the Work Order:

Exhibits

Exhibit C- Standards of Comfort

Exhibit D - Project Pro Forma

REVISION 5. The following clause is added to the Work Order:

Attachments

The following Attachments are attached and incorporated into this Work Order Contract:

Attachment # - Preliminary Assessment and Analysis Report

Except as herein amended, the provisions of the Original Master Contract, the Work Order Contract, and any previous amendments, exhibits, and attachments thereto remain in full force and effect.

SAMPLE

Contractor's Duties for Investment Grade Audit

The Contractor shall do all things necessary to complete an Investment Grade Audit (IGA) for the following facilities (the Facilities):

- *List facilities from SSRFP*
- *Facility X*
- *Facility Y*

In the performance of its duties, the Contractor shall provide all services necessary and reasonable to complete the following tasks. When these duties permit the Contractor to determine if an action is necessary, the Contractor will make such determination as would a reasonable and prudent person possessing knowledge and expertise of the subject matter. Upon reasonable and timely request, to the extent permitted by the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, the State Institution agrees to provide to the Contractor relevant information, data, drawings and plans held by or accessible to the State Institution, and to provide access to the Facilities and its staff and occupants at reasonable, mutually agreed times.

Task 1 – Preliminary Assessment of Needs and Opportunities

- 1.1 Meet with State Institution representative(s) to establish work plans, schedules and milestones, communication procedures, and meet and confer requirements.
- 1.2 Collect data and background information from the State Institution concerning facilities operation and energy use for the most recent three years from the effective date of this Work Order Contract. The State Institution shall provide to the Contractor, upon reasonable request, accurate and complete data and information held by or accessible to the State Institution. Where information is not available from the State Institution, Contractor will make a diligent effort to collect such information through the other means such as facility inspection, staff interviews and utility -providers' records. The State Institution shall provide data release authorization(s) to the Contractor for relevant data held by other entities, including but not limited to utility, fuel, material and service providers. Contractor shall assess the validity and accuracy of information provided and to confirm or correct as needed.

Data and background information to be collected includes but is not limited to:

- 1.2.1 Building square footage;
 - 1.2.2 Construction data of buildings and major additions including building envelope;
 - 1.2.3 Utility provider invoices;
 - 1.2.4 Occupancy and usage information;
 - 1.2.5 Descriptions of all energy-consuming or energy-saving equipment used energy management procedures practiced at or by the Facilities;
 - 1.2.6 Description of any energy or water use related improvements completed or currently being implemented;
 - 1.2.7 Description of any changes made to the structure of the Facilities or its energy-using or water-using equipment during the baseline period;
 - 1.2.8 Description of future plans regarding building modifications or equipment modifications and replacements;
 - 1.2.9 Drawings, as available including mechanical, plumbing, electrical, building automation and temperature controls, structural, architectural, modifications and remodels;
 - 1.2.10 Original construction submittals and factory data such as specifications and pump curves as available.
 - 1.2.11 Operating engineer logs, maintenance work orders and like materials, as available.
 - 1.2.12 Records of maintenance expenditures for energy-using or related equipment, including service contracts.
 - 1.2.13 Prior completed energy audits or studies, if any.
- 1.3 Perform a preliminary walk-through of the Facilities and interview staff and occupants to identify potential energy and water saving measures.
 - 1.3.1 Interview the Facilities management, maintenance staff, subcontractors and occupants of each building regarding:
 - h) Facilities operation, including energy management procedures.
 - i) Equipment maintenance problems;
 - j) Comfort problems and requirements;
 - k) Equipment reliability;
 - l) Projected equipment needs;
 - m) Occupancy and use schedules for the Facilities and specific equipment therein; and
 - n) Completed, current, planned and anticipated Facility improvements.

