

**FILED**

JUN 04 2010

*Joe Aiello*  
Sangamon County Clerk

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JUN 01 2010

Resolution No. 15-1

Paul Palazzolo  
SANGAMON COUNTY AUDITOR

RESOLUTION OF THE COUNTY OF SANGAMON, ILLINOIS, IDENTIFYING ACQUISITION CONTRACTS TO BE PAID FROM PROCEEDS OF THE COUNTY'S \$12,970,000 TAXABLE DEBT CERTIFICATES, SERIES 2010.

**BE IT RESOLVED, BY THE MEMBERS OF THE BOARD OF SANGAMON COUNTY, ILLINOIS, IN SESSION THIS 8TH DAY OF JUNE, 2010, AS FOLLOWS:**

**Section 1. Findings.** It is found and declared by the Members of the Board (the "County Board") of Sangamon County, Illinois as follows:

(a) The County is a duly organized and existing county created under the provisions of the laws of the State of Illinois, is now operating under and pursuant to the provisions of the Counties Code of the State of Illinois (55 ILCS 5/1 *et seq.*, as amended, the "Counties Code"), and is a "governmental unit" within the meaning of the Local Government Debt Reform Act of the State of Illinois (30 ILCS 350/1 *et seq.*, as amended, the "Debt Reform Act").

(b) Pursuant to Section 17(b) of the Debt Reform Act, the County issued on April 1, 2010 its \$12,970,000 Taxable Debt Certificates, Series 2010 (the "Series 2010 Certificates") to finance (i) the lease, purchase, construction, furnishing and equipping of a new County building to be used by the Sangamon County Department of Public Health, the offices of the Sangamon County Department of Community Services and/or other governmental offices, as determined by the Sangamon County Board, to provide services to the residents of the County, (ii) constructing a new roof and undertaking other improvements and renovations to the Sangamon County Complex, (iii) other public works and improvements, and (iv) paying costs and expenses incidental thereto, such as legal and other financing and related administrative fees and costs (collectively, the "Project").

(c) In connection with the issuance of the Series 2010 Certificates, the County entered into an installment contract, dated March 17, 2010 with the County Treasurer as nominee seller with respect to the Project (the "Installment Contract"), with consideration to be paid through installments over a term not to exceed twenty (20) years.

(d) The adoption of a resolution or ordinance (each an "Identification Action") identifying all or any part of an Acquisition Contract (as defined herein) and the filing

152

of it and the related Acquisition Contract with the County Treasurer are conditions to the disbursement of moneys on deposit in the Project Fund (as defined in Section 2(b) of Resolution No. 1-1 adopted by the County Board on February 18, 2010) to pay amounts under such Acquisition Contract.

**Section 2. Acquisition Contracts.**

(a) Contracts for the leasing, acquisition, construction and equipping of the Project, or any component part of the Project (each an "Acquisition Contract") shall be let in compliance with applicable Illinois law and the rules and procedures of the County pertaining to such contracts. In order to pay all or any part of an Acquisition Contract from the proceeds of the

(b) The County Board identifies all or any part of the Acquisition Contracts set forth in the Certificate of Filing attached hereto (copies of which are attached to the Certificate of Filing) to the Installment Contract as required by Section 17(b) of the Debt Reform Act. The County Clerk is authorized and directed to file a certified copy of this Resolution, including the Certificate of Filing attached hereto and the related Acquisition Contract(s) with the County Treasurer in his or her capacity as nominee seller under the Installment Contract.

(c) This Resolution shall constitute an Identification Action with respect to all or any part of the Acquisition Contracts set forth in the Certificate of Filing and the County Treasurer is authorized and directed to apply proceeds of sale of the Series 2010 Certificates directly to pay such Acquisition Contracts as set forth in the Certificate of Filing and to disburse moneys on deposit in the BAB Account of the Project Fund and/or the RZEDB Account of the Project Fund (as defined in the Tax Regulatory Certificate for the Series 2010 Certificates dated April 1, 2010 of the County) as applicable, to pay such Acquisition Contracts without further action by the County Board or other officers of the County.

**Section 3. Additional Authority.** The Chairman, Vice-Chairman, the County Treasurer, the County Clerk, the County Administrator and the other officers and employees of the County are authorized to execute and deliver on behalf of the County such other documents, agreements and certificates and to do such other things consistent with the terms of this Resolution.

**Section 4. Conflicting Resolutions.** All resolutions and orders or parts of resolutions and orders in conflict with this Resolution are repealed to the extent of such conflict

**Section 5. Severability.** If any section, paragraph, clause or provision of this Resolution shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this Resolution.

**Section 6. Further Acts.** All actions of the officers, agents and employees of the County that are in conformity with the purposes and intent of this Resolution, whether taken before or after the adoption date thereof, are hereby ratified, confirmed and adopted.

**Section 7. Effective Date.** This Resolution shall take effect immediately upon its adoption.

Rosemarie Long

Todd Smith

John

J H Swab

Mavis Turner

Sarah Musgrave

### CERTIFICATE OF FILING

We, the undersigned, do hereby certify that we are, respectively, the duly qualified and acting County Clerk and County Treasurer of The County of Sangamon, Illinois (the "County"), and as such officers we do hereby certify that on the [ ] day of [ ] 2010 there was filed with each of us, respectively, and placed on deposit in our respective records, a properly certified copy of Resolution No. [ ], passed by the County Board of the County, on the \_\_\_ day of \_\_\_\_\_, 2010, and approved by the Chairman, and entitled:

RESOLUTION OF THE COUNTY OF SANGAMON, ILLINOIS, IDENTIFYING ACQUISITION CONTRACTS TO BE PAID FROM PROCEEDS OF THE \$12,970,000 TAXABLE DEBT CERTIFICATES, SERIES 2010.

and further, a properly certified copy of each of the following "Acquisition Contracts" as defined in the Resolution, enumerated as follows:

BRIEF DESCRIPTION OF ACQUISITION CONTRACT	NAME OF CONTRACTOR	CONTRACT AMOUNT(\$)	IDENTIFIED AMOUNT(\$)	TO BE PAID FROM BAB ACCOUNT OR RZEDB ACCOUNT
Guaranteed Energy Management Contract	Ameresco, Inc.	\$4,749,003.00	\$4,749,003.00	\$1,754,260.13 (RZEDB) \$2,994,742.87 (BAB)

and that copies of the same have all been deposited in, and all as appears from, the official files and records of our respective offices.

IN WITNESS WHEREOF, we have hereunto affixed our official signatures and the seal of The County of Sangamon, Illinois, this [ ] day of [ ] 2010.

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Joe Aiello  
County Clerk,  
The County of Sangamon, Illinois

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Thomas K. Cavanagh  
County Treasurer,  
The County of Sangamon, Illinois

[SEAL]



**ENERGY CONSERVATION MEASURES AGREEMENT**

**BY AND BETWEEN  
SANGAMON COUNTY  
AND  
AMERESCO, INC.**

## TABLE OF CONTENTS

### SECTIONS

1	Scope of Services
2	Ownership of ECM(s)
3	Intentionally Omitted
4	Compensation and Payment
5	Term
6	Guarantee of Savings
7	Right of Entry/Space
8	Changes in Services
9	Warranties
10	CUSTOMER Role and Responsibilities
11	Defaults by CUSTOMER and Ameresco
12	Remedies for Default
13	Intentionally Omitted
14	Insurance and Bonds
15	Indemnification and Limitation of Liability
16	Agreement Interpretation and Performance
17	Privileged and Proprietary Information
18	Severability
19	Assignment and Subcontracting
20	Waiver
21	Force Majeure
22	Contract Documents
23	Notices
24	Records
25	Representations and Warranties
26	Independent Contractor
27	Additional Representation and Warranties of CUSTOMER
28	Negligent/Wrongful Acts
29	Further Documents and Events
30	Third Party Beneficiaries
31	Notifications of Governmental Action - Occupational Safety and Health
32	References

### ATTACHMENTS

ATTACHMENT A	PROPERTY DESCRIPTION
ATTACHMENT B	SCOPE OF SERVICES
ATTACHMENT C	GUARANTEE OF SAVINGS
ATTACHMENT D	DELIVERY AND ACCEPTANCE CERTIFICATE
ATTACHMENT D (1)	PERCENT COMPLETE ACKNOWLEDGEMENT CERTIFICATE
ATTACHMENT E	NOTICE TO PROCEED
ATTACHMENT F	CHANGE ORDER
ATTACHMENT G	METHODOLOGY OF CALCULATING SAVINGS
ATTACHMENT H	STANDARDS OF COMFORT
ATTACHMENT I	DAVIS-BACON ACT AND COPELAND ACT COMPLIANCE

# ENERGY CONSERVATION MEASURES AGREEMENT

BY AND BETWEEN

SANGAMON COUNTY

AND

AMERESCO, INC.

**THIS ENERGY CONSERVATION MEASURES AGREEMENT** (the "Agreement") is entered into this [ ]<sup>th</sup> day of [Month], [ ], by and between Sangamon County, having its principal place of business located at Sangamon County Complex, 200 S. Ninth St., Room 201, Springfield, Illinois 62701 (hereinafter referred to as "CUSTOMER") and Ameresco, Inc., having its principal place of business at 111 Speen Street, Suite 410, Framingham, MA 01701 (hereinafter referred to as "Ameresco"). The parties to this Agreement shall be collectively referred to as the "Parties" and individually as a "Party."

**WHEREAS**, CUSTOMER has issued a Request for Proposal, dated March 4, 2009 (RFP) seeking proposals from qualified offerors to provide performance-based services for the design and execution of an energy consumption reduction plan including acceptance of payment for such services via guaranteed cost savings accrued as a result of plan implementation which is incorporated by reference as part of this Agreement;

**WHEREAS**, Ameresco has prepared and issued a Proposal to CUSTOMER, in response to the RFP, dated March 23, 2009 ("Proposal");

**WHEREAS**, CUSTOMER wishes Ameresco to perform a project ("Project") consisting of certain energy conservation services and installations ("Scope of Services") at CUSTOMER's buildings described in Attachment A (the "Property"), and Ameresco wishes to perform such services; and

**WHEREAS**, CUSTOMER owns and controls the Property.

**NOW, THEREFORE**, in consideration of the mutual promises and agreements contained herein, the Parties hereby agree as follows:

## SECTION 1 SCOPE OF SERVICES

(a) Work:

Upon delivery by CUSTOMER to Ameresco of a "Notice To Proceed", substantially in the form attached to this Agreement as Attachment E, Ameresco shall furnish all labor, materials and equipment and perform all work required for the timely completion of the Scope of Services and schedule set forth in Attachment B, including the installation of the energy conservation measures and facility improvement measures identified therein ("ECM(s)"), as such Scope of Services and such Attachments may be modified in accordance with this Agreement. CUSTOMER and Ameresco shall mutually plan the scheduling of the ECM(s). The ECM(s) shall be planned to minimize interruption of the daily routine of CUSTOMER's staff except as permitted in writing by CUSTOMER.

- (b) Disposal: Unless otherwise directed by the CUSTOMER, Ameresco shall be responsible for legally disposing of all equipment and materials which are rendered useless and removed as a result of installation of the ECM(s) pursuant to this Agreement, the cost of which is included as part of the Project cost. In addition, Ameresco shall, at its cost, cause all lamps which are classified as hazardous wastes by the rules and regulations of the U.S. Environmental Protection Agency (40 CFR Parts 260 through 279) as may be applicable, and PCB-contaminated ballasts, if any, which have



been rendered useless and removed as a result of the installations of the ECM(s) to be transported and disposed of. All other existing PCB-contaminated ballasts, lamps and all other hazardous materials not associated with the installations of the ECM(s) (if any), however, remain the responsibility of CUSTOMER and Ameresco shall assume no liability in connection with their removal, transportation or disposal.

(c) Asbestos and Lead Paint:

- (i) Asbestos: Ameresco's Scope of Services is predicated on the viability of the Project without Ameresco encountering or disturbing asbestos or being required to perform any asbestos abatement or taking any other action with respect to asbestos, except for asbestos explicitly included in the following locations, the cost of which is included as part of the "Contract Cost" as such term is defined in Section 4 of this Agreement:

- [List areas **IF APPLICABLE**]
- 

CUSTOMER hereby represents that there is no asbestos in any area wherein Ameresco shall be performing the Scope of Services except as specified above. In the event that: (a) Ameresco encounters any friable asbestos which is in the vicinity of the Project that is not identified above, (b) Ameresco determines that its work shall result in the disturbance of asbestos material not identified above, or (c) Ameresco determines that the presence of asbestos material not identified above may impede Ameresco's work, Ameresco shall notify CUSTOMER of the same and CUSTOMER shall, at its cost, cause the asbestos to be lawfully removed, enclosed, encapsulated or otherwise abated in accordance with applicable laws, rules and regulations, or alternatively, CUSTOMER, at its cost, may provide written test reports showing that asbestos in that area has been properly removed, enclosed, encapsulated or otherwise abated in accordance with applicable laws rules and regulations. In the event Ameresco cannot determine whether any particular material does or does not contain asbestos, CUSTOMER, upon Ameresco's written request, shall, at CUSTOMER's cost, lawfully perform tests or cause tests to be performed in order to determine whether or not such material contains asbestos and/or whether there are unacceptable levels of airborne particulate material containing asbestos and provide such test report to Ameresco. Under no circumstances, except as identified above, shall Ameresco be required to handle asbestos. In the event it encounters asbestos that materially affects the Scope of Services or the Project schedule, Ameresco, at its option, may demobilize and cease construction in the area affected by the presence of asbestos until such time as CUSTOMER performs the actions required to be performed by CUSTOMER that are described in this Subsection. In the event that CUSTOMER does not promptly take action, as provided herein, or notifies Ameresco that it shall not take such action, Ameresco may, at its option, either remove the affected area from its Scope of Services (and make commensurate adjustments to its rights and obligations) or mutually agree with CUSTOMER to terminate this Agreement in its entirety, any such agreement not to be unreasonably withheld. CUSTOMER shall be responsible for payment of the portion of the Work implemented prior to such termination. CUSTOMER shall be responsible for any and all costs (including termination) incurred by Ameresco that relate to the presence of asbestos.

- (ii) Lead Paint: Ameresco's Scope of Services is predicated upon the viability of the Project without Ameresco encountering or disturbing lead paint or being required to perform abatement or providing any notice or taking any other action with respect to lead paint. CUSTOMER hereby represents that there is no exposed lead paint in any area in which Ameresco shall be performing the Scope of Services. In the event that Ameresco encounters lead paint in any area where it is to perform the Scope of Services, which services shall require disturbing lead paint, and Ameresco reasonably believes that such paint may be lead paint, CUSTOMER, upon Ameresco's written request, shall, at CUSTOMER's cost, lawfully perform tests or cause tests to be performed in order to determine whether or not such paint contains lead and shall provide a test report to Ameresco. In the event that: such test report demonstrates the presence of lead paint or Ameresco reasonably believes that performing its services under this Agreement is likely to cause the disturbance of lead paint in such a manner as to require Ameresco to provide any notification or take any actions pursuant to any federal, state or local laws, rules, or

regulations and Ameresco notifies CUSTOMER of the same, CUSTOMER shall, in either case, at its cost, cause the lead paint to be lawfully removed, or otherwise abated in accordance with applicable laws, rules and regulations. Under no circumstances, shall Ameresco be required to perform services, which cause the disturbance of lead paint. In the event lead paint materially affects the Project Schedule, Ameresco, at its sole option, may demobilize and cease construction in the area affected by the presence of lead paint until such time as CUSTOMER performs the actions required to be performed by CUSTOMER. In the event that CUSTOMER does not promptly take action as provided herein or notifies Ameresco that it shall not take such action, Ameresco may, at its sole option, either remove the affected area from its Scope of Services (and make commensurate adjustments to the rights and obligations of the Parties) or mutually agree with CUSTOMER to terminate this Agreement in its entirety, which agreement shall not be unreasonably withheld and CUSTOMER shall be responsible for payment of the portion of the Work implemented prior to such termination.. CUSTOMER shall be responsible for any and all costs (including termination) incurred by Ameresco that relate to the presence of lead paint.