1.3.2 Survey major energy-using equipment, including but not limited to:

- l) Lighting (indoor and outdoor);
- m) Heating and heat distribution systems;
- n) Cooling systems and related equipment;
- o) Automatic temperature control systems and equipment;
- p) Air distribution systems and equipment, outdoor air ventilation systems and equipment, exhaust systems and equipment;
- q) Hot water systems;
- r) Electric motors, transmission and drive systems;
- s) Special systems such as kitchen/dining equipment;
- t) Water consuming systems such as restroom fixtures, water fountains, irrigation systems;
- u) Renewable energy systems; and
- v) Any other major energy using systems,

1.3.3 Perform surveys outside of normal business hours and/or on weekends when necessary, and subject to prior approval of the State Institution, to verify Facilities systems and occupancy schedules.

1.3.4 Develop a preliminary list of potential energy and water saving measures, with consideration given to the following for each system:

- j) Comfort and maintenance problems;
- k) Energy use, loads, proper sizing, efficiencies and hours of operation;
- l) Current operating condition;
- m) Remaining useful life;
- n) Feasibility of system replacement;
- o) Hazardous materials or other environmental concerns that may be present;
- p) Future plans for equipment replacement or building renovations and use;
- q) Facilities operation and maintenance procedures that could be affected; and
- r) Capability to effectively monitor performance and verify savings.

Contractor shall assess the validity and accuracy of information provided and shall verify or correct the information as needed.

1.4 Meet with State Institution representative(s) to present preliminary findings and negotiate agreement on energy and water saving measures to be analyzed.

List of Deliverables for Task 1:

- Report of site information and details to be verified by State Institution
- Preliminary Findings and Recommendations to be negotiated

2.Task 2 – Preliminary Analysis of Measures

2.1 Establish base year consumption and reconcile with end-use consumption estimates.

2.1.1 Establish base year consumption by examining relevant utility and fuel provider bills for the past three years, including but not limited to electricity, building heating fuels, steam and water. Establish base year consumption as appropriate in:

- g) energy units such as kilowatt-hours of usage, kilowatts of demand;
- h) physical units of fuel, such as “hundred cubic feet” (ccf) or gallon;
- i) energy content, such as therms or British thermal units (Btus);
- j) cost structure, such as firm or interruptible;
- k) cost per unit and cost per billing period; and
- l) cost per square foot of conditioned space.

The Contractor shall consult with facility personnel or other parties as needed to identify and account for any anomalous schedule or operating conditions that could affect an accurate base year representation, such as significant occupancy or use changes or periods of time when relevant equipment was malfunctioning, repaired or replaced.

2.1.2 Estimate loading, usage and/or hours of operation for all major end uses of total facility energy and water consumption, including but not limited to:

- g) lighting,
- h) heating,
- i) cooling,
- j) motors (fans and pumps),
- k) plug loads, and
- l) other major energy and water using equipment.

Where loading or usage is highly variable (such as cooling loads), the Contractor may use its best judgment to determine if direct measurement or monitoring is appropriate. However, the Contractor may not assume that equipment run hours equal the operating hours of the building(s) or facility staff estimates.

- 2.1.3 Reconcile actual annual end-use loads and consumption with the calculated base year loads and consumption and modify calculated base year values as needed to conform actual loads and consumption.
 - 2.1.4 Propose adjustments to the baseline for energy and water saving measures that will be implemented in the future.
 - 2.1.5 Provide a detailed description of the process(es), calculations, variables and adjustment factors used to establish the base year consumption .
- 2.2 Within ninety (90) days of the effective date of this Work Order Contract, develop and submit to the State Institution a preliminary analysis of potential energy and water saving measures.
- 2.2.1 Provide a comprehensive list of all potential energy and water saving measures including but not limited to: lighting systems, heating/ventilating/air conditioning equipment and distribution systems, controls systems, building envelope, motors, kitchen equipment, pools, renewable energy systems, other special equipment, irrigation systems, water saving devices, and retro-commissioning.
 - 2.2.2 For each measure, prepare a preliminary estimate of energy or water cost savings including description of analysis methodology, supporting calculations and assumptions used to estimate savings.
 - 2.2.3 Identify those measures which are reasonably likely to be cost effective and therefore warrant detailed analyses. For each measure, include equipment purchase, installation, and retro-commissioning cost estimates as well as an estimate for engineering design work required to obtain construction or other bids.
- 2.3 Meet with State Institution representative(s) to present preliminary findings and recommendations, and to establish agreement on measures, if any, to include in the detailed analysis and audit report. Provide information on potential project economics, including but not limited to an assessment of energy use, savings potential, project opportunities, recommended measures for further analysis, and the Contractor's assessment of its potential to develop an energy savings contract proposal that conforms to the requirements of this Work Order Contract. The State Institution may accept in whole or in part, or may reject the Contractor's analysis or recommendations if the Contractor's analysis or recommendations do not meet the requirements of the State Institution's Work Order Contract.

List of Deliverables for Task 2:

- Report detailing Base Year Consumption and Methodology
- Preliminary Analysis and Recommendations Report

3.Task 3 – Detailed Analysis and Investment Grade Audit

- 3.1 Upon acceptance by the State Institution of the preliminary findings and recommendations, the Contractor shall perform a detailed analysis of the potential savings and costs for each accepted energy and water saving measure. In performing its detailed analysis, the Contractor shall:
- 3.1.1 Use appropriate American Society of Heating, Refrigeration and Air-conditioning Engineers or other nationally-recognized analysis and calculation methodologies for each measure analyzed.
 - 3.1.2 Use assumptions, estimates, projections and baselines which best represent the true value of each measure's future energy or operational savings and the true cost of implementing each measure. Include accurate marginal costs for each unit of savings, documentation of material and labor cost savings, adjustments to the baseline if necessary to reflect current conditions at the facility, and calculations which account for any interactive effects of the recommended measures.
 - 3.1.3 Use best judgment regarding the employment and duration of instrumentation to achieve an accurate and faithful characterization of energy use.
 - 3.1.4 Use markups and fees no greater than those specified in Exhibit B, Contractor's Fees, in all cost estimates.
 - 3.1.5 If State Institution intends to perform Measurement and Verification post-project implementation, State Institution may require Contractor to develop a preliminary measurement and verification plan for each measure in accordance with Attachment 1, Measurement and Verification Guidelines, incorporated herein.
- 3.2 Upon the State Institution's acceptance of the preliminary findings and recommendations, the Contractor shall prepare a preliminary Investment Grade Audit Report containing detailed technical and financial data and calculations sufficient to complete an energy savings project. The report shall include but is not limited to:
- 3.2.1 Report overview and summary including:
 - a)Contact information;