- (d) Compliance With Law: The Parties shall comply with all federal, state and local laws, rules and regulations now in effect or known to be changing during the construction period.
- (e) Taxes: CUSTOMER represents that it is a tax exempt not for profit entity and that it shall cooperate with Ameresco and provide Ameresco with appropriate resale exemption documentation so that Ameresco may attempt to establish that it shall not have to pay taxes, fees and assessments or other charges of any character which may be imposed or incurred by any governmental or public authority as an incident to title to, or operation of the ECM(s) (Taxes) which would otherwise be levied upon or in respect to said interest component or of the ECM(s). Notwithstanding the foregoing, CUSTOMER shall pay (or, if applicable, reimburse Ameresco for the payment of) all property, sales taxes, use taxes or other fees and assessments associated with the Work. CUSTOMER shall have no liability for taxes measured by the net income of Ameresco.
- (f) Duties, Obligations and Responsibilities of Ameresco:
  - (i) All labor furnished under this Agreement shall be performed by personnel who are competent to perform the tasks undertaken, that all materials and equipment provided shall be new and of agreed upon quality unless otherwise agreed, and that the completed ECM(s) shall comply in all material respects with the requirements of this Agreement.
  - (ii) Ameresco shall maintain the Project site in a reasonably clean condition during the performance of the construction Work.
  - (iii) Ameresco shall regularly, as mutually agreed upon by the Parties, clean the Project site of all debris, trash and excess material or equipment generated by Ameresco's construction Work hereunder.
  - (iv) Ameresco shall permit CUSTOMER or any of its representatives to enter upon the Project site to review or inspect the ECM(s) without formality or other procedure, except that all such entries must be in compliance with all safety procedures, rules and regulations.
  - (v) Ameresco shall provide equipment manuals and other appropriate information regarding equipment installed hereunder to CUSTOMER at or about the time of "Substantial Completion" as such term is defined below.
  - (vi) Ameresco shall be responsible for obtaining all necessary permits and approvals for installation of the Equipment and shall pay any and all permit fees. CUSTOMER shall use its best efforts to assist Ameresco in obtaining all necessary permits and approvals for installation of the Equipment. In no event shall Customer, however, be directly responsible for payment of any permit fees. The Equipment and the operation of the Equipment by Ameresco shall at all times conform to all federal, state and local code requirements in effect at the time of installation. Ameresco shall furnish copies of each permit or license

- which is required to perform the work to the CUSTOMER before Ameresco commences the portion of the work requiring such permit or license.
- (vii) Ameresco shall not install any ECMs that have an adverse effect on the safety of the occupants of any of the buildings, facilities, or areas identified in Attachment A of this agreement.
  - (viii) Ameresco shall perform all tasks/phases under the Agreement, including construction, and install the ECMs in such a manner so as not to harm the structural integrity of the buildings or their operating systems and so as to conform to the standards of comfort set forth in Attachment H (Standards of Comfort) of this Agreement. Ameresco shall repair and restore to its original condition any area of damage caused by Ameresco's performance under this Agreement. The CUSTOMER reserves the right to review the work performed by Ameresco and to direct Ameresco to take certain corrective action if, in the reasonable opinion of the CUSTOMER, the structural integrity of the buildings or its operating system is or will be harmed. All costs associated with such corrective action to damage caused by Ameresco's performance of the work shall be borne by Ameresco.
  - (ix) Ameresco shall remain responsible for the professional and technical accuracy of all services performed, whether by Ameresco or its subcontractors or others on its behalf, throughout the term of this Agreement.
  - (x) Ameresco shall perform all services under this Agreement in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions.
  - (xi) Ameresco will implement appropriate safety measures pertaining to the installation of ECMs, including establishing safety programs and rules, posting appropriate warnings and notices, erecting safety barriers, and establishing proper notice procedures to protect persons and property from injury, loss or damage.
  - (xii) Ameresco will designate one or more persons who will be the authorized representative(s) on-site and off-site. The authorized representative(s) will be present at all times when work is in progress and will have responsibility for coordinating the work of Ameresco's subcontractors and will act as the designated safety representative with a duty to prevent accidents.
  - (xiii) Ameresco will secure and pay for background checks for its employees in accordance with applicable state statutes necessary for the proper execution and completion of the work and ensure that no person directly associated with the project has been convicted of a felony, or, if so convicted, at least five years have passed since completion of sentence as of the effective date of this Agreement, Ameresco will specifically incorporate this provision with all of its Subcontractors under this Agreement.
  - (xiv) Ameresco agrees to submit in a timely fashion to CUSTOMER for approval, such approval not to be unreasonably withheld, conditioned, or delayed, any shop drawings, samples, product data, manufacturers' literature or similar submittals as may reasonably requested by CUSTOMER.

## **SECTION 2    Ownership of ECM(s)**

Title to and ownership of the ECM(s) identified in Attachment B shall automatically transfer to CUSTOMER, or as applicable, lessor in accordance with terms of a lease, upon the occurrence of both: (a) execution and delivery of each Delivery and Acceptance Certificate substantially in the form attached to this Agreement as Attachment D or a Percent Complete Acknowledgement Certificate substantially in the form attached to this Agreement as Attachment D (1), the execution and delivery of which shall not be unreasonably withheld, conditioned or delayed, and (b) completion of CUSTOMER's payment obligations to Ameresco for the ECM(s) included in the Delivery and Acceptance Certificate or the Percent Complete Acknowledgement Certificate specified in section (a) of this section, excluding payment obligations related to maintenance or other

continuous services, if applicable. For the purposes of this Agreement the term "Substantial Completion" shall mean that the ECM(s) have been installed by Ameresco, and, if such ECM(s) are equipment, such equipment is then operating in a manner consistent with each manufacturer's intended use. Ameresco shall be entitled to all rights, benefits and remedies afforded a secured party under law with respect to the ECM(s) installed pursuant to this Agreement, including but not limited to those under the Uniform Commercial Code, as adopted in the State of Illinois or any other applicable State of Illinois law. Ameresco shall retain such security interest in the ECM(s), pursuant to this Agreement, for equipment installed hereunder until CUSTOMER executes and delivers a Delivery and Acceptance Certificate and title has transferred to CUSTOMER. If requested by Ameresco in connection therewith, CUSTOMER agrees to provide to Ameresco required financing statements and other documents necessary in order for Ameresco and/or any bank, or other financial institution to whom Ameresco has assigned any interest in this Agreement, to perfect such security interest in the ECM(s). A final Delivery and Acceptance Certificate, attached hereto as Attachment D, shall be executed by Customer upon Substantial Completion of the installation of the ECMs. Customer shall not unreasonably withhold or delay the execution and delivery of the Delivery and Acceptance Certificate.

**SECTION 3                    Intentionally Omitted (TIE WITH FINANCE DOCUMENTS AS NEEDED)**

**SECTION 4                    Compensation and Payment**

- (a) The "Contract Cost" shall be Four Million, Seven Hundred Forty Nine Thousand, and Three Dollars (\$4,749,003.00).
- (b) Upon CUSTOMER'S securing of financing and subsequent delivery by CUSTOMER to Ameresco of a Notice to Proceed, substantially in the form attached to this Agreement as Attachment E, Ameresco shall submit invoices to Customer for monthly progress payments to Ameresco based upon the percentage of the Project construction and equipment procurement completed at the end of each month, so that Ameresco is paid the percentage of the Contract Cost that is commensurate with the percentage of completion of the Scope of Services. CUSTOMER will withhold retainage at a rate of 10% from all invoices except for the final invoice. A Percent Complete Acknowledgement Certificate in the form attached hereto as Attachment D (1) will be executed by Customer during each month of the construction period showing percent complete and monthly payment due. CUSTOMER shall make payment to Ameresco, within thirty (30) days after the execution of a Percent Complete Acknowledgement Certificate (the "Due Date"). A final Delivery and Acceptance Certificate, attached hereto as Attachment D, shall be executed by Customer upon Substantial Completion of the installation of the ECMs. Customer shall not unreasonably withhold or delay the execution and delivery of the Delivery and Acceptance Certificate.
- (c) All non-disputed amounts not paid to Ameresco on or before the Due Dates specified in Subsection 4(b) shall accrue interest at the Prime rate of interest as published in the Wall Street Journal for major banks. If Ameresco is prohibited by law from charging interest at said rate but is instead limited by law to charging a maximum rate, which is a lower rate, Ameresco shall charge interest at said lower rate on all outstanding balances until payment in full is received.

**SECTION 5                    Term**

This Agreement shall be effective on the date first above written and shall remain in effect through the "Guarantee Period" as such term is defined in Attachment C (the "Term") or, unless terminated prior to such date, as provided for in Section 12 of this Agreement. Notwithstanding the foregoing, nothing in this Section 5 shall relieve CUSTOMER from paying amounts, which accrued prior to such termination of this Agreement, when due under this Agreement.

**SECTION 6                    Guarantee of Savings**

- (a) To the extent set forth in Attachment C, and solely in accordance with Attachment C, Ameresco hereby guarantees the Annual Guaranteed Savings Amount, as such term is defined in Attachment C, to be achieved by CUSTOMER as a result of performance of the Scope of Services.
- (b) The Annual Guaranteed Savings Amount is subject to CUSTOMER performing all of its maintenance and other obligations under this Agreement that may affect the achieved Annual Guarantee Savings Amount. In the event that CUSTOMER fails to perform, its obligations under this Agreement or

interferes with, or permits any third party to take any action which, in the reasonable opinion of Ameresco, may prevent the achievement of the Annual Guaranteed Savings Amount under this Agreement, Ameresco may, after providing CUSTOMER thirty (30) days advance notice, adjust the Annual Guaranteed Savings Amount during the period in which such savings were affected to reflect the impact such actions had on same. Ameresco's rights set forth in this section shall not be in limitation of any other rights it is entitled to by law and under this Agreement.

## **SECTION 7                      Use of Premises – Site Security**

During the Term of this Agreement, Customer shall provide Ameresco and its employees, agents and subcontractors reasonable access to the Property for the purpose of fulfilling Ameresco's obligations under this Agreement subject to the conditions specified herein:

- (a) Ameresco shall provide Customer with a complete list of all persons duly authorized to work on the project. Only those persons will be admitted into the facility. Customer may issue temporary identification cards that will be kept by security personnel at the entrance to the facility during non working hours. All workers may be required to sign in and out every time they enter or leave the institution. As state laws prohibits the import of contraband into the facility searches may be conducted at any time by security personnel.
- (b) Customer may require Ameresco to remove any worker who has been convicted of a felony, who is a family member of an inmate or who violates any provision of this agreement or State, Federal or Local law.
- (c) A designated area will be arranged for parking of 4 personal vehicles whose ignition, trunk and doors shall be locked at all times. Trucks will be admitted on the site only by request of Ameresco and shall be promptly loaded, unloaded and removed by Ameresco.
- (d) Workers shall not talk to or in any way communicate or attract the attention of inmates. Workers shall not come to the job under the influence of intoxicants or drugs. Nothing shall be taken or given to an inmate. Workers shall promptly notify security personnel of all unusual happenings pertaining to inmates.
- (e) Customer shall have the right to exclude any person from the job site and deny that person future access when Customer determines that the person is that the person is performing work in an unworkmanlike manner, is causing disruption or conflicts, appears to be intoxicated or under the influence of drugs, had violated any State or Federal law or has behaved in a threatening or violent manner. Customer may instruct Ameresco to exclude such person and Ameresco shall comply.

## **SECTION 8                      Changes in Services**

The Scope of Services may be changed only by mutual agreement of the Parties evidenced by execution of a "Change Order" substantially in the form attached to this Agreement as Attachment F, including the quantity, quality, dimensions, type or other characteristics of the ECMs. In addition, the Scope of Services may be reduced or expanded including, without limitation, the addition or reduction of other energy efficiency measures and facilities not included within the ECMs scheduled on Attachment B by the execution and delivery of a Change Order Form. Such Change Order Form may serve as a remedy for a partial default pursuant to Sections 11 and 12, below.

## **SECTION 9                      Warranties**

Ameresco hereby agrees as follows:

- (a) Ameresco warrants that the all work hereunder will be in conformance with the contract and is warranted to be free from defects in materials, equipment and workmanship for a period of one (1) year from the date of execution of the Delivery and Acceptance Certificate by CUSTOMER. Any manufacturers' warranties which exceed this one (1) year period shall be assigned to Customer to the extent allowed by the manufacturer.

- (b) To furnish adequate protection from damage for all work and to repair damages of any kind for which Ameresco or Ameresco's Subcontractors are responsible, to the building or equipment, to Ameresco's own work, or to the work of others.
- (c) Any equipment or service provided under this Agreement which is or becomes defective during the Warranty Period shall be replaced by Ameresco at its cost. The replacement shall include the cost of all labor and shipping and transportation costs associated with the replacement. In addition, the costs for adjustment of controls, air balancing, and correction of mechanical difficulties are also included if such adjustments are due to defective equipment or improper installations. Ameresco shall make any such replacements promptly upon receiving notice from CUSTOMER. Ameresco shall provide all labor, material and equipment to promptly repair or replace the defective work. The repair shall include all work damaged as a result of such defects or as a result of remedying the defects, Work which is repaired or replaced shall be inspected and warranted in accordance with this agreement.
- (d) EXCEPT AS PROVIDED ABOVE, AMERESCO MAKES NO FURTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, WRITTEN, ORAL OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO THE VALUE, DESIGN, AND CONDITION OR FITNESS FOR USE OR PARTICULAR PURPOSE AND MERCHANTABILITY, REGARDING THE ECM(s).

**SECTION 10                      Customer's Role and Responsibilities**

- (a) Operations: CUSTOMER shall operate all equipment installed hereunder in accordance with the manufacturer's recommendations, the standards of comfort set forth in Attachment H of this Agreement, and the manuals supplied to CUSTOMER by Ameresco.
- (b) Maintenance: Upon the execution of the final Delivery and Acceptance Certificate, CUSTOMER shall, at its expense, maintain the Property in good working condition during the Term of this Agreement. CUSTOMER shall maintain, at CUSTOMER's expense: (i) all equipment and other components included as part of the ECMs, and (ii) all other equipment which is attached thereto and/or is integral to the proper functioning of the ECMs.
- (c) Malfunctions: CUSTOMER shall use its best efforts to notify Ameresco as soon as reasonably possible in the event of any malfunction in the operation of the ECM(s) installed hereunder.
- (d) Protection of ECMs: Except in the case of emergency, CUSTOMER shall not remove, move, alter, turn off or otherwise significantly alter the operation of the equipment installed hereunder or the operation of the ECMs, or any individual part thereof, without the prior approval of Ameresco, which approval shall not be unreasonably withheld. After receiving Ameresco's approval, CUSTOMER shall proceed as instructed. CUSTOMER shall act reasonably to protect the ECMs from damage or loss, if, due to an emergency; it is not reasonable to notify Ameresco before acting. CUSTOMER agrees to protect the equipment and operating condition of the ECMs.
- (e) Measurement System: CUSTOMER shall not move, modify or otherwise alter the measurement and verification system installed as part of the ECM(s) or any component thereof without the written consent of Ameresco unless such action is in accordance with manuals provided by Ameresco.
- (f) Adjustment to Baseline: If CUSTOMER does not reasonably protect the ECM(s) or maintain the Property in good repair and good working condition, Ameresco, after thirty (30) days advance notice to CUSTOMER, may adjust the baseline, as identified in Attachment D.
- (g) Changes to Property or Additional Equipment: CUSTOMER shall notify Ameresco in writing at least thirty (30) days prior to making any changes to the Property that may significantly affect the energy usage on the Property, including, but not limited to, changes in the hours or days or time of year that the Property is occupied or operated, the number of occupants (including, but not limited to, staff, tenants and visitors), the activity conducted, the equipment, the facilities, or the size of the Property. CUSTOMER shall also notify Ameresco regarding increases over time in numbers and usage of "plug in" devices such as computers and printers. In the event Ameresco receives such notification or

otherwise determines that such a change has occurred, it may make the revisions to the Attachments or take such other action as may be provided for hereunder. Ameresco may also make retroactive adjustments if CUSTOMER has not provided timely notice and any payments shall be retroactively reconciled to reflect the changed baseline.

- (h) Energy Usage Data: CUSTOMER shall make available to Ameresco, on a monthly basis for the Term of this Agreement, copies of all energy bills, energy usage data, and any and all other such documentation maintained by CUSTOMER, as may be requested by Ameresco, which is required to perform all of its obligations under this Agreement.
- (i) Insurance and Risk of Loss or Damage: Without limiting any of its obligations or liabilities under this Agreement, CUSTOMER shall, at its expense, provide and maintain at all times during the Term of this Agreement, sufficient insurance against the loss, theft of or damage to the ECM(s), related equipment, and all equipment installed hereunder, for the full replacement value thereof. Ameresco's Commercial General Liability insurance shall be primary for any property damage or bodily injury during the performance of the Work hereunder.

Upon acceptance, CUSTOMER assumes all risk of loss of or damage to the ECM(s) from any cause whatsoever except to the extent that such loss or damage was caused by the negligence or willful misconduct of Ameresco or its Subcontractors. In the event of loss or damage to any equipment installed hereunder, CUSTOMER shall promptly notify Ameresco and immediately return the same to good repair with the proceeds of any insurance received to the cost of such repair. If CUSTOMER determines that any of the ECM(s) are lost, stolen, destroyed or damaged beyond repair, CUSTOMER shall replace the same with like equipment in good repair in a timely fashion.
- (j) Telephone: CUSTOMER is responsible for installing and maintaining telephone lines and all associated costs for the ECM(s) telephone lines or applicable energy management system communication systems.
- (k) Protection: CUSTOMER shall at all times act reasonably to protect the ECM(s) from loss or damage to the same extent and in the same manner in which it protects the Property.
- (l) Alteration: CUSTOMER agrees not to move or alter or change the ECM(s) in any way that may cause a reduction in the level of efficiency or savings generated by the ECM or the equipment installed hereunder without obtaining Ameresco's written approval.
- (m) Storage: CUSTOMER shall provide rent free space for Ameresco, or any of its subcontractors, to mobilize and store supplies, tools and equipment during installation of the ECM(s) or other activities by Ameresco on the Property as available pursuant to this Agreement for which such storage space may be required with locking capacity acceptable to Ameresco. Only Ameresco or any of Ameresco's subcontractors, and CUSTOMER's assigned personnel shall have access to storage. CUSTOMER shall have no liability for supplies, tools and equipment left or stored onsite. All tools and material taken in shall be listed in a manifest with copies to security personnel. All tools shall be accounted for at the close of the day and changes to tool inventory shall be addressed by change and immediate delivery of manifest to security personnel. Ameresco is responsible for the proper storage of all tools and shall promptly report all broken tools.
- (n) Fuel: CUSTOMER shall procure and pay for all energy and fuel for the operation of the Property.
- (o) Filings: CUSTOMER shall make all filings, if any, required of it by the State of Illinois relating to the Project. Ameresco shall reasonably cooperate with CUSTOMER regarding any such filings.
- (p) Cooperation during Construction: CUSTOMER acknowledges and agrees that completion of the Scope of Services is dependent on CUSTOMER's cooperation in relocating personnel, furniture and equipment or taking such other actions as may be necessary by CUSTOMER in order to prepare space for work by Ameresco. CUSTOMER agrees to take all such actions as is reasonably requested by Ameresco in a timely manner in order to allow the Scope of Work to be accomplished hereunder.

**SECTION 11****Defaults****(a) By CUSTOMER.**

CUSTOMER shall be in default under this Agreement upon the occurrence of any of the following:

- (i) CUSTOMER fails to pay when due any amount to be paid under this Agreement and such failure continues for a period of five (5) business days after notice of overdue payment is delivered by Ameresco to CUSTOMER;
- (ii) CUSTOMER fails to perform any of its required duties or obligations under this Agreement and fails to cure such failure and the effects of such failure within thirty (30) days of receipt of written notice of default, unless such failures and effects cannot be completely cured within thirty (30) days after said written notice, in which case a default shall exist only if CUSTOMER does not commence and diligently pursue to cure such failures and effects as soon as practicable;
- (iii) CUSTOMER enters receivership, or makes an assignment for the benefit of creditors, whether voluntary or involuntary, or a petition is filed by or against CUSTOMER under any bankruptcy, insolvency or similar law and such petition is not dismissed within sixty (60) days.
- (iv) CUSTOMER fails to cooperate in relocating personnel, furniture and equipment or to take such other actions as may be necessary by CUSTOMER in order to prepare space for work by Ameresco as is reasonably requested by Ameresco in a timely manner in order to allow the Scope of Work to be accomplished hereunder, may result in a Default of the specific ECM or ECMs, that the failure is related to.

**(b) By Ameresco.**

Ameresco shall be in default under this Agreement upon the occurrence of any of the following:

- (i) Ameresco fails to perform any of its material duties or obligations under this Agreement and fails to cure such failure or effects of such failure within thirty (30) days of receipt of written notice of default, unless such failure or effects of such failure cannot be completely cured within thirty (30) days after said written notice, in which case a default shall exist only if Ameresco does not promptly commence and diligently pursue to cure such failure as soon as practicable;
- (ii) Ameresco enters receivership, or makes an assignment for the benefit of creditors, whether voluntary or involuntary, or a petition is filed by or against Ameresco under any bankruptcy, insolvency or similar law and such petition is not dismissed within sixty (60) days;
- (iii) Any lien or encumbrance upon any installed ECM by any subcontractor, laborer, or supplier of Ameresco except that such lien or encumbrance, if remedied or addressed by provision of a bond by ESCO within thirty (30) days after written notice by CUSTOMER to ESCO demanding that such lien or encumbrance be remedied, shall be deemed cured by purposed of this Contract;
- (iv) The repossession or removal of an ECM or any associated equipment by Ameresco without good cause;
- (v) Any representation or warranty furnished by Ameresco is false or misleading in any material respect when made.

**SECTION 12****Remedies for Default****(a) In the event CUSTOMER defaults under this Agreement, Ameresco may:**

- (i) bring actions for any remedies available at law or in equity or other appropriate proceedings



for the recovery of damages, including amounts past due, and/or bring an action in equity for specific performance; and

- (ii) with or without recourse to legal process, Ameresco may terminate this Agreement by delivering written notice of termination at least thirty (30) days prior to the requested termination date.
  - (iii) For a partial Default: Ameresco, at its option may,
    - (a) Terminate the specific ECM or ECMs, that the failure is related to; or
    - (b) Continue to work with CUSTOMER to install the ECM or ECMs, upon agreement between the parties as to the revised Scope of Work and Schedule and CUSTOMER's delivery of an executed Change Order Form in accordance with Section 8, hereof.
- (b) In the event Ameresco defaults under this Agreement, CUSTOMER may terminate this Agreement and bring an action in law for direct damages which shall include all costs and expenses reasonably incurred.

**SECTION 13**                    **Intentionally Omitted.** ( NOTE: FINANCIAL DEFAULT ISSUES INCLUDING TERMINATION SCHEDULE)

**SECTION 14**                    **Insurance and Bonds**

(a) By Ameresco: Without limiting any of its obligations or liabilities under this Agreement, Ameresco shall provide and maintain at its expense, the following insurance coverage where reasonable market availability for such insurance exists:

- (i) Workers' Compensation and Employer's Liability Insurance as required by law.
- (ii) Comprehensive General Liability Insurance, including contractual liability, Bodily Injury per person, \$1 million; Bodily Injury per occurrence, \$1 million; Property Damage per occurrence, \$1 million; Personal Injury per occurrence, \$1 million; and Excess Liability, \$5 million.
- (iii) Comprehensive Automobile Liability Insurance, including owned, non-owned and hired automotive equipment of, Bodily Injury per person, \$1 million; Bodily Injury per occurrence, \$1 million; Property Damage per occurrence, \$1 million; and Excess Liability, \$5 million.
- (iv) Ameresco shall deliver to CUSTOMER a Certificate of Insurance naming CUSTOMER as an additional insured party under paragraphs (ii) and (iii), above, and agrees to provide CUSTOMER with at least thirty (30) days notice of cancellation.
- (v) Professional Liability Insurance - in the minimum amount of \$1,000,000 until completion and acceptance of performance hereunder, as will protect CUSTOMER from claims which may arise out of or result from Ameresco's professional Services under this Agreement or by a contractor or subcontractor of Ameresco, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts Ameresco may be liable.

Ameresco shall deliver to CUSTOMER Performance and Payment Bonds in a sum equal to the Contract Cost conditioned upon faithful performance of the Agreement by Ameresco, for the implementation of the ECM(s) as it may be from time to time modified by Change Orders within ten (ten) days of issuance of a Notice to Proceed. The Performance Bond applies only to the installation portion of this Agreement and does not apply in any way to energy savings guarantees, payments or maintenance provisions, except that the Performance Bond shall guarantee that the installation will be free of defective materials and workmanship for a period of twelve (12) months following completion and acceptance of the Work.

**SECTION 15**                    **Indemnification and Limitation of Liability**

Confidential & Proprietary Information of Ameresco, Inc.

- (a) Neither Party nor its respective officers, directors, agents, employees, parent, subsidiaries or affiliates or their affiliates' officers, directors, agents or employees shall be liable, irrespective of whether such claim of liability is based upon breach of warranty, tort, (including negligence, whether of any of the Parties to this Agreement or others), strict liability, contract, operation of law or otherwise, to any other Party, or its affiliates, officers, directors, agents, employees, successors or assigns, or their respective insureds, for incidental, indirect, punitive or consequential damages, connected with, related to or arising from performance or non-performance of this Agreement, or any action or inaction in connection therewith including, without limitation, claims in the nature of lost revenues, income or profits (other than payments expressly required and due under this Agreement), and increased expense of, reduction in or loss of power generation production or equipment used therefore.
- (b) Ameresco's liability in contract for direct damages under this Agreement shall in all cases be limited to the sum of the payments received by Ameresco under this Agreement. Ameresco's liability in tort and the liability in tort of any of its officers, employees, agents, affiliates or subcontractors, shall in all cases be limited to the lesser of direct damages relating to physical damage to CUSTOMER's Property or the amount of its insurance in force pursuant to section 14 of this Agreement.
- (c) Ameresco's liability to CUSTOMER in tort shall in all cases be limited to the actual proceeds of insurance under the policies maintained by Ameresco pursuant to the requirements of this Agreement.
- (d) Ameresco agrees to defend, indemnify and hold CUSTOMER harmless from and against any and all claims for damages but only to the extent such damages arise by reason of bodily injury, death or damage to property caused by Ameresco's or its Subcontractors negligence or willful misconduct. To the extent that any such damages are covered by or under Ameresco's Comprehensive General Liability or Excess Liability Insurance policies, Ameresco shall not be required to indemnify CUSTOMER in excess of the limits of such coverage. Ameresco, however, in no event shall be obligated to indemnify CUSTOMER to the extent that any such injury or damage is caused by the negligence of CUSTOMER or any entity for which CUSTOMER is legally responsible.
- (e) CUSTOMER agrees to defend, indemnify and hold harmless Ameresco, its officers, agents and employees, from and against any and all claims, liabilities, actions, demands, judgments, losses, costs, expenses (including reasonable attorneys' fees), suits, actions or damages arising by reason of bodily injury, death or damage to property sustained by any person or entity to the extent caused by or sustained as a result of the negligence or willful misconduct of CUSTOMER, its officers, agents, subcontractors or employees. CUSTOMER, however, in no event shall be obligated to defend Ameresco to the extent that any such injury or damage is caused by the negligence of Ameresco or any person or entity for which Ameresco is legally responsible.

**SECTION 16 Agreement Interpretation and Performance**

This Agreement shall be governed as to all matters whether of validity, interpretations, obligations, performance or otherwise exclusively by the laws of the State of Illinois, except those requiring application of the law of another jurisdiction, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this Agreement shall be deemed to have been delivered and accepted by all parties in the State of Illinois.

**SECTION 17 Privileged and Proprietary Information**

Ameresco's systems, means, cost, and methodologies of evaluating, implementing, accomplishing and determining energy savings and the terms of the Agreement for this Project shall be considered privileged and proprietary information. Trade secrets or proprietary information submitted by Ameresco to CUSTOMER in relation to this Agreement shall be submitted in a sealed envelope clearly marked "PROPRIETARY". CUSTOMER shall use the same level of effort to protect and safeguard such information as it employs to safeguard its own confidential information. CUSTOMER shall not disclose such proprietary information without the express written consent of an officer of Ameresco unless required to do so by statute or regulation.

When any request for disclosure of such information is made under any applicable freedom of information law (the "FOIA"), CUSTOMER shall provide prompt verbal and written notice to Ameresco. Ameresco Confidential & Proprietary Information of Ameresco, Inc.

acknowledges that Customer is subject to the Freedom of Information Act (5 ILCS 140/1 et. seq.) and agrees that final determination for the release of information shall be based upon the opinion of the Public Access Counselor for the Attorney General's Office of the State of Illinois and may be released without express written consent based upon said opinion.

**SECTION 18**                    **Severability**

If any provision of this Agreement is found by any court of competent jurisdiction to be invalid or unenforceable, the invalidity of such provision shall not affect the other provisions of this Agreement, and all other provisions of this Agreement shall remain in full force and effect.

**SECTION 19**                    **Assignments and Subcontracting**

- (a) Ameresco may elect to use subcontractors in meeting its obligations hereunder. All Subcontractors used by Ameresco shall have their principal place of business located in Sangamon County unless prior approval is given by Customer to use a subcontractor from outside Sangamon County. No work may be subcontracted to any contractor whose status as a contractor or entity has been suspended or revoked by the State of Illinois. All work performed by the subcontractor shall be pursuant to an agreement between Ameresco and the subcontractor which specifically binds the subcontractor to all applicable terms and conditions of this agreement for which violation Ameresco shall be primarily liable.
- (b) CUSTOMER shall not assign, transfer, or otherwise dispose of this Agreement, the ECM(s), or any interest therein, or sublet or lend the ECM(s) or permit the ECM(s) to be used by anyone other than CUSTOMER and CUSTOMER's employees without the prior express written consent of Ameresco.
- (c) Ameresco shall not assign this Agreement in whole or in part to any other party without first obtaining the consent of CUSTOMER, which consent shall not be unreasonably withheld; provided that, Ameresco may assign, without obtaining the consent of CUSTOMER, its rights and obligations under this Agreement in whole or in part to any affiliated or associated company of Ameresco and its rights for payments under this Agreement to any financial institution, lender or investor in connection with a leasing or financing arrangement for the ECM(s). Ameresco shall notify CUSTOMER thirty (30) days prior to any such assignment and CUSTOMER agrees to acknowledge receipt of such notice within five (5) days.

**SECTION 20**                    **Waiver**

Any waiver of any provision of this Agreement shall be in writing and shall be signed by a duly authorized agent of Ameresco and CUSTOMER. The waiver by either Party of any term or condition of this Agreement shall not be deemed to constitute a continuing waiver thereof nor of any further or future waiver of any additional right that such Party may be entitled to under this Agreement.

**SECTION 21**                    **Force Majeure**

If either Party shall be unable to carry out any material part of its obligations under this Agreement, except CUSTOMER's obligations to make payments when due) due to causes beyond its control ("Force Majeure"), including, but not limited to, an act of God, strikes, lockouts or other industrial disturbances acts of public enemies orders or restraints of any kind of the government of the United States or any state or any of their departments agencies or officials or any other civil governmental, military or judicial authority, war, blockage, insurrection, riot, sudden action of the elements, fire, explosion, flood, earthquake, storms, drought, landslide, or explosion or nuclear emergency, this Agreement shall remain in effect but the affected Party's obligations shall be suspended for a period equal to the disabling circumstances, provided that:

- (a) the non-performing Party gives the other Party prompt written notice describing the particulars of the event of Force Majeure, including but not limited to the nature of the occurrence and its expected

duration, and continues to furnish timely regular reports with respect thereto during the period of Force Majeure;

- (b) the suspension of performance is of no greater scope and of no longer duration than is required by the event of Force Majeure;
- (c) no obligations of either Party that arose before the event of Force Majeure causing the suspension of performance are excused as a result of the event Force Majeure;
- (d) the non-performing Party uses reasonable efforts to remedy its inability to perform; and
- (e) the Term of this Agreement, as mutually agreed upon by CUSTOMER and Ameresco, shall be extended for a period equal to the number of days that the event of Force Majeure prevented the non-performing Party from performing.

Any decision by CUSTOMER to close or change the use of the facilities or ECM's at the Property shall not constitute a Force Majeure excusing Customer's performance under this Agreement.

## **SECTION 22**            **Contract Documents**

- (a) Upon execution of this Agreement by both Parties, this Agreement and its Attachments shall constitute the entire Agreement between the Parties relating to the subject matter hereof, and supersedes all proposals, previous agreements, discussions, correspondences, and all other communications, whether oral or written, between the Parties relating to the subject matter of this Agreement. In the case of any conflict between this Agreement and the Attachments or any other document referred to in this Agreement, the provisions of this Agreement shall control.
- (b) This Agreement may not be modified or amended except in writing signed by the Parties.
- (c) Headings are for the convenience of reference only and are not to be construed as a part of the Agreement.

## **SECTION 23**            **Notices**

All notices, requests, demands, elections and other communications under this Agreement, other than operational communications, shall be in writing and shall be deemed to have been duly given on the date when hand-delivered, or on the date of the confirmed facsimile transmission, or on the date received when delivered by courier that has a reliable system for tracking delivery, or six (6) business days after the date of mailing when mailed by United States mail, registered or certified mail, return receipt requested, postage prepaid. All notices shall be addressed to the following individuals:

- (a) If to CUSTOMER:
  - Sangamon County Complex
  - 200 S. Ninth Street, Room 201
  - Springfield, IL 62701
- (b) If to Ameresco:
  - Ameresco, Inc.
  - 1900 Spring Road, Suite 400
  - Oak Brook IL, 60523
  - Attention: Executive Vice President & General Manager

With a copy to:

Ameresco, Inc.  
111 Speen Street, Suite 410  
Framingham, MA 01701,

Attention: General Counsel

Either Party may from time to time change the individual(s) to receive notices and/or its address for notification purposes by giving the other Party written notice as provided above.

**SECTION 24**                    **Records**

To assist Ameresco in its performance of this Agreement, CUSTOMER shall (to the extent it has not already done so) furnish (or cause its energy suppliers and transporters to furnish) to Ameresco, upon its request, accurate and complete data (kept by CUSTOMER or CUSTOMER's energy suppliers and transporters in the regular course of their respective businesses) concerning energy usage for the existing facilities at the Property, including the following data for the most current thirty-six (36) month period: utility records, occupancy information; descriptions of any changes in building structure or heating, cooling or other systems or energy requirements; descriptions of all energy consuming or saving equipment used on Property; descriptions of all energy management procedures presently utilized. If requested by Ameresco, CUSTOMER shall also provide any prior energy analyses of the Property, to the extent available.

**SECTION 25**                    **Representations and Warranties**

Each Party warrants and represents to the other Party that:

- (a) It has all requisite power, authority, licenses, permits, and franchises, corporate or otherwise, to execute and deliver this Agreement and perform its obligations hereunder;
- (b) Its execution, delivery, and performance of this Agreement have been duly authorized by, or are in accordance with, as to Ameresco, its organic instruments and, as to CUSTOMER, by all requisite action and are not in breach of any applicable law, code or regulation; this Agreement has been duly executed and delivered by the signatories so authorized, and constitutes each Party's legal, valid and binding obligation;
- (c) Its execution, delivery, and performance of this Agreement shall not result in a breach or violation of, or constitute a material default under, any agreement, lease or instrument to which it is a party or by which it or its Properties may be bound or affected; and
- (d) It has not received any notice, nor to the best of its knowledge is there pending or threatened any notice of any violation of any applicable laws, ordinances, regulations, rules, decrees, awards, permits or orders which would materially adversely affect its ability to perform hereunder;
- (e) The persons executing this Agreement are fully authorized by law to do so; and
- (f) In addition, CUSTOMER warrants and represents to Ameresco that CUSTOMER has obtained or shall obtain all necessary governmental, legal, administrative and any other approval necessary for it to enter into this Agreement.

**SECTION 26**                    **Independent Contractor**

Nothing in this Agreement shall be construed as reserving to CUSTOMER any right to exercise any control over or to direct in any respect the conduct or management of business or operations of Ameresco. The entire control or direction of such business and operations shall be in and shall remain in Ameresco, subject only to Ameresco's performance of its obligations under this Agreement. Neither Ameresco nor any person performing any duties or engaged in any work on the Property on behalf of Ameresco shall be deemed an employee or agent of CUSTOMER.