- b) Summary table of recommended energy and water saving measures, with itemization for each measure of total design and construction cost, annual maintenance cost, the first year cost avoidance (in dollars and energy units), simple payback and equipment service life;
 - c) Summary of annual energy and water use by fuel type and costs of existing or base year condition;
 - d) Calculation of cost savings expected if all recommended measures are implemented, and percentage savings of total facility energy cost;
 - e) Description of the existing facilities and mechanical and electrical systems;
 - f) Summary description of each recommended measure, including estimated costs and savings;
 - g) Discussion of measures considered but not investigated in detail; and
 - h) Conclusions and recommendations.
- 3.2.2 Base year energy use including:
- a) Description and itemization of current billing rates, including schedules and riders;
 - b) Summary of all utility billings;
 - c) Identification and definition of base year consumption and description of how it was established;
 - d) Reconciliation of estimated end use consumption (i.e. lighting, cooling, heating, fans, plug loads, etc.) with calculated base year consumption, include discussion of any unusual findings.
- 3.2.3 Full description of each energy and water saving measure including:
- a) Existing conditions;
 - b) Description of equipment to be installed and how it will function;
 - c) Estimated useful service life of new equipment;
 - d) Discussion of facility operations and/or maintenance procedures that will be affected by a measure's installation or implementation;
 - e) Recommended installation and implementation plan;
 - f) Savings calculations including:
 - (1) Base year energy use and cost;
 - (2) Post-retrofit annual energy use and cost;
 - (3) Savings estimates including analysis methodology, supporting calculations, formulas, assumptions and key data used;
 - (4) Annual savings estimated for each year of the proposed contract period. Savings estimates must be attributed to the time period(s) in which they are actually realized, and must conform to any limitations on savings estimates specified by the State Institution;
 - (5) Description and calculations for any proposed utility rate changes attributable to the proposed measure;
 - (6) Explanation of how savings interactions between retrofit options are accounted for in calculations; and
 - (7) Operation and maintenance savings, including detailed calculations and description.
 - g) If a computer simulation is used to estimate savings potential, the Contractor shall provide a concise description of the simulation program and methodology and list key input data. At the State Institution's request, the Contractor shall provide access to the program and all assumptions and inputs used, and/or printouts of all input files and relevant output files and documentation sufficient to explain how the savings estimates are derived from the simulation program output.
 - h) Cost estimates and estimated scope of the construction work needed. Provide specifications for major mechanical components as well as detailed lighting and water fixture counts. Include all anticipated costs associated with installation and implementation:
 - (1) Engineering and/or design costs;
 - (2) Estimates for labor, materials, and equipment; include any anticipated special provisions, such as overtime or shift differential pay, if necessary to accomplish the work within any operational or time restrictions specified by the State Institution;
 - (3) Permit costs;
 - (4) Construction management fees; and
 - (5) Environmental costs or benefits, such as waste handling and disposal or environmental credits.
 - i) Relevant conclusions, observation or caveats.
 - j) Preliminary commissioning plan in conformance with requirements provided in Attachment 2, System Start-up and Commissioning Requirements, incorporated herein.
 - k) Preliminary measurement and verification plan in conformance with Attachment 1, Measurement and Verification Guidelines.
 - l) Compatibility of existing control systems and equipment with proposed improvements. Provide brand name and model of any existing controls system if proposed controls systems modifications will have to be compatible with that control system, and note if sole-source procurement will be necessary to maintain system compatibility.
 - m) Appendices that fully document the data used to prepare the analyses and the sources and methods employed to collect the data.

- 3.3 Within 90 days of the State Institution's acceptance of the preliminary findings and recommendations, the Contractor shall meet with State Institution to present the preliminary Investment Grade Audit Report.
- 3.3.1 Review the recommendations, savings calculations and impact of the measures on the operations of the Facilities.
- 3.3.2 Specify how the estimated project costs and savings meet the State Institution's terms for completing the Investment Grade Audit.
- 3.4 Upon acceptance by the State Institution of the preliminary Investment Grade Audit Report, prepare and present final Investment Grade Audit Report within ninety (90) days of acceptance.

List of Deliverables for Task 3:

- **Preliminary Investment Grade Audit**
- **Final Investment Grade Audit**

SAMPLE

Contractor's Fee Schedule

1. Contractor's Fees for Investment Grade Audit

As specified in this Work Order Contract, the Contractor shall provide an Investment Grade Audit as part of a three-stage process including the Preliminary Assessment of Needs and Opportunities, the Preliminary Analysis of Measures, and the Detailed Analysis and Investment Grade Audit.

1.1 Preliminary Assessment & Analysis

In the table below provide the maximum fee to conduct the Preliminary Assessment & Analysis portion of the Investment Grade Audit, on a cost per square foot basis. The Contractor agrees that the proposed maximum fee shall incorporate its responsibility to adhere to and complete the full scope of work as presented in Exhibit A of this Work Order Contract, including any subcontracted work not performed by the Contractor.

	Proposed Maximum Cost per sq.ft.
Investment Grade Audit Preliminary Assessment & Analysis	\$/sq.ft.

The total square footage of all facilities to be evaluated in the Preliminary Assessment & Analysis is **XXXX square feet**.