Nothing in this Section shall be deemed to be a waiver of CUSTOMER's right to use its Property. CUSTOMER and Ameresco are independent of one another and shall have no other relationship relating to or arising out of this Agreement. Neither Party shall have or hold itself out as having the right or authority to bind or create liability for the other by its intentional or negligent act or omission, or to make any contract or otherwise assume any obligation or responsibility in the name of or on behalf of the other Party.

**SECTION 27****Additional Representations and Warranties**

CUSTOMER hereby warrants and represents to Ameresco that:

- (a) CUSTOMER intends to continue to use the Property in a manner reasonably similar to its present use;
- (b) CUSTOMER does not contemplate any changes to the electrical and thermal consumption characteristics of the Property except as may have been disclosed to Ameresco by CUSTOMER in writing prior to the execution of this Agreement;
- (c) CUSTOMER has provided Ameresco with all records heretofore requested by Ameresco; and
- (d) CUSTOMER has not entered into any other agreements or understandings for the Property with persons or entities other than Ameresco regarding the provision of the Scope of Services.

Ameresco hereby warrants and represents to Customer that:

- (a) Ameresco warrants that, to the best of its knowledge, it possesses the necessary copyright, trademark, patent or intellectual property right concerning the design or use of any proposal, product or process provided or used in the performance of this Agreement;
- (b) Ameresco shall indemnify and hold the CUSTOMER harmless from all claims, demands, damages, costs, and expenses, including reasonable attorney's fees that CUSTOMER may pay or incur due to infringement by any proposal, product or process provided by Ameresco under this Agreement of any United States copyright, trademark, patent, intellectual property right or other rights duly protected by State or Federal law. If any use of the products provided by Ameresco under this Agreement is enjoined, Ameresco shall, at its own expense and at its option, either procure the right to continue use of such products, replace them with noninfringing products of equal performance or modify them so that they are no longer infringing. If Ameresco is unable to do any of the preceding, Ameresco agrees to remove the infringing product, and to pay the CUSTOMER: 1) any amounts paid by the CUSTOMER towards the purchase of the product, less straight line depreciation; 2) any license fee paid by the CUSTOMER for the use of any software, less an amount for the period of usage; and 3) the pro rata portion of any maintenance fee representing the time remaining in any period of maintenance paid for. The obligations of Ameresco under this paragraph continue without time limit. As principles of governmental or public law are involved, the CUSTOMER may participate in or choose to conduct, in its sole discretion, the defense of any such action..

Ameresco's obligation to defend any claim or lawsuit is upon the condition that (i) Customer provide prompt written notification of any claim or lawsuit and provides Ameresco the full right to defend such claim or lawsuit; and (ii) Customer provide all such information and assistance as Ameresco may reasonably request in the defense of such claim or lawsuit.

**SECTION 28****LABOR LEGISLATION**

Ameresco and all its subcontractors shall conform to all applicable Illinois and Federal statutory requirements regarding labor including but not limited to the following Acts and prevailing wage requirements found in :

- (a) Equal Employment Opportunity. Applicable Laws: State of Illinois policy and law, set out in the Illinois Constitution, Article 1, Section 07, requires that employment opportunities be free from discrimination. The equal employment clause contained in 775 ILCS 5/2-105 et seq. is incorporated into the contract and is intended to insure compliance with the applicable laws and with the Illinois Department of Human Rights Rules and Regulations for Public Contracts. The Contractor shall conform to all provisions of the Equal Employment Opportunity Clause (44 Illinois Administrative Code, Ch. X, Sec. 750, Appendix A), and shall include said clause, verbatim or by reference, in each of its subcontracts under which any portion of the contract obligations will be undertaken or assumed, so that the provisions of the clause will be binding upon all such subcontractors.

- (b) Prevailing Wage Act. The act regulates wages of laborers, mechanics, and other workers employed in any public works by the state, county, city, or any public body or any political subdivision or by anyone under contract for public works (820 ILCS 130) and provides in part that Ameresco, subcontractors, etc., shall pay to all laborers, workers, and mechanics performing work under the contract, not less than the prevailing rate of wages as determined by the Illinois Department of Labor. The Contractor shall prominently post the current schedule of prevailing wages at the project site, and shall notify immediately in writing all of its subcontractors, etc. of all changes in the Schedule of Prevailing Wages. Any increase in costs to the Contractor due to changes in the prevailing rate of wages or labor law during the term of any contract shall be at the expense of the Contractor and not at the expense of Ameresco.
- (c) Veterans Preference Act, (330 ILCS 55).
- (d) The Service Men's Employment Tenure Act, (330 ILCS 60).
- (e) Child Labor Law, (820 ILCS 205).
- (f) Unified Code of Corrections, (730 ILCS 5/3-12-1 et seq.) Unauthorized employment of convict labor.
- (g) Employment of Illinois Workers on Public Works Act, (30 ILCS 570) requiring employment of Illinois workers on public works projects.
- (h) The Worker's Compensation Act, (820 ILCS 305).
- (i) Drug Free Workplace Act, (30 ILCS 580).
- (j) The Human Rights Act, (775 ILCS 5/1-101).
- (k) The Public Employment Discrimination Act, (775 ILCS 10).
- (l) Davis-Bacon Act and Copeland Compliance Act, (40 U.S.C. 3141 et seq., 18 USC 875, 29 CFR Parts 1, 3 and 5) and related requirements included in Attachment I.

**SECTION 29                      Further Documents and Events**

The Parties shall execute and deliver all documents and perform all further acts that may be reasonably necessary to effectuate the provisions of this Agreement, in that regard, it being understood and agreed that Ameresco covenants and agrees to execute or procure the execution of all documents reasonably required to release any lien held by Ameresco or its assignees upon the termination of this Agreement and payment of all amounts required to be paid by CUSTOMER to Ameresco, pursuant to this Agreement. CUSTOMER agrees to execute all documents that may be reasonably required by an entity that provides funds for any financing contemplated herein and to cooperate with Ameresco in obtaining such funds.

It being further understood that CUSTOMER also agrees to execute all documents which may be reasonably required for Ameresco to obtain all licenses, permits and governmental approvals required by Ameresco for installation and operation of the ECM(s). Ameresco's obligations hereunder are also subject to obtaining all such licenses, permits and governmental approvals as are required to perform its obligations under this Agreement.

Ameresco shall require that its contractors and subcontractors in connection with this Project pay the rate of wages for workmen required for any work or construction to comply with the Department of Labor for the state of Illinois and the Davis-Bacon Act and Copeland Compliance Act, and related requirements included in Attachment I.

**SECTION 30                    Third Party Beneficiaries**

Except as may be specifically provided for in this Agreement, the Parties hereto do not intend to create any rights for, or grant any remedies to, any third party beneficiary of this Agreement.

**SECTION 31                    Notifications of Governmental Action - Occupational Safety and Health**

The Parties agree to notify each other as promptly as is reasonably possible upon becoming aware of an inspection under, or any alleged violation of, the Occupational Safety and Health Act or any other provision of federal, state or local law, relating in any way to the undertakings of either Party under this Agreement.

**SECTION 32                    References**

Unless otherwise stated, all references to a particular Attachment or to Attachments herein are to the referenced Attachment or Attachments which are attached to this Agreement and all such referenced Attachments are incorporated by reference within this Agreement. All references herein to a Section shall refer to a Section of this Agreement unless this Agreement specifically provides otherwise.

**IN WITNESS WHEREOF**, the duly authorized officers or representatives of the Parties have set their hand on the date first written above with the intent to be legally bound.

**CUSTOMER**

**AMERESCO, INC.**

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Authorized Signature

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_



**ATTACHMENT A**

**PROPERTY DESCRIPTION**

The following buildings, facilities, and areas, which are owned and operated by CUSTOMER, are included in the Scope of Services set forth in Attachment B:

Sangamon County Complex  
200 S Ninth Street  
Springfield IL 62701

## ATTACHMENT B

### SCOPE OF SERVICES

This Attachment sets forth a description of existing equipment and the ECM(s) and related equipment to be installed by Ameresco at the buildings set forth in Attachment A within the Property. Installation of the ECM(s) and the included equipment is subject to change if Ameresco discovers unforeseen conditions at the Property that render its preliminary analysis of the Property inaccurate, or significantly affect Ameresco's anticipated economic benefit or Annual Guaranteed Savings. Any changes to the installation of the ECM(s) and the included equipment are subject to approval of CUSTOMER, which approval shall not be unreasonably withheld, conditioned or delayed.

This document describes the Scope of Work that Ameresco Incorporated will implement as part of the energy and cost saving performance contract for the Sangamon County Facility.

Warranties: A one year parts and labor warranty is provided by Ameresco on all work. All equipment warranties are standard one year warranties unless noted otherwise below.

Service: The scope of work does not include any service agreements.

ECM 1 – Facility wide lighting upgrade

ECM 2 – Omitted from the Scope of Work

ECM 3 – Kitchen exhaust hood motor reduction

ECM 4 – Two (2) new water chillers, monitoring and exhaust system

ECM 5 – Omitted from the scope of work.

ECM 6 – Variable primary chilled water system

ECM 7 – Various cooling tower upgrades

ECM 8 – Replacement of existing steam boilers to condensing boiler system

ECM 9 – Replace domestic water heaters

ECM 10 – Variable primary hot water heating system

ECM 11 – New booster pumps in Courts, Office, and Detention, galvanized pipe replacement

ECM 12 – Water conservation measures

ECM 13 – Upgrade 342 VAV boxes with DDC, 222 control valves

ECM 14 – Water softening equipment

ECM 15 – Upgrade AHU controls, various motors, VFDs

**Energy Conservation Measure #1**

This energy conservation measure includes the renewal of the lighting systems that serve the Courts/Office and Detention buildings. All existing interior fluorescent lighting systems and existing interior/exterior metal halide/high pressure sodium lighting systems will be extensively upgraded as part of this energy conservation measure. All lighting products used for the renewal of the lighting systems will comply with ANSI/ASHRAE/IESNA Standard 90.1-2007 and the 2009 International Energy Conservation Code.

The fluorescent light fixtures that currently serve the Courts/Office building will be retrofitted with a factory "relight" assembly. This retrofit assembly will be extensively used to convert each existing light fixture from T-12 lamps and magnetic ballasts to T-5 lamps and electronic ballasts. The conversion process will include the replacement of the existing parabolic lens. All salvageable material removed from the light fixtures will be recycled to the fullest extent possible.

Dual technology occupancy switches will be installed in certain areas of the Courts/Office building to reduce electrical consumption when controlled areas of the building are unoccupied. Refer to Table #1 for a list of rooms to receive occupancy sensors. The fluorescent cove lighting system that serves the court rooms will be updated with T-8 lamps and electronic ballasts. The obsolete lighting control system that currently serves the County Board Room will also be replaced with a Lutron Electronics model LCP8 dimming system. A photocell will be installed on the existing lights in the main entrance to shut off the lights when daylight is sufficient to adequately light the space.

The fluorescent light fixtures that currently serve the Detention building will be retrofitted from T-12 lamps and magnetic ballasts to T-8 lamps and electronic ballasts. The conversion process will include the replacement of the existing parabolic lens. All salvageable material removed from the light fixtures will be recycled to the fullest extent possible.

The light fixtures that include metal halide lamps and magnetic ballasts that serve the Detention building day-rooms will be replaced. The replacement light fixtures will be a security type and will include T-5 lamps and electronic ballasts. The light fixtures that are removed will be recycled to the fullest extent possible. Dual technology occupancy switches and day-light harvesting sensors will be installed in certain areas of the Detention building to reduce electrical consumption when controlled areas of the building are unoccupied or can be illuminated by natural lighting from adjoining windows.

Refer to Table #2 Lighting Savings Calculations for further detail. Approved manufacturers are General Electric and Sylvania. All fixtures to be retrofitted will be wiped down with a dry cloth as they are retrofitted. T-5 lamps will have a 3.5 year parts-only warranty while T-8 lamps will have a 4 year parts-only warranty. Electronic ballasts will have a 5 year parts-only warranty. The lighting equipment warranty will be administered as follows: Owner staff will replace failed equipment and store the failed equipment. The failed equipment will be shipped back to the manufacturer and replacement equipment will be shipped by the manufacturer.

**TABLE #1**

Occupancy Sensor Locations											
Area/Room	Quantity	Area/Room	Quantity	Area/Room	Quantity	Area/Room	Quantity	Area/Room	Quantity	Area/Room	Quantity
1st Floor		2nd Floor		3rd Floor		4th Floor		5th Floor		6th Floor	
1A01	1	2A01	1	3A01	1	4A01	1	5A01	1	6A01	1
1A02	1	2A02	1	3A02	1	4A02	1	5A02	1	6A02	1
1A03	1	2A03	2	3A03	1	4A03	1	5A03	1	6A03	1
1A04	1	2A04	1	3A04	1	4A04	1	5A04	1	6A04	1
1A05	1	2A05	1	3A05	1	4A05	1	5A05	1	6A05	1
1A06	1	2A06	1	3A06	1	4A06	1	5A06	1	6A06	1
1A07	1	2B01	1	3A07	1	4A07	1	5A07	1	6A07	1
1A08	1	2B02	1	3A08	1	4A08	1	5A08	1	6A08	1
1A09	1	2B03	3	3A09	1	4A09	1	5A09	1	6A09	1
1A10	1	2B04	1	3A10	1	4A10	1	5A10	1	6A10	1
1A11	2	2B06	1	3A11	1	4A11	2	5A11	1	6A11	1
1A12	1	2C01	1	3A12	1	4A12	1	5A12	1	6A12	1
1A13	1	2C02	1	3A13	1	4A13	1	5A13	1	6A13	1
1A14	2	2C03	1	3A14	1	4A14	1	5A14	1	6A14	1
1A15	1	2C04	1	3A15	1	4A15	1	5A15	1	6A15	1
1A16	1	2C05	1	3A16	1	4A16	1	5A16	1	6A16	1
1A17	1	2C06	1	3A17	1	4A17	1	5A17	1	6A17	1
1A18	1	2C07	1	3A18	2	4A18	1	5A18	1	6A18	1
1A19	1	2C08	1	3A19	1	4A19	1	5A19	1	6A19	1
1A20	1	2C09	1	3A20	1	4A20	1	5A20	1	6A20	1
1A21	1	2C10	2	3A21	2	4A21	1	5A21	1	6A21	1
1A23	1	2C11	1	3A22	1	4A22	2	5A22	1	6A22	1
1A24	1	2C13	2	3A23	1	4A23	1	5A23	1	6A23	1
1A25	1	2C14	1	3A24	1	4A24	1	5A24	1	6A24	1
1A26	1	2C15	1	3A25	1	4A25	1	5A25	1	6A25	1
1A27	1	2C16	1	3A26	1	4A26	1	5A26	1	6A26	1
1A28	1	2C17	1	3A27	1	4A27	2	5A27	1	6A27	1
1A29	1	2C18	1	3A28	1	4A28	1	5A28	1	6A28	1
1A30	1	2C19	1	3A29	1	4A29	1	5A29	1	6A29	1
1A31	1	2D01	1	3A30	2	4A30	1	5A30	1	6A30	1
1A32	1	2D03	1	3A31	1	4A31	1	5A31	1	6A31	1
1A33	1	2D04	1	3A32	1	4A32	1	5A32	1	6A32	1
1A34	1	2D07	1	3A33	2	4A33	1	5A33	1	6A33	1
1A36	1	2D08	1	3A34	1	4A34	1	5A34	1	6A34	1
1A37	1	2E01	1	3A35	1	4A35	1	5A35	1	6A35	1
1A38	1	2E02	1	3A36	1	4A36	1	5A36	1	6A36	1
1A39	1	2E03	1	3A37	1	4A37	1	5A37	1	6A37	1
1A40	1	2E04	1	3A38	1	4A38	2	5A38	1	6A38	1
1A41	1	2E05	1	3A39	1	4A39	1	5A39	1	6A39	1
1B01	1	2E06	1	3A40	1	4A40	1	5A40	1	6A40	1
1B02	1	2F01	1	3A41	1	4A41	1	5A41	1	6A41	1
1B03	1	2F02	1	3A42	1	4A42	1	5A42	1	6A42	1
1B04	1	2G01	1	3A43	1	4A43	1	5A43	1	6A43	1

SECURITY SERVICE LOCATIONS												
Access Point	Quantity	Access Point 2nd Floor	Quantity	Access Point 3rd Floor	Quantity	Access Point 4th Floor	Quantity	Access Point 5th Floor	Quantity	Access Point 6th Floor	Quantity	Access Point 7th Floor
1DCG		2602	1	2644	1	4445	1	CA44		CA44	1	7A44
1EC6		2603	1	3E01	2	7A18	1	EA18		EA18	1	7A18
1F17		2614	1	3E02	1	4A17	2	FA18		FA18	1	7A18
1EC6		2605	1	3E03	1	4A18	1	EA17		EA17	1	7A17
1DC9		2600	1	3E04	1	4A18	1	CA40		CA40	1	7A40
1B10		2607	1	3E05	1	4A50	1	EA49		EA49	1	7A49
1B11		2608	1	3E06	1	4A51	1	EA50		EA50	1	7A50
1B12	2	2608	1	3E07	1	4A51	1	EA51		EA51	1	7A51
1D13		2610	1	3E08	1	4A52	1	CA52		CA52	1	7A52
1B14		2H01	1	3E09	1	4A53	1	EA53		EA53	1	7A53
1B15		2H02	1	3E10	1	4A56	1	EA54		EA54	1	7A54
1B16		2H03	1	3E11	1	4A57	1	EA55		EA55	1	7A55
1CC1		2H04	1	3E12	1	4A50	1	CA50		CA50	1	7A50
1C13		2H05	1	3E13	1	4A58	1	EA57		EA57	1	7A57
1D14		2H06	1	3E14	1	4A58	1	EA58		EA58	1	7A58
1D15		2H07	1	3E15	1	4B01	1	EA59		EA59	1	7A59
1D16		2H08	1	3E16	1	4B02	1	EA60		EA60	1	7A60
1D17		2H09	1	3E17	1	4B03	1	EA61		EA61	1	7A61
1D18		2P01	2	3E18	1	4B04	1	EA62		EA62	1	7A62
1D19		2P02	2	3E19	1	4B05	1	EA63		EA63	1	7A63
1D20		2P03	2	3E20	1	4B06	1	EA64		EA64	1	7A64
1D21		2P04	1	3E21	1	4B07	1	EA65		EA65	1	7A65
1D22		2P05	1	3E22	1	4B08	2	EA66		EA66	1	7A66
1D23		2S01	1	3E23	1	4C11	3	EA67		EA67	1	7A67
1E14			1	3E24	2	4C12	1	EA68		EA68	1	7A68
1E15			1	3E25	1	4C13	1	EA69		EA69	1	7A69
1E16			1	3E26	1	4C14	1	EA70		EA70	1	7A70
1E17			1	3E27	1	4C15	1	EA71		EA71	1	7A71
1E18			1	3E28	1	4C16	2	EA72		EA72	1	7A72
1E19			1	3E29	1	4C17	1	EA73		EA73	1	7A73
1E20			1	3E30	1	4C18	1	EA74		EA74	1	7A74
1E21			1	3E31	1	4C19	1	EA75		EA75	1	7A75
1E22			1	3E32	1	4C20	1	EA76		EA76	1	7A76
1E23			1	3E33	1	4C21	1	EA77		EA77	1	7A77
1E24			1	3E34	1	4C22	1	EA78		EA78	1	7A78
1E25			1	3E35	1	4C23	1	EA79		EA79	1	7A79
1E26			1	3E36	1	4C24	1	EA80		EA80	1	7A80
1E27			1	3E37	1	4C25	1	EA81		EA81	1	7A81
1E28			1	3E38	1	4C26	1	EA82		EA82	1	7A82
1E29			1	3E39	1	4C27	1	EA83		EA83	1	7A83
1E30			1	3E40	1	4C28	1	EA84		EA84	1	7A84
1E31			1	3E41	1	4C29	1	EA85		EA85	1	7A85
1E32			1	3E42	1	4C30	1	EA86		EA86	1	7A86
1E33			1	3E43	1	4C31	1	EA87		EA87	1	7A87
1E34			1	3E44	1	4C32	1	EA88		EA88	1	7A88
1E35			1	3E45	1	4C33	1	EA89		EA89	1	7A89
1E36			1	3E46	1	4C34	1	EA90		EA90	1	7A90
1E37			1	3E47	1	4C35	1	EA91		EA91	1	7A91
1E38			1	3E48	1	4C36	1	EA92		EA92	1	7A92
1E39			1	3E49	1	4C37	1	EA93		EA93	1	7A93
1E40			1	3E50	1	4C38	1	EA94		EA94	1	7A94
1E41			1	3E51	1	4C39	1	EA95		EA95	1	7A95
1E42			1	3E52	1	4C40	1	EA96		EA96	1	7A96
1E43			1	3E53	1	4C41	1	EA97		EA97	1	7A97
1E44			1	3E54	1	4C42	1	EA98		EA98	1	7A98
1E45			1	3E55	1	4C43	1	EA99		EA99	1	7A99
1E46			1	3E56	1	4C44	1	EA00		EA00	1	7A00
1E47			1	3E57	1	4C45	1	EA01		EA01	1	7A01
1E48			1	3E58	1	4C46	1	EA02		EA02	1	7A02
1E49			1	3E59	1	4C47	1	EA03		EA03	1	7A03
1E50			1	3E60	1	4C48	1	EA04		EA04	1	7A04
1E51			1	3E61	1	4C49	1	EA05		EA05	1	7A05
1E52			1	3E62	1	4C50	1	EA06		EA06	1	7A06
1E53			1	3E63	1	4C51	1	EA07		EA07	1	7A07
1E54			1	3E64	1	4C52	1	EA08		EA08	1	7A08
1E55			1	3E65	1	4C53	1	EA09		EA09	1	7A09
1E56			1	3E66	1	4C54	1	EA10		EA10	1	7A10
1E57			1	3E67	1	4C55	1	EA11		EA11	1	7A11
1E58			1	3E68	1	4C56	1	EA12		EA12	1	7A12
1E59			1	3E69	1	4C57	1	EA13		EA13	1	7A13
1E60			1	3E70	1	4C58	1	EA14		EA14	1	7A14
1E61			1	3E71	1	4C59	1	EA15		EA15	1	7A15
1E62			1	3E72	1	4C60	1	EA16		EA16	1	7A16
1E63			1	3E73	1	4C61	1	EA17		EA17	1	7A17
1E64			1	3E74	1	4C62	1	EA18		EA18	1	7A18
1E65			1	3E75	1	4C63	1	EA19		EA19	1	7A19
1E66			1	3E76	1	4C64	1	EA20		EA20	1	7A20
1E67			1	3E77	1	4C65	1	EA21		EA21	1	7A21
1E68			1	3E78	1	4C66	1	EA22		EA22	1	7A22
1E69			1	3E79	1	4C67	1	EA23		EA23	1	7A23
1E70			1	3E80	1	4C68	1	EA24		EA24	1	7A24
1E71			1	3E81	1	4C69	1	EA25		EA25	1	7A25
1E72			1	3E82	1	4C70	1	EA26		EA26	1	7A26
1E73			1	3E83	1	4C71	1	EA27		EA27	1	7A27
1E74			1	3E84	1	4C72	1	EA28		EA28	1	7A28
1E75			1	3E85	1	4C73	1	EA29		EA29	1	7A29
1E76			1	3E86	1	4C74	1	EA30		EA30	1	7A30
1E77			1	3E87	1	4C75	1	EA31		EA31	1	7A31
1E78			1	3E88	1	4C76	1	EA32		EA32	1	7A32
1E79			1	3E89	1	4C77	1	EA33		EA33	1	7A33
1E80			1	3E90	1	4C78	1	EA34		EA34	1	7A34
1E81			1	3E91	1	4C79	1	EA35		EA35	1	7A35
1E82			1	3E92	1	4C80	1	EA36		EA36	1	7A36
1E83			1	3E93	1	4C81	1	EA37		EA37	1	7A37
1E84			1	3E94	1	4C82	1	EA38		EA38	1	7A38
1E85			1	3E95	1	4C83	1	EA39		EA39	1	7A39
1E86			1	3E96	1	4C84	1	EA40		EA40	1	7A40
1E87			1	3E97	1	4C85	1	EA41		EA41	1	7A41
1E88			1	3E98	1	4C86	1	EA42		EA42	1	7A42
1E89			1	3E99	1	4C87	1	EA43		EA43	1	7A43
1E90			1	3E00	1	4C88	1	EA44		EA44	1	7A44
1E91			1	3E01	1	4C89	1	EA45		EA45	1	7A45
1E92			1	3E02	1	4C90	1	EA46		EA46	1	7A46
1E93			1	3E03	1	4C91	1	EA47		EA47	1	7A47
1E94			1	3E04	1	4C92	1	EA48		EA48	1	7A48
1E95			1	3E05	1	4C93	1	EA49		EA49	1	7A49
1E96			1	3E06	1	4C94	1	EA50		EA50	1	7A50
1E97			1	3E07	1	4C95	1	EA51		EA51	1	7A51
1E98			1	3E08	1	4C96	1	EA52		EA52	1	7A52
1E99			1	3E09	1	4C97	1	EA53		EA53	1	7A53
1E00			1	3E10	1	4C98	1	EA54		EA54	1	7A54
1E01			1	3E11	1	4C99	1	EA55		EA55	1	7A55
1E02			1	3E12	1	4C00	1	EA56		EA56	1	7A56
1E03			1	3E13	1	4C01	1	EA57		EA57	1	7A57
1E04			1	3E14	1	4C02	1	EA58		EA58	1	7A58
1E05			1	3E15	1	4C03	1	EA59		EA59	1	7A59
1E06			1	3E16	1	4C04	1	EA60		EA60	1	7A60
1E07			1	3E17	1	4C05	1	EA61		EA61	1	7A61
1E08			1	3E18	1	4C06	1	EA62		EA62	1	7A62
1E09			1	3E19	1	4C07	1	EA63		EA63	1	7A63
1E10			1	3E20	1	4C08	1	EA64		EA64	1	7A64
1E11			1	3E21	1	4C09	1	EA65		EA65	1	7A65
1E12			1	3E22	1	4C10	1	EA66		EA66	1	7A66
1E13			1	3E23	1	4C11	1	EA67		EA67	1	7A67
1E14			1	3E24	1	4C12	1	EA68		EA68	1	7A68
1E15			1	3E25	1	4C13	1	EA69		EA69	1	7A69
1E16			1	3E26	1	4C14	1	EA70		EA70	1	7A70
1E17			1	3E27	1	4C15	1	EA71		EA71	1	7A71
1E18			1	3E28	1	4C16	1	EA72		EA72	1	7A72
1E19			1	3E29	1	4C17	1	EA73				



TABLE #2

Sangamon County Complex  
Energy and Maintenance Savings Calculations

Courts/Administration Building

Room No.	Room Name	Present Fixture Information			Proposed Fixture Information			Present Consumption			Proposed Consumption		
		Present Fixtures	Present Watts (Per Fixture)	Room Qty	Proposed Fixtures	Prop Watts (Per Fixture)	Room Qty	Present (Watts)	Present (Hours)	Present (KWh)	Proposed (Watts)	Proposed (Hours)	Proposed (KWh)
84	F16	118	64	Convert fixture to H.I.C. (2) 15 P25WMLamps	83	8,976	3,120	31,125	4,555	3,120	312	12,708	18,326
1005	P25	118	1005	Convert fixture to H.I.C. (2) 15 P25WMLamps	83	118,280	3,120	238,730	53,205	3,120	312	149,505	214,181
40	F26	68	40	Convert fixture to H.I.C. (2) 15 P25WMLamps	53	3,120	3,120	8,724	4,120	3,120	312	5,953	3,781
17	F26	60	17	Replace fixture with 1 lamp 15 P25WMLamps	23	1,000	3,120	3,182	591	3,120	312	1,066	2,064
114	P25	78	114	Replace fixture with 1 lamp 15 P25WMLamps	25	8,892	3,120	27,743	7,850	3,120	312	8,000	18,740
100	F26	74	100	Convert fixture to H.I.C. (2) 15 P25WMLamps	44	22,824	3,120	70,840	13,464	3,120	312	31,580	32,912
415	F26	74	415	Convert fixture to H.I.C. (2) 15 P25WMLamps	44	30,710	3,120	85,815	18,260	3,120	312	51,274	42,241
284	F26	74	284	Replace fixture with 1 lamp 15 P25WMLamps	25	21,756	3,120	67,910	15,362	3,120	312	43,164	24,124
4	F26	77	4	No Change	77	300	3,120	961	0	3,120	312	961	0
35	D10C	37	45	Replace fixture with 1 lamp 15 P25WMLamps	25	1,565	3,120	5,195	1,125	3,120	312	3,159	2,033
21	F11C	74	21	Convert fixture to H.I.C. (2) 15 P25WMLamps	44	1,554	3,120	4,438	924	3,120	312	2,305	2,254
27	F12C	74	27	Convert fixture to H.I.C. (2) 15 P25WMLamps	44	1,598	3,120	8,224	1,184	3,120	312	3,330	2,808
84	F12C	37	84	Replace fixture with 1 lamp 15 P25WMLamps	25	2,388	3,120	7,368	1,600	3,120	312	4,483	2,686
30	F14C	74	30	Convert fixture to H.I.C. (2) 15 P25WMLamps	53	2,100	3,120	6,950	1,550	3,120	312	4,465	2,462
24	F15C	37	24	Replace fixture with 1 lamp 15 P25WMLamps	25	868	3,120	2,771	600	3,120	312	1,585	1,005
0	F16C	7	0	Changed by Owner	7	0	3,120	0	0	3,120	312	0	0
83	F17C	120	83	Changed by Owner	120	10,100	3,120	31,824	10,200	3,120	0	31,824	0
470	F18C	120	470	Changed by Owner	120	30,400	3,120	175,968	50,400	3,120	0	175,968	0
23	F18C	6	23	No Change	6	207	3,120	768	225	3,120	312	768	768
18	P20C	75	18	Changed by Owner	75	1,350	3,120	4,212	1,350	3,120	0	0	0
18	P21C	6	18	No Change	6	269	3,120	1,741	500	3,120	312	1,242	125
0	P22C	500	0	Changed by Owner	500	1,600	3,120	3,120	0	3,120	0	0	0
14	P23C	60	14	Changed by Owner	60	840	3,120	2,921	840	3,120	0	2,921	0
23	P24C	120	23	Changed by Owner	120	2,100	3,120	6,911	2,100	3,120	0	6,911	0
0	P25C	110	0	No Change	110	0	3,120	0	0	3,120	312	0	0
0	P26C	110	0	No Change	110	0	3,120	0	0	3,120	312	0	0
0	P27C	110	0	No Change	110	0	3,120	0	0	3,120	312	0	0
0	P28C	77	0	No Change	77	0	3,120	0	0	3,120	312	0	0
0	P29C	77	0	No Change	77	0	3,120	0	0	3,120	312	0	0
0	P30C	110	0	No Change	110	0	3,120	0	0	3,120	312	0	0
0	P31C	4	0	No Change	4	0	3,120	0	0	3,120	312	0	0
0	P31C	440	0	No Change	440	0	3,120	0	0	3,120	312	0	0
204	COVE	74	204	Replace with 1500 Lux	28	15,000	3,120	47,160	5,712	3,120	312	19,008	31,060
8	F16C	148	8	Replace with 1500 Lux	23	1,184	3,120	3,884	424	3,120	312	1,101	2,503
1	F16C	118	1	Eliminate fixture and Light Fixtures	0	118	3,120	352	0	0	0	0	352
185	F26	118	185	Eliminate fixture and Light Fixtures	0	118	3,120	352	0	0	0	0	352
4	F26	74	4	Eliminate fixture and Light Fixtures	0	74	3,120	232	0	0	0	0	232
2	F26	74	2	Eliminate fixture and Light Fixtures	0	148	3,120	464	0	0	0	0	464
28	F26	74	28	Eliminate fixture and Light Fixtures	0	218	3,120	683	0	0	0	0	683
2	F14C	74	2	Eliminate fixture and Light Fixtures	0	148	3,120	464	0	0	0	0	464
2	COVE	74	2	Eliminate fixture and Light Fixtures	0	74	3,120	232	0	0	0	0	232
1				Lamp Changes by Ken/Ming HIG, TYC/BC, 200-235-8210	0	0	3,120	0	0	3,120	312	0	78,203

Subtotal Courts/Administration Building 522,713

Detention

Room No.	Room Name	Present Fixture Information			Proposed Fixture Information			Present Consumption			Proposed Consumption		
		Present Fixtures	Present Watts (Per Fixture)	Room Qty	Proposed Fixtures	Prop Watts (Per Fixture)	Room Qty	Present (Watts)	Present (Hours)	Present (KWh)	Proposed (Watts)	Proposed (Hours)	Proposed (KWh)
150	F16	118	78	Replace with 1 High Efficiency ballast and 2 1-8 lamps	84	8,988	8,760	12,920	4,922	8,760	876	12,917	25,951
87	F16	74	87	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	4,215	8,760	36,950	2,451	8,760	876	18,224	17,318
70	F16	74	70	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	11,100	8,760	37,220	8,850	8,760	876	50,552	43,354
204	F16	112	204	Replace with 1 High Efficiency ballast and 2 1-8 lamps	84	22,816	8,760	60,111	13,055	8,760	876	100,234	97,715
2	F16	112	2	No Change	0	0	8,760	0	0	8,760	876	0	0
30	F16	74	30	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	2,220	8,760	18,447	1,280	8,760	876	10,110	8,217
1	F16	74	1	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	74	8,760	245	43	8,760	876	359	293
81	F16	74	81	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	8,724	8,760	33,900	3,913	8,760	876	30,550	29,119
188	F16	74	188	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	13,214	8,760	107,918	7,095	8,760	876	81,554	77,318
27	F16C	100	27	No Change	0	0	8,760	0	0	8,760	876	0	0
0	F16C	100	0	Changed by Owner	18	800	8,760	1,500	144	8,760	876	0	8,876
52	F16C	74	52	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	3,443	8,760	33,708	2,335	8,760	876	17,028	16,000
10	F11C	215	10	Replace with 4 Lamp 1500 Footcandle High Bay	225	2,125	8,760	36,135	3,300	8,760	876	23,727	9,405
54	F11C	215	54	Replace with 4 Lamp 1500 Footcandle High Bay	225	12,850	8,760	130,008	12,204	8,760	876	82,616	33,810
4	F11C	450	4	Changed by Owner	150	1,500	8,760	15,768	600	8,760	876	4,730	11,015
81	F11C	81	81	No Change	0	0	8,760	0	0	8,760	876	0	0
23	F12C	37	23	Replace with 1 High Efficiency ballast and 1 1-8 lamps	22	651	8,760	7,555	505	8,760	876	3,989	3,465
5	F12C	5	5	No Change	0	0	8,760	0	0	8,760	876	0	0
0	F12C	5	0	No Change	0	0	8,760	0	0	8,760	876	0	0
25	F12C	74	25	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	1,500	8,760	18,208	1,075	8,760	876	6,475	7,731
155	F12C	74	155	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	11,470	8,760	100,477	6,665	8,760	876	82,544	47,830
100	F12C	74	5	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	310	8,760	3,241	215	8,760	876	1,595	1,256
0	F12C	110	0	No Change	0	0	8,760	0	0	8,760	876	0	0
117	F12C	74	117	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	6,955	8,760	75,544	5,031	8,760	876	38,634	36,180
46	F12C	74	46	Replace with 1 High Efficiency ballast and 2 1-8 lamps	44	3,404	8,760	29,810	2,044	8,760	876	23,210	8,909
0	F12C	74	0	Replace with 1 High Efficiency ballast and 2 1-8 lamps	43	0	8,760	0	0	8,760	876	0	0
0	F12C	110	0	No Change	70	0	8,760	0	0	8,760	876	0	0
0	F12C	120	0	No Change	10	0	8,760	0	0	8,760	876	0	0
0	F12C	165	0	No Change	70	0	8,760	0	0	8,760	876	0	0
0	F12C	77	0	No Change	38	0	8,760	0	0	8,760	876	0	0
30	F12C	39	30	No Change	0	0	8,760	0	0	8,760	876	0	0
0	F12C	8	0	No Change	8	0	8,760	0	0	8,760	876	0	0

Subtotal Detention Building 453,712

Existing Fixture Schedule

Fixture Tag	Description
F1C	3-34W 2 X 4 recessed grid mounted troffer; flush steel hinged & latched door frame, baked white enamel finish acrylic prismatic lens.
F2C	3-34W Same as F1C except with 1 1/2" X 1 1/2" X 1" deep parabolic louver-one piece injection molded polystyrene or acrylic base material, specular silver finish.
F3C	2-34W Same as F1C except with 2 lamps.
F4C	2-25W 3 Ft. long 2 lamp strip fluorescent all steel housing with baked enamel finish.
F5C	2-34W Same as F4C except 4 Ft. in length.
F6C	2-34W 2 X 2 Recessed grid mounted fluorescent troffer; flush steel hinged and latched door frame, baked white enamel finish, acrylic prismatic
F7C	2-34W Same as F6C except with 1 1/2" X 1 1/2" X 1" deep parabolic louver-one piece injection molded polystyrene base material with specular silver finish.
F8C	2-34W 4 foot pendant mounted industrial fluorescent fixture with 10% up-light, reflectors baked white enamel finish.
F9C	photocell.
F10	1-34W Wraparound under cabinet task light white baked enamel finish on steel housing, acrylic prismatic lens, K-12 pattern, .125" thick minimum.
F11C	2-34W 4 Ft. Medium security recessed fluorescent fixture, die form steel housing, lamps, door frame with continuous piano hinge with welded pins, 3 stainless steel temper-steel finish.
F12C	2-34W 1 X 4 Surface mounted, fluorescent fixture; all steel housing, hinged steel door with white baked enamel finish, .125" thick acrylic prismatic len.
F13C	1-34W 4 Ft. Surface mounted fluorescent, steel housing, clear polycarbonate lens.
F14C	2-34W 1 X 4 recessed fluorescent all steel housing with baked white enamel finish, flush, hinged door frame with acrylic lens, K-12 pattern, .125" thick minimum.
F15C	1-34W 4 ft. long single lamp strip fluorescent all steel housing with baked white enamel finish.
F16C	2-7W Fluorescent universal mount exit light red stencil style letters, universal arrows on white background, white matte finish housing, downlight.
F17C	120W ER40 Incandescent 6" diameter round black baffle downlight clean specular alzak reflector, diecast aluminum housing white polycarbonate trim.
F18C	120W ER40 Same as F17C except 6" square.
F19C	2-9W Same as F17C except twin tube fluorescent lamps.
F20C	75W-ER30 Same as F18 except 75W lamp.
F21C	Blax T/E 32W 6" diameter round metal halide wall washer fixture. Cast aluminum housing. Shielded aperture with specular alzak scoop reflector & reflector housing. Black groove baffle.
F22C	5-100 A19 Incandescent chandelier; Gross Lighting model number G12000-30.
F23C	1-60W Surface mount wall sconce cased opal diffuser mounted directly to wall 13"W X 4"H X 6 1/2" Ext.
F24C	120W Same as F18C except wall washer type.
F25C	100W High pressure sodium street lamp 27" X 16 1/2" case aluminum lantern in the Lincoln style with type 5 refractor black paint finish. One Piece. Heavy wall cast iron pole.
F26C	120W ER40 2 Ft. single circuit light track with baffled incandescent fixture.
F27C	100W HPS 8" round bollard 3' 6" high, extruded aluminum housing with painted black finish. Specular clear aluminum reflector protected by clear acrylic lens.
F28C	polycarbonate lens.
F29C	polycarbonate lens.
F30C	100W High pressure sodium well light. One piece die cast aluminum housing with bituminous coating below grade, lens retaining ring & splice compartment with grill cover.
F31C	1-14.9W Low voltage up-light, cast aluminum housing & spike, baked enamel black finish.
F32C	impact and heat resistant lens.
COVE	Fluorescent lights in the Court Room cove area (Owner furnished and installed after construction).
F1C 4L	Owner furnished and installed after construction; similar to F1C.



Existing Fixture Schedule	
Fixture Tag	Description
F1D	3-34W 2 X 4 recessed grid mounted troffer; flush steel hinged and latched door frame, baked white enamel finish, acrylic prismatic lens, K-12 pattern minimum .125" thick.
F2D	2-34W Same as F1D except with 2 lamps.
F3D	2-34W 4 Ft. 2 Lamp chain mounted industrial fluorescent fixture, 10% upright, reflectors - baked white enamel finish.
F4D	3-34W Same as F1D except with 1 1/2" X 1 1/2" X 1" deep parabolic louver-one piece injection molded polystyrene or acrylic base material with specular silver finish.
F5D	2-25W 2 lamp fluorescent mirror light, 3 Ft. long, localized distribution, aluminum, fascia-energy saving H.P.F. ballast & lamps.
F6D	2-34W Same as F5D except 4 Ft. in length.
F7D	2-34W 2 X 2 recessed grid mounted fluorescent troffer. Flush steel hinged and latched door frame, baked white enamel finish, acrylic prismatic lens, K-12, minimum .125" thick.
F8D	2-34W 1 X 4 recessed fluorescent troffer; flush steel hinged and latched door frame and white enamel finish, .125" thick, K-12 prismatic acrylic lens.
F9D	by 3 security screws, and stainless steel finish. Lens shall be .259" thick clear polycarbonate lens w/ .125" thick K-12 prismatic acrylic on fixture side. Provide recessed flush push button acrylic on fixture side. Fully gasketed, UL listed for wet locations.
F10D	1-100W Porcelain socket.
F11D	2-34W 2 Ft. X 4 Ft. surface mounted, 2 lamp fluorescent fixture. Steel body & sides, flat steel door frame, baked white enamel finish, .125" thick K-12 prismatic acrylic lens.
F12D	acrylic on fixture side. Hinged door w/tamperproof screws. Quartz restrrike lamp.
F13D	hinged door frame, tamper proof screws.
F14D	3-150W Incandescent adjustable-3 lamp, corner mount fixture. Heavy gage welded steel housing.
F15D	hinged door frame, tamper proof screws.
F16D	1-34W 4 Ft. single lamp fluorescent fixture. Vandal resistant, die formed 16 GA. steel housing with high gloss baked white enamel. Clear prismatic polycarbonate lens.
F17D	as required.
F18D	as required.
F19D	lens downlight (safelight).
F20D	2-34W Same as F7D except with 1 1/2" X 1 1/2" X 1" deep parabolic louver-one piece injection molded polystyrene base material with specular silver finish.
F21D	polycarbonate & .125" thick prismatic acrylic overlay lens and security screws.
F22D	2-34W same as F21D except maximum security. 14GA. stainless steel housing, shielding .125" thick prismatic acrylic over .375" thick clear polycarbonate.
F23D	NOT USED
F24D	3 stainless steel straps and tamperproof resistant screws. UL listed for damp locations.
F25D	2-34W Same as F8D except vandal resistant. High impact 1 Ft. X 4 Ft. acrylic lens 3/16" thick.
F26D	3-34W Same as F25D except 2 X 4, 3 energy saving lamps.
F27D	2-34W Same as F9D except maximum security. 14 GA. stainless steel housing, .375" thick clear polycarbonate lens w/.125" thick K-12 prismatic acrylic on fixture.
F28D	100W High pressure sodium 12" exterior downlight position, step baffle, frenal spread lens. All steel housing, U.L. listed for damp locations.
F29D	175W Metal halide recessed 10", round metal halide downlight, all steel housing, lamp shield, specular clear alzak reflector. Provide mounting for lay-in ceiling.
F30D	locations.
F31D	70W HPS - Same as F30D except 70W HPS.
F32D	120W Incandescent track light. Surface mounted, single circuit.
F33D	120W Incandescent 6" round black baffle downlight. Die-cast aluminum housing with white polycarbonate trim. Clear specular alzak reflector.

### Energy Conservation Measure #2

This ECM has been omitted from the Scope of Work.

### Energy Conservation Measure #3

This energy conservation measure includes the renewal of the supply air and exhaust air fan systems that serve the island hood located in the kitchen on the second floor of the Detention building. The existing fan systems are significantly oversized. The island hood currently operates in a constant air volume application. The existing supply air and exhaust air fans will be replaced with fans systems that are properly sized for the current use of the island hood. The complete system will be supplied by the existing island hood factory representative to insure compliance with NFPA 96.

The existing supply fan motor is 30 hp and the existing exhaust fan motor is 15 hp. The new supply fan will be a Greenheck TCB In Line Centrifugal Fan rated for 11,520 cfm with a 7.5 hp motor. The new exhaust fan will be a CaptiveAire BL\_CARM Utility Set rated for restaurant duty at 14,000 cfm with a 5 hp motor. The entire system will remain in full compliance with NFPA requirements post-retrofit. The hours of operation for the system are being reduced as the kitchen is not used at night and the system is not needed to condition the space. The existing system was significantly oversized (as several of the existing systems were). Appropriate calculations have been performed to allow for the proposed reduction in hp sizes to maintain proper system operation.

### Energy Conservation Measure #4

This energy conservation measure includes the replacement of the existing 415 ton central plant water chillers that are located in the main equipment room in the Detention building. The water chillers provide chilled water for the air handling units located in both the Courts/Office and Detention buildings.

The water chillers will be removed and replaced with water chillers rated for 375 tons each. The energy efficiency of the new water chillers will comply with the mandatory energy efficiency requirements included in ANSI/ASHRAE/IESNA Standard 90.1-2007 and the 2009 International Energy Conservation Code.

The F-11 refrigerant currently used by the existing water chillers will be legally recovered and shipped to a national refrigerant recycler. The existing water chillers will be salvaged to the fullest extent possible. A refrigerant monitor, exhaust fan, motorized damper, notification appliances and self contained breathing apparatus station will be installed to meet the requirements of ASHRAE Standard 15. The new water chillers will include BACnet protocol compliant controls for connectivity to the building automation system described in Energy Conservation Measure #15.

Either Trane or McQuay chillers will be provided.

The reduced chiller capacity is due to a reduction in cooling load from lighting retrofits and improved HVAC controls.

### Energy Conservation Measure #5

This ECM has been omitted from the scope of work.

### Energy Conservation Measure #6

This energy conservation measure includes the conversion of the existing chilled water distribution system from a constant volume primary/secondary (zoned) application to a variable volume primary application. The two existing primary pumps and four existing secondary pumps (parallel pumping) will be replaced with two primary pumps that will operate in a lead/standby arrangement. The speed of each primary pump motor will be controlled by a variable frequency drive.

The existing ceiling mounted chilled water compression tank will be replaced with a floor mounted expansion tank. A side-stream air separator will be installed to improve the air control of the chilled water system.

The existing pneumatically actuated globe style control valves that control the flow of chilled water for each chilled water coil will be replaced with electrically actuated pressure independent control valves. Two differential pressure transmitters will be installed to control the operation of the lead variable primary

pump. All of the existing chilled water valves will be replaced.

Square D E-Flex variable speed drives will be provided. Bell & Gossett 30 hp base mounted pump series Q1531 will be provided. The system will be balanced by a certified balancing contractor. Toshiba Premium Efficiency motors will be provided. The reduction in pump hp is permissible due to the existing system being oversized.

#### **Energy Conservation Measure #7**

This energy conservation measure includes the renewal of the existing cooling tower. The existing cooling tower intake louvers will be replaced to improve air delivery through the cooling tower. The existing two speed cooling tower fan motors will be replaced with premium efficiency, single speed motors. The existing two-speed starters will be replaced with variable frequency drives.

The existing condenser pumps will be replaced. The replacement pumps will include premium efficiency motors. The existing soft-start motor starters will be replaced with variable frequency drives. The existing cooling tower water chemistry controller will be replaced. The new water chemistry controller will be re-piped to permit proper sampling flow.

The system will be balanced by a certified balancing contractor. Square D E-Flex variable speed drives will be provided and Toshiba Premium Efficiency motors will be provided. The new motors will be the same hp as the existing motors. The new pumps will be Bell and Gossett base mounted series Q1531 25 hp pumps. Proper calculations have been performed to confirm a reduction in hp will permit proper operation of the system.

#### **Energy Conservation Measure #8**

This energy conservation measure includes the installation of four condensing type hot water boilers and one high efficiency steam boiler. The new boilers will replace the operation of the existing steam heating system. The condensing type hot water boilers will supply hot water for air handling unit hot water coils and terminal unit hot water coils (both heating and reheat). The steam boilers will supply low pressure steam for preheat and humidification.

Two of the three existing steam boilers that are located in the main equipment room of the Detention building will be removed and legally disposed of. The steam boilers will be salvaged to the fullest extent possible. The boiler to remain has been recently refurbished and will be used as a backup to the new steam boiler. Running the new boiler as the full time lead boiler is essential to achieving the projected energy savings. The existing boiler will remain off line and valved off at all times unless the new boiler goes off line. At that point the new boiler will be manually started up. Automatic startup from the controls system is not included. The existing natural gas supply piping will be modified to support the operation of the new hot water and steam boilers. Stainless steel flue duct work will be installed for the hot water boilers as required for sidewall venting. The combustion air for the condensing boilers will be installed in PVC piping. Each boiler will be equipped with a motorized isolation control valve. The new steam boilers will be equipped with Honeywell ControlLinks Fuel Air Ratio controls to improve combustion efficiency across all firing ranges.

A new boiler feed unit will be installed for the steam boilers including new boiler feed piping. A stack control system that will include an in-line fan, variable frequency drive and pressure transmitter will be installed for the steam boilers. Stainless steel flue duct work will be installed between the steam boilers and the existing 42" stack. Each steam boiler will be equipped with a balance damper located in the outlet of the boiler.

A fully redundant hot water boiler and fully redundant steam boiler will be installed. The hot water boilers will be Aerco model BMK-2.0LN 2,000,000 btu/hr. The boiler feed system will be Blackmore and Glunt model CMED or comparable ¾ hp with 150 gallon storage tank. The boiler flue system will be Tjernlund System. The steam boilers will be Hurst 100 hp series 45 Firebox boilers with Webster JB2-G-50 burners.

Trace 700 load calculations have been performed to verify a reduction in boiler capacity from existing will allow proper operation of the facility.

The operation of the four hot water boilers and one new steam boiler will be controlled by the building

automation system described in energy Conservation Measure #15. Remaining existing steam traps will be tested. If not operating properly, the traps will be replaced.

#### **Energy Conservation Measure #9**

This energy conservation measure includes the installation of three domestic water heaters to replace the operation of the two existing steam water heaters.

A new high efficiency gas-fired water heater will be installed in the laundry room that is located on the second floor of the Detention building. The existing natural gas piping located in the laundry room will be used to supply the new water heater. The water heater will be sized to satisfy the hot water heating needs of the laundry independent of the ozone injection equipment. The water heater will feature a sealed combustion fan system. This heater will be a Bradford-White model EF-60T-125E-3N(A)..

A new high efficiency gas-fired water heater will be installed in room 20, the equipment room adjacent to the kitchen on the second floor of the Detention building. The existing natural gas piping located in the kitchen will be extended to the equipment room. The natural gas piping will be installed in a sealed envelope as it is routed in the ceiling cavity between the kitchen and equipment room. The hot water supply piping from the new water heater to the kitchen equipment will be modified to reduce the use of 140 degree water for equipment that does not require an elevated water temperature. Two ASSE approved thermostatic mixing valves will be installed to accomplish the separate supply of 105 degree and 140 degree water to the kitchen. The water heater will feature a sealed combustion fan system. The heater will be a Bradford-White model EF-100T-250E-3N(A).

Domestic Water Heater #1 will be installed in Room 002. This domestic water heater serves all domestic hot water heating needs for the Courts/Office and Detention buildings except for the laundry and kitchen. The domestic water heater will be manufactured by Cemline. The model number is V500SPH1375DW-1375DW.

#### **Energy Conservation Measure #10**

This energy conservation measure includes the conversion of the existing hot water distribution system from a constant volume primary/secondary (zoned) application to a variable volume primary application. The two existing primary pumps and the four existing secondary pumps (lead/standby pumping) will be replaced with two primary pumps that will operate in a lead/standby arrangement. The speed of each primary pump motor will be controlled by a variable frequency drive.

The existing ceiling mounted hot water compression tank will be replaced with a floor mounted expansion tank. The existing air separator will be reused to for air control of the hot water system.

The existing pneumatically actuated globe style control valves that control the flow of hot water for each hot water coil will be replaced with electrically actuated pressure independent control valves. Two differential pressure transmitters will be installed to control the operation of the lead variable primary pump. All of the existing hot water valves will be replaced.

The system will be balanced by a certified balancing contractor. Square D E-Flex variable speed drives will be provided. Bell & Gossett 30 hp base mounted pump series Q1531 will be provided. The system will be balanced by a certified balancing contractor. Toshiba Premium Efficiency motors will be provided. Proper calculations have been performed to ensure proper operation of the system despite a reduction in hp due to oversizing of the existing system.

#### **Energy Conservation Measure #11**

This energy conservation measure includes the replacement of the existing booster pumps that boost the pressure of the domestic cold water for the Courts/Office and Detention buildings. The existing booster pumps are significantly oversized.

Two pumps will be installed for each building's domestic cold water supply. The speed of each pump motor will be controlled by a variable frequency drive. The existing galvanized supply and return headers will be replaced. A bypass valve will be installed for the Courts/Office pressure booster pump. Pressure transducers will be installed in the domestic cold water supply header for each building. The existing

pressure reducing valves that are installed throughout the Courts/Office and Detention buildings will be opened up where possible.

The Detention Center pumps will be Bell and Gossett base mounted model Q1531 7.5 hp pumps. The Courts and Office Building pumps will be Bell and Gossett base mounted model Q1531 1.5 hp pumps. Square D E-Flex variable speed drives will be provided and Toshiba Premium Efficiency motors will be provided. Proper calculations have been performed to ensure proper operation of the system despite a reduction in hp due to oversizing of the existing system.

The new booster pumps will be connected to the building automation system described in Energy Conservation Measure #15.

#### **Energy Conservation Measure #12**

This energy conservation measure includes the implementation of certain water conservation measures for cost savings for both the Courts/Office and Detention buildings.

A sewer revenue meter will be installed in the Detention building for the cooling tower make-up water system. Two sewer revenue meters will be installed in the Courts/Office building for the lawn sprinkler systems. The water meters will be equipped with an automated meter reading feature.

New reduced flow aerators will be installed in the restroom lavatory faucets for both buildings. New reduced flow shower heads will be installed for the Detention building. Existing urinals will be replaced with low flow urinals. Selected water closets will be replaced with low flow water closets.

Refer to the savings calculations in Attachment G for specific quantities of each retrofit to be provided.

Toto CT708H toilets will be provided where toilets are being replaced. Sloan model WEUS 0.13 gpf urinals will be provided. Sloan Act-o-matic model AC-51-2.0 shower heads will be provided.

#### **Energy Conservation Measure #13**

This energy conservation measure includes upgrading the existing controls system that serves 342 variable air volume boxes that are located throughout the Courts/Office and Detention buildings. The existing controls are obsolete and mostly inoperative.

The existing pneumatic control devices serving the VAV boxes will be removed and legally disposed of. Control power and communication cabling will be extended to the existing variable air volume boxes. The existing air flow measurement devices will be cleaned and reused. The control valves installed for the variable air volume boxes that have reheat coils will be replaced with pressure independent electrically actuated valves.

An application specific direct digital controller will be installed for each variable air volume box. The direct digital controller will include an integral mass air flow sensor and actuator for air flow measurement and air volume control. A room thermostat with an integral LCD and setpoint adjustment will be installed for each variable air volume box. Each application specific direct digital controller will be networked to the building automation system described in Energy Conservation Measure #15.

Approved controls system manufacturers are Automated Logic. Specific control and sensing devices will be manufacturer's standard equipment. Leaks in the existing pneumatic system will be searched for and repaired during the course of the scope of work included herein. No searching specifically for pneumatic leaks will be performed however. The following equipment will remain on the pneumatic system:

1. Existing steam humidifiers
2. New line size isolation valves for the chillers and boilers.
3. The existing smoke dampers and smoke control system.

#### **Energy Conservation Measure #14**

This energy conservation measure includes the installation of a water softener that will be located in the

Detention building main equipment room. The water softener will supply soft water to the boiler feed unit that will serve the two new steam boilers. The boiler feed unit and steam boilers are described in Energy Conservation Measure #8.

The water softener will be located adjacent to the boiler feed unit. The softener will be a Marlo MGT series packaged system catalog number C349AG00N000. The capacity of the softener is 15 gpm continuous and 20 gpm peak.

#### **Energy Conservation Measure #15**

This energy conservation measure includes the replacement of the existing legacy control system that serves both the Courts/Office and Detention buildings. The equipment to be controlled is described below.

In addition to the replacement of the existing legacy control system the operation of the air handling units will be upgraded. All existing AHU supply fan and return fan motors will be replaced with Toshiba Premium Efficiency motors. The existing outlet dampers and inlet dampers used for air volume control will be locked in the open position. Variable frequency drives will be installed to control the volume of conditioned air delivered to the variable air volume boxes. The air handler supply and return fan motors will be replaced with motors of the same hp as existing motors. County staff has verified all existing air handlers currently run continuously.

Existing outlet dampers and inlet guide vanes will be abandoned in place and locked in the full open position. Each VAV box will be balanced for the design air flow. The approved manufacturer is Automated Logic. The system will be web based and a single front end work station will be provided.

Control Points to be installed:

Air Handlers:

1. Supply and return fan motor start/stop and status
2. Coil control valve adjust.
3. Outside/return/mixed air dampers adjust.
4. Supply and return fan speed adjust.
5. Remote duct pressure sensor
6. Discharge, return and mixed air temperature sensors. Multizone units shall have separate discharge sensors for the hot deck and cold deck.
7. Multizone units shall have zone discharge and zone damper adjust for all zones.
8. Two central outside air temperature sensors will be used for all HVAC equipment.
9. Variable speed drive generic alarm.
10. Face/bypass damper control (if applicable).
11. Humidifier control and return air humidity sensor.
12. Safeties and filter status is not included unless if a part of the existing DDC legacy system.

Pumps:

1. Motor start/stop and status.
2. Motor speed adjust.
3. Variable speed drive generic alarm.
4. Remote pressure sensor (two for HW system, two for CW system, two for domestic water system).

Heating Hot Water System:

1. Boiler enable/disable and status.
2. Boiler inlet/outlet temperature.
3. One system supply temperature.
4. Two return temperature sensors (one for each building).
5. Boiler isolation valves.
6. Two flow meters.
7. Bypass valve position and control.
8. Boiler generic alarm.

Domestic Hot Water System (for each of three separate systems):

1. Hot water supply and return temperature.
2. Circulation pump start/stop and status (if applicable).

Steam Heating System:

1. Boiler enable/disable and status.
2. Boiler pressure.
3. Stack draft pressure.
9. System supply pressure.
10. Boiler isolation valves.

Chilled Water System:

1. System supply temperature
2. Two return temperatures, one for each building.
3. Chiller inlet/outlet temperature.
4. Chiller enable/disable and status.
5. Chiller generic alarm.
6. Chilled water bypass pump start/stop, status speed adjust and vfd generic alarm.

Cooling Tower and Condenser Pumps

1. Tower supply, return and basin temperature.
2. Chiller inlet and outlet temperature.
3. Tower fan start/stop, status speed adjust and vfd generic alarm.
4. Condenser pump start/stop, status speed adjust and vfd generic alarm.

Kitchen Hood:

1. Supply and return fan start/stop and status.
2. Coil control and discharge temperature.

Exhaust Fans:

1. For exhaust fans that must run 24/7: fan status.
2. For exhaust fans that can be shut off during unoccupied hours: fan start/stop and status.

VAV Terminal Units

1. Space temperature.
2. Zone damper adjust.
3. Zone reheat valve adjust (if applicable).
4. Discharge air temperature.
5. Zone setpoint adjust.
6. Airflow.
7. For fan powered units: zone override and fan start/stop and status.

Finned Tube Radiation

1. Space temperature.
2. Valve adjust

Unit Heaters

1. Space temperature
2. Fan start/stop.

Elevator equipment room cooling only fan coils and exhaust fans

1. Space Temperature
2. Valve adjust.
3. Exhaust fan start/stop.

**ATTACHMENT C**  
**GUARANTEE OF SAVINGS**

**PERFORMANCE GUARANTEE**

The "Annual Guaranteed Savings Amount" is: six hundred thirty-eight thousand nine hundred twenty eight and 00/100 Dollars (\$634522.00).

Deleted: 638,928

The Annual Guaranteed Savings Amount is made up of three (3) savings components:

1. Energy Savings
2. Repair & Maintenance Savings; and
3. Long Term Operating Cost Savings

Ameresco, guarantees the total Annual Guaranteed Savings Amount, but does not guarantee the savings amount achieved by each individual savings measure.

**TERMS OF GUARANTEE**

Subject to the terms and conditions set forth in this Agreement, Ameresco guarantees that the performance of the ECM(s) shall result in the Annual Guaranteed Savings Amount set forth above for each Guarantee Year during the Guarantee Period. The first Guarantee Year shall begin with the first day of the month after the month in which the Customer signs a final Delivery and Acceptance Certificate. Each Guarantee Year shall be twelve (12) months. The Guarantee Period shall be ten (10) years unless terminated earlier as provided in the Agreement.

**REVIEW OF GUARANTEED SAVINGS CALCULATIONS**

CUSTOMER has reviewed the Annual Guaranteed Savings Amount calculations and methodologies in Appendix G and finds that the calculations and assumptions used for calculation of the Annual Guaranteed Savings Amount should result in achievement of the Annual Guaranteed Savings Amount.

**SAVINGS AUDIT PROCEDURE**

A measurement and verification plan is set forth in Attachment D and a Delivery and Acceptance Certificate is set forth in Attachment D. The total savings achieved by the combined individual savings measures, including any "Stipulated Savings" as such term is defined in Attachment D, shall be deemed the total "Actual Savings". The Annual Guaranteed Savings Amount shall be deemed achieved when the Delivery and Acceptance Certificate is executed by CUSTOMER.

**RECONCILIATION**

Measurements shall be completed as described in Attachment D, the Delivery and Acceptance Certificate, upon completion of installation of the ECM(s). If the Annual Guaranteed Savings Amount is not achieved at the end of the first guarantee year, Ameresco shall pay CUSTOMER the amount by which the Annual Guaranteed Savings Amount exceeds the Actual Savings and may, at Ameresco's sole expense and discretion, including the cost of any required energy auditing, elect one of the following alternatives:

- (a) Install additional ECM(s), or modifications that are mutually agreed to by CUSTOMER in order to achieve the Annual Guaranteed Savings Amount, or
- (b) Pay CUSTOMER the amount by which the Annual Guaranteed Savings Amount exceeds the Actual Savings at the end of each Guarantee Year.

Stipulated Savings shall not be measured or audited. These savings have been negotiated and agreed upon by Ameresco and CUSTOMER and are stipulated as set forth in Attachment D, Delivery and Acceptance Certificate. Ameresco and CUSTOMER agree that the Stipulated Savings are deemed satisfied for the Term of this Agreement, upon installation of the ECM(s).



**ATTACHMENT D**

**DELIVERY AND ACCEPTANCE CERTIFICATE**

This Attachment summarizes the results of the Measurement and Verification process for Projects implemented by Ameresco for CUSTOMER. The Annual Guaranteed Savings Amount is:

Annual Energy Savings	\$297,562	----- Deleted: 301,968
Repair & Maintenance Savings	\$57,283	
Long Term Operating Cost Savings	\$279,677	
Annual Guaranteed Savings Amount	\$634,522	----- Deleted: 638
		----- Deleted: 928

**ENERGY SAVINGS**

The method of verification of savings varies for each energy savings measure implemented. Table 1 below summarizes the baseline utility rates. Table 2 summarizes the verification procedure for each type of energy savings measure. CUSTOMER acknowledges that the utility rates set forth in Table 1 are correct and shall be used throughout the Term of the Guarantee Period in determining savings.

**Table 1  
Utility Rates**

Facility	Electric Rate Blended cost per Kw.	Natural Gas Rate Cost per Therm	\$/Kgal Sewer	\$/Kgal Water
Sangamon County Complex	\$0.107812	\$1.100	\$2.52	\$3.23

**Table 2  
Verification Procedure**

ECM	Verification Method
1 Facility wide lighting upgrade	Verification based on IPMVP Option A is recommended for this ECM. Pre and post measurement of wattages, on either single fixtures or a circuit of fixtures, shall be performed. Measurements shall be taken one time before and one time after installation for unique retrofit types which have a total population of 100 or more. For retrofits with less than this population the wattages will be stipulated as set forth in Attachment B. Values for wattages, once determined as set forth above, shall be used for calculating savings throughout the Guarantee Period. Operating hours shall be stipulated as set forth in Attachment B and the savings calculation spreadsheets of Attachment B are used to determine actual savings. Savings for retrofits already performed by the Owner are stipulated.
3. Kitchen exhaust hood motor reduction	Verification based on IPMVP Option A is recommended for this ECM. Motor wattage pre and post will be measured one time before and one time after installation. Values for wattages, once determined as set forth above,

ECM	Verification Method
	shall be used for calculating savings throughout the Guarantee Period. Operating hours shall be stipulated as set forth in Attachment G. The calculation method outlined in Attachment G shall be used to determine actual savings.
4. New Water Chillers	Verification based on IPMVP Option A is recommended for this ECM. Both parties agree the savings calculations are reasonable. The existing chiller efficiency and operating hours shall be stipulated as set forth in Attachment G. The new chiller efficiency shall be measured one time after installation and shall be used for calculating savings throughout the Guarantee Period. The savings calculation shown in Attachment G shall be used to determine actual savings.
6. Variable primary chilled water system	Verification based on IPMVP Option A is recommended for this ECM. The energy management system shall be used to trend log the % speed of the variable frequency drives during a representative period of the first Guarantee Year and this value shall be used for calculating savings throughout the Guarantee Period. It is agreed that upon verification that the average speed has been reduced to 80% of full load during the trend period, the savings shall be deemed achieved for the duration of the Guarantee Period. Should EMS data be unavailable, savings shall be stipulated as set forth in Attachment G.
7. Cooling tower upgrades	Verification based on IPMVP Option D savings are recommended for this ECM. Both parties agree the calculated savings are reasonable. During the first two (2) Guarantee years annual spot-checks shall be performed to verify that the installed equipment is performing satisfactorily. It is agreed that upon completion of the spot-checks, the savings shall be deemed achieved for the duration of the Guarantee Period.
8. Replace existing steam boilers	Verification based on IPMVP Option D savings are recommended for this ECM. Both parties agree the calculated savings are reasonable. During the first two (2) Guarantee years annual spot-checks shall be performed to verify that the installed equipment is performing satisfactorily. It is agreed that upon completion of the spot-checks the savings shall be deemed achieved for the duration of the Guarantee Period.

ECM	Verification Method
9. Replace domestic water heaters	Verification based on IPMVP Option D savings are recommended for this ECM. Both parties agree the calculated savings are reasonable. During the first two (2) Guarantee years annual spot-checks shall be performed to verify that the installed equipment is performing satisfactorily. It is agreed that upon completion of the spot-checks, the savings shall be deemed achieved for the duration of the Guarantee Period.
10. Variable primary hot water pumping	Verification based on IPMVP Option D savings are recommended for this ECM. Both parties agree the calculated savings are reasonable. During the first two (2) Guarantee years annual spot-checks shall be performed to verify that the boilers are being regularly tuned up and maintained. It is agreed that upon completion of the spot-checks, the savings shall be deemed achieved for the duration of the Guarantee Period.
11. New domestic water booster pumps	Verification based on IPMVP Option A savings are recommended for this ECM. The energy management system shall be used to trend log the % speed of the variable frequency drives during a representative period of the first Guarantee Year and this value shall be used for calculating savings throughout the Guarantee Period. It is agreed that upon verification that the average speed has been reduced to 80% of full load during the trend period, the savings shall be deemed achieved for the duration of the Guarantee Period. Should EMS data be unavailable, savings shall be stipulated as set forth in Attachment G.
12. Water conservation measures	Verification based on IPMVP Option D savings are recommended for this ECM. Both parties agree the calculated savings are reasonable. During the first two (2) Guarantee years annual spot-checks shall be performed to verify that the installed equipment is operating properly. It is agreed that upon completion of the spot-checks, the savings shall be deemed achieved for the duration of the Guarantee Period.

ECM	Verification Method
15. Upgrade energy management system	Verification based on IPMVP Option D savings are recommended for this ECM. Both parties agree the calculated savings are reasonable. During the first two (2) Guarantee years annual spot-checks shall be performed to verify that the controls system is properly shutting off equipment in the unoccupied mode. It is agreed that upon completion of the spot-checks, the savings shall be deemed achieved for the duration of the Guarantee Period.

Annual measurement and verification reports for the plan described above are included in the scope of work for this contract for the first two years of the term only. Should the Owner wish to continue receiving annual reports for years 3 through 10, the annual M&V fee shall be \$10,000 for year 3, escalated at 3% per year for subsequent years.

Stipulated Energy Savings

The Annual Energy Savings identified in the table below are Stipulated Savings documented by the calculations and methodologies described in Appendix G. CUSTOMER agrees that the Stipulated Savings are deemed satisfied upon installation of the related ECMs and the Stipulated Savings shall not be measured or audited.

Description	Stipulated Savings
ECM 7 – Various cooling tower upgrades	\$ 6,301
ECM 8 – Replacement of existing steam boilers to condensing boiler system	\$ 31,482
ECM 9 – Replace domestic water heaters	\$ 5,211
ECM 10 – Variable primary hot water heating system	\$ 9,255
ECM 12 – Water conservation measures	\$ 4,807
ECM 15 – Upgrade AHU controls, various motors, VFDs	\$ 73,472
Total Stipulated Annual Energy Savings	\$ 130,528

Calculation of Annual Energy Savings Deviation

Item D-1

(D-1) Total Guaranteed Energy Savings \$ 297,562

Deleted: 301,968

Item D-2

(D-2) Total Measured Energy Savings \$ \_\_\_\_\_

Item D-3

(D-3) Total Stipulated Energy Savings \$ 130,528

Item D-4 (D-4 = D-2 plus D-3)

(D-4) Total Actual Energy Savings \$ \_\_\_\_\_

Item D-5 (D-5 = D-4 minus D-1)

(D-5) Savings Deviation \$ \_\_\_\_\_

If the Savings Deviation (Item D-5) is greater than or equal to zero, the Annual Guaranteed Savings Amount shall be deemed satisfied for the Term of the Agreement. If the Savings Deviation (Item D-5) is negative it shall be deemed the annual shortfall. The annual shortfall for the first year shall be considered the annual shortfall for the following years until completion of the Scope of Services. Ameresco shall pay CUSTOMER the Savings Deviation (Item D-5 in Exhibit D) amount each year until the guarantee period is complete, or at Ameresco's discretion, shall install additional ECM(s), or make other changes agreed to by CUSTOMER, at Ameresco's cost, in order to achieve the Annual Guaranteed Savings as set forth in the Agreement.

Date completed \_\_\_\_\_

## Repair & Maintenance Savings

The Annual Repair & Maintenance Savings identified in the table below are Stipulated Savings documented by the calculations and methodologies described in Attachment G. CUSTOMER agrees that the Stipulated Savings are deemed satisfied upon installation of the related ECMs and the Stipulated Savings shall not be measured or audited.

Description	Stipulated Savings
ECM 1 – Facility wide lighting upgrade	\$ 12,620
ECM 3 – Kitchen exhaust fan control system	\$ 781
ECM 4 – Two (2) new water chillers, monitoring and exhaust system	\$ 7,348
ECM 6 – Variable primary chilled water system	\$ 2,886
ECM 7 – Various cooling tower upgrades	\$ 1,288
ECM 8 – Replacement of existing steam boilers to condensing boiler system	\$ 8,393
ECM 9 – Two (2) domestic water heaters	\$ 2,697
ECM 10 – Variable primary hot water heating system	\$ 1,928
ECM 11 – New booster pumps, galvanized pipe replacement	\$ 752
ECM 12 – Water conservation measures	\$ 309
ECM 13 – Upgrade 342 VAV boxes with DDC, 222 control valves	\$ 9,343
ECM 14 – Water softening equipment	\$ 102
ECM 15 – Upgrade AHU controls, various motors, VFDs	\$ 8,836
<b>Total Stipulated Annual Repair and Maintenance Savings</b>	<b>\$ 57,283</b>

## Long Term Operating Cost Savings

The Annual Long Term Operating Cost Savings identified in the table below are Stipulated Savings. CUSTOMER agrees that the Stipulated Savings are deemed satisfied upon installation of the related ECMs and the Stipulated Savings shall not be measured or audited.

Description	Stipulated Savings
ECM 1 – Facility wide lighting upgrade	\$ 61,613
ECM 3 – Kitchen exhaust fan control system	\$ 3,813
ECM 4 – Two (2) new water chillers, monitoring and exhaust system	\$ 35,875
ECM 6 – Variable primary chilled water system	\$ 14,091
ECM 7 – Various cooling tower upgrades	\$ 6,290
ECM 8 – Replacement of existing steam boilers to condensing boiler system	\$ 40,979
ECM 9 – Two (2) domestic water heaters	\$ 13,167
ECM 10 – Variable primary hot water heating system	\$ 9,415
ECM 11 – New booster pumps, galvanized pipe replacement	\$ 3,670
ECM 12 – Water conservation measures	\$ 1,507
ECM 13 – Upgrade 342 VAV boxes with DDC, 222 control valves	\$ 45,616
ECM 14 – Water softening equipment	\$ 498
ECM 15 – Upgrade AHU controls, various motors, VFDs	\$ 43,143
<b>Total Stipulated Annual Long Term Operating Cost Savings</b>	<b>\$ 279,677</b>

**PROJECT COMPLETION LOG**

**Table AC-1**

Sub-project Tasks	Completion Date
ECM 1 – Facility wide lighting upgrade	
ECM 3 – Kitchen exhaust fan control system	
ECM 4 – Two (2) new water chillers, monitoring and exhaust system	
ECM 6 – Variable primary chilled water system	
ECM 7 – Various cooling tower upgrades	
ECM 8 – Replacement of existing steam boilers to condensing boiler system	
ECM 9 – Two (2) domestic water heaters	
ECM 10 – Variable primary hot water heating system	
ECM 11 – New booster pumps, galvanized pipe replacement	
ECM 12 – Water conservation measures	
ECM 13 – Upgrade 342 VAV boxes with DDC, 222 control valves	
ECM 14 – Water softening equipment	
ECM 15 – Upgrade AHU controls, various motors, VFDs	

Notes (special instructions etc.):

**Items furnished to CUSTOMER upon accepting this Delivery and Acceptance Certificate:**

- Receipt of owner's manuals; \_\_\_\_\_ sets.
- Receipt of instruction and training; \_\_\_\_\_
- Completion of inspection and walk-through.
- Receipt of warranty information.

The aforementioned Project is hereby completed to the standards set forth in the Agreement denoted above and to the satisfaction of CUSTOMER.

CUSTOMER	By:	Title:	Date:
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*Item D-6*

CUSTOMER accepts the pre- and post-construction savings measurements as set forth in the Delivery and Acceptance Certificate and agrees that all Guaranteed Savings have been satisfied and that the Work identified in Table AC-1 is complete.  
 CUSTOMER assumes possession thereof on \_\_\_\_\_.

CUSTOMER	By:	Title:	Date:
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**ATTACHMENT D (1)**

***PERCENT COMPLETE ACKNOWLEDGEMENT CERTIFICATE***

Customer hereby acknowledges receipt of a portion of the Energy Conservation Measure (the "ECM") described in Attachment B to the Energy Services Agreement (the "Agreement") as amended within the Notice to Proceed between Customer and Ameresco as \_\_\_\_\_ percent complete substantiated by sufficient detail provided by Ameresco. Customer agrees to make payment to Ameresco as set forth in Section 4 of the Agreement.

Date Accepted by Customer: \_\_\_\_\_

Accepted for: **CUSTOMER**

Accepted by:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**ACKNOWLEDGMENT OF AMERESCO**

Ameresco hereby acknowledges that the total amount due based upon percent complete for the ECM's described in Attachment B, and the Notice to Proceed, hereto is \$ \_\_\_\_\_.

Date Accepted by Ameresco:

Accepted for: **AMERESCO, INC.**

Accepted by:

Name: \_\_\_\_\_

Title: \_\_\_\_\_



**ATTACHMENT E**  
**NOTICE TO PROCEED**

May 11<sup>th</sup>, 2010

Executive Vice President and General Manager  
Ameresco, Inc.  
1900 Spring Road, Suite 400  
Oak Brook IL 60523

**SUBJECT: NOTICE TO PROCEED**

To Whom It May Concern:

In accordance with the terms of our Energy Services Agreement dated June 8<sup>th</sup>, 2010, CUSTOMER hereby issues this Notice to Proceed to Ameresco in relation to the Scope of Services set forth in such Agreement.

Sincerely,

CUSTOMER

\_\_\_\_\_  
(Name)  
Title

**ATTACHMENT F**

**CHANGE ORDER**

(Agreement for change in Scope of Services and/or Agreement)

Change Request No.

CUSTOMER: Sangamon County

Department:

Project No.

Contract No.

Site:

Title:

**I. REQUEST**

Date:

(a) Requested by \_\_\_\_\_ Of \_\_\_\_\_

(b) Description of change \_\_\_\_\_

**II. AMERESCO's AGREEMENT**

For all costs involved in this change including extensions of time herein requested, Ameresco proposes to perform the work described in accordance with the provisions of the Agreement for the price as follows.

Payment shall be made on the basis of:

- (a) Predetermined lump sum total of (add) (deduct) \$
- (b) Lump sum "not-to-exceed" (add) (deduct) \$  
(Max. price based on contract or negotiated unit prices)

NOTE: ONLY IF RATE TABLE INCLUDED: ( ) (c) Time & Material Basis \$  
"not-to-exceed" (add) (deduct)  
(Computed in accordance with provisions of the Contract)

Place an "X" beside selected proposal method and strike out either (add) or (deduct) whichever does not apply. If necessary, attach detailed estimates and breakdown for above in accordance with change order instruction. A claim for work performed under protest may be submitted per (c) above.

An extension of contract time of \_\_\_\_\_ calendar days to \_\_\_\_\_ is requested.

**AMERESCO, INC.**

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**CUSTOMER APPROVAL:  
CUSTOMER**

\_\_\_\_\_

Contract Award	\$
Previous Additions	\$
Previous Deductions	\$
Net Total	\$
This Change	\$
Total	\$

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

## ATTACHMENT G

### METHODOLOGY OF CALCULATING SAVINGS

The methodology used for projecting savings resulting from the implementation of the project is summarized in the following equation:

Total Annual Savings = Annual Energy Savings + Annual Operational & Maintenance Savings + Long term Operational Savings

Where:

Total Annual Savings = The total annual savings associated with implementation of the project.

Annual Energy Savings = The total annual savings associated with reduction in energy and utility consumption as a result of implementation of the project.

Annual Maintenance & Repair Savings = The total annual savings associated with reduction in operations, maintenance and repair related expenses, including the reduction in deferred maintenance liability, as a result of implementation of the project.

Long Term Operational Savings = The total annual savings resulting from capital replacement expenditures that are being offset by the County as a result of implementation of the project.

#### Annual Energy Savings

The general approach to determining energy savings involves comparing the energy use associated with a facility, or certain energy consuming equipment or systems within a facility, before installation of the Energy Conservation Measure ("ECM") (baseline) and after installation of the ECM (post-installation).

$$\text{Energy Savings} = (\text{Baseline Energy Use}) - (\text{Post Installation Energy Use})$$

The baseline energy use is determined from a rigorously derived end-use analysis and historical energy consumption data. Specific techniques range from stipulating all factors affecting ECM performance to installing extensive, highly accurate metering systems. When deciding the appropriate level of sophistication for a particular plan, factors such as complexity of the measure, expected magnitude of savings from the measure, and the customer's aversion to risk all weigh upon the decision.

The Annual Energy Savings are calculated using standard computerized procedures which compare the performance of the CUSTOMER's equipment, building systems, and facilities, as appropriate, before and after implementation of the project ECMs. Table G1, Savings Summary, below summarizes the savings projected from implementation of the ECMs. In some cases, the energy savings shown for a given ECM in the table may be less than the value predicted by the models.

**Table G1: Savings Summary:**

TABLE G1 ENERGY SAVINGS SUMMARY

Energy Conservation Measure	Electrical Savings (kWh)	Natural Gas Savings (Therms)	Water Savings (Gallons)	Sewer Savings (Gallons)
1	1,086,379			
2				
3	178,287	6,029		
4	141,016			
5				
6	57,502			
7	58,445			
8		28,620		
9		4,737		
10	85,846			
11	75,065			
12			1,214,660	350,560
13	included in ECM 15			
14	no energy savings			
15	533,155	14,496		
<b>Total</b>	<b>2,215,695</b>	<b>53,882</b>	<b>1,214,660</b>	<b>350,560</b>

**SAVINGS CALCULATIONS**

For savings calculation for ECM 1 Lighting Conservation Measures refer to the Tables 1 and 2 in Attachment B. For all other ECMs, the savings calculations are included below:

<b>ECM 3 ENERGY SAVINGS CALCULATIONS</b>				
<i>Equipment</i>	<i>Volume Control</i>	<i>Motor Horsepower/Voltage</i>	<i>Annual kWh Consumption</i>	<i>Hours of Operation/Year</i>
Existing EF-54	Constant Volume	30	159,976	8,760
Existing SF-1	Constant Volume	15	73,418	8,760
New EF-54	Variable Air Volume	10	37,772	6,205
New SF-1	Variable Air Volume	5	17,335	6,205
Total Savings				
	<i>1<sup>st</sup> Year Energy Savings (kWh)</i>	178,287		
All operating hours are based on Owner input for existing and new conditions.				
<i>Motor Electrical Energy Consumption Calculation</i>			Fan Hp * .746 kw/hp * Avg Load% * Hrs/Fan Efficiency%	

ECM 4 ENERGY SAVINGS CALCULATIONS					
ASHRAE 90.1-2008 Supplement		Enter the orange fields. Grey and blue fields are calculated.			
Centrifugal Chiller Efficiency Target Calculation					
Item	Value	Units	Comment		
Full Load Capacity	375	Tons	Rating full load capacity		
Compliance Path	A or B		Select ed compliance path		
Full Load Efficiency	0.576	kw/ton	From table 6.8.1c		
Part Load Efficiency	0.549	kw/ton	From table 6.8.1c		
Evaporator LWT	34.00	F	CLWT (Minimum of 38 F)		
Condenser EWT	85.00	F	CEWT (Maximum of 102 F)		
Condenser Flow	2.60	gpm/ton	Flow (1 to 6 gpm/ton)		
Lift	41.00	F	CEWT-CLWT		
DTstd	9.978	F	(24* full load efficiency * 6.83)/Flow		
X	950.978	F	DTstd + Lift (39<X<=60)		
X Check	TRUE				
X Check	OK		insure that input values do not result in an X <=39 or >=102		
Kadj	0.948		(5.174722-0.303868(X)+0.00629466(X) <sup>2</sup> -0.000045780(X) <sup>3</sup> )		
Adjusted Full Load Efficiency	0.583	kw/ton	full load efficiency/Kadj		
Adjusted Part Load Efficiency	0.558	kw/ton	part load efficiency/Kadj		
<b>Equipment</b>	<b>Water Chiller Part Load Efficiency</b>	<b>Water Chiller Full Load Efficiency</b>	<b>Annual Hours of Operation at Full Load</b>	<b>Annual Hours of Operation at Part Load</b>	<b>Annual Consumption In kWh</b>
Existing Chiller 1 @ 415 Ton	.608 kW/Ton	.608 kW/Ton	756	4,284	515,035 kWh
Existing Chiller 2 @ 415 Ton	.608 kW/Ton	.608 kW/Ton	0	2,160	163,503 kWh
New Chiller 1 @ 375 Ton	.556 kW/Ton	.608 kW/Ton	756	4,284	458,709 kWh
New Chiller 2 @ 375 Ton	.556 kW/Ton	.608 kW/Ton	0	1,260	78,813 kWh
<b>1<sup>st</sup> Year Electrical Energy Savings (kWh)</b>	<b>141,016</b>				

ECM 6 ENERGY SAVINGS CALCULATIONS					
Equipment	Volume Control	Motor Horsepower/Voltage	Annual kWh Consumption	Hours of Operation/Year	Notes
P-1 (Secondary Pump)	Constant Volume	15	27,878	5,040	Courts/Office Building Secondary Pump
P-2 (Secondary Pump)	Constant Volume	15	27,878	5,040	Courts/Office Building Secondary Pump
P-3 (Secondary Pump)	Constant Volume	10	16,562	5,040	Detention Building Secondary Pump
P-4 (Secondary Pump)	Constant Volume	10	16,562	5,040	Detention Building Secondary Pump
P-5 (Primary Pump)	Constant Volume	15	27,652	5,040	Chiller #1 Primary Pump
P-6 (Primary Pump)	Constant Volume	15	15,930	2,880	Chiller #2 Primary Pump
New P-3 (Vari-prime)	Variable Volume	30	37,480	5,040	Lead/Standby Arrangement
New P-4 (Vari-prime)	Variable Volume	30	37,480	5,040	Lead/Standby Arrangement
<b>1<sup>st</sup> Year Energy Savings (kWh)</b>	<b>57,502</b>				

Note: All pump consumption (kWh) calculated using Bell & Gossett's ESP Plus Program; all operating hours are based on Owner input (existing conditions) and Ameresco projections (new conditions).

ECM 7 ENERGY SAVINGS CALCULATIONS							
Equipment	Volume Control	Motor Horsepower/Voltage	Annual kWh Consumption	Existing Efficiency	New Efficiency	Hours of Operation/Year	Notes
P-1 Existing Condenser Pump	Constant Volume	40	104,759			5,040	Serves Chiller #1
P-2 Existing Condenser Pump	Constant Volume	40	59,862			2,880	Serves Chiller #2
P-1 New Condenser Pump	Constant Volume	25	77,921			5,040	Serves Chiller #1
P-2 New Condenser Pump	Constant Volume	25	33,396			2,880	Serves Chiller #2
<b>Equipment</b>	<b>Volume Control</b>	<b>Motor Horsepower/Voltage</b>	<b>Existing Efficiency</b>	<b>New Efficiency</b>	<b>Hours of Operation/Year</b>		
CTF-1 (New Tower Fan)	Two Speed to VFD	20	0.885	0.930	5,040		Installation of single speed, premium efficiency motor and VFD
CTF-2 (New Tower Fan)	Two Speed to VFD	20	0.885	0.930	1,260		Installation of single speed, premium efficiency motor and VFD
<b>1<sup>st</sup> Year Energy Savings (kWh)</b>	<b>58,445</b>						

Note: All pump consumption (kWh) calculated using Bell & Gossett's ESP Plus Program; all