This gives a maximum fee to conduct the Preliminary Assessment & Analysis of **\$XX,XXX.XX**

1.2 Investment Grade Audit – Detailed Analysis

The table below includes the position descriptions and hourly rates for labor and services self-performed by the Contractor. Markups shall not be applied to fees.

Position Description	Hourly Rate
<u>Position</u>	<u>\$xx.xx</u>

For duties required by Exhibit A of this Work Order Contract, but performed by a subcontracted firm, as well as any materials or equipment purchased by the Contractor to perform the Investment Grade Audit - Detailed Analysis, the Contractor agrees to the following maximum percentage markups:

Project Markup	Maximum Percent Markup
<u>Overhead Percent</u>	<u>X%</u>
<u>Profit Percent</u>	<u>X%</u>

2. Open Book Pricing

The Contractor shall fully disclose all costs of materials and labor purchased and subcontracted by the Contractor and a list of hourly rates and position descriptions for labor or services provided by the Contractor. Estimates for number of hours required for the project and deviations of these budgeted hours shall require prior written approval by the State Institution or shall not be paid. Contractor shall maintain cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records. Contractor shall retain these records and afford the State access thereto pursuant to Master Contract, Section 9: State Audits. Costs will be evaluated through price analysis to compare costs with reasonable criteria such as established catalog and market prices or historical prices. The pricing methodology and individual cost markups disclosed during preliminary contract negotiations will be expected to be applied, providing the scope and size of the project remain the same as assumed when markups were disclosed.

Exhibit C: Contractor's Fee Schedule

Costs, markups and fees applicable to the cost estimates developed in the Performance of the Contractor's Duties as specified in Exhibit A: Sample Work Order Contract and Exhibit B: Sample Amended Work Order Contract shall not exceed the maximum amounts established in this exhibit to the Master Contract. Markups shall not be applied to fees.

1. Preliminary Assessment and Analysis

The table below provides the maximum fee to conduct the Preliminary Assessment & Analysis portion of the Investment Grade Audit, on a cost per square foot basis. Contractor agrees that the proposed maximum fee shall incorporate its responsibility to adhere to and complete the full scope of work as presented in Exhibit A: Contractor's Duties for Investment Grade Audit, including any subcontracted work not performed by the Contractor. There may be certain circumstances where ECMs will need to be priced outside the dollar per square foot model. In these cases, negotiations between the Contractor, State Institution, and Minnesota Department of Commerce's authorized project representatives must take place.

Table 1

	Proposed Maximum Cost per sq.ft.
Investment Grade Audit Preliminary Assessment & Analysis	\$/sq.ft.

2. Investment Grade Audit – Detailed Analysis

The total cost to perform the work outlined in Exhibit B Sample Amended Work Order Contract – Investment Grade Audit Detailed Analysis will be determined by the scope of work as agreed upon between the State Institution and Contractor, but the rates by position may not exceed those as defined below.

Table 2

Position Description	Hourly Rate

For duties required by the Work Order Contract or Amended Work Order Contract but performed by a subcontracted firm, as well as any materials or equipment purchased by the Contractor to perform the Investment Grade Audit - Detailed Analysis, Contractor agrees to the following maximum percentage markups:

Table 3

Project Markup	Maximum Percent Markup
Overhead Percent on Subcontracted Work	X%
Profit Percent on Materials or Equipment Purchased	X%

3. Open Book Pricing

The Contractor shall fully disclose all costs of materials and labor purchased and subcontracted by the Contractor and a list of hourly rates and position descriptions for labor or services provided by the Contractor. Estimates for number of hours required for the project and deviations of these budgeted hours shall require prior written approval by the State Institution or shall not be paid. Contractor shall maintain cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records. Contractor shall retain these records and afford the State access thereto pursuant to Master Contract, Section 11: State Audits. Costs will be evaluated through price analysis to compare costs with reasonable criteria such as established catalog and market prices or historical prices. The pricing methodology and individual cost markups disclosed during preliminary contract negotiations will be expected to be applied, providing the scope and size of the project remain the same as assumed when markups were disclosed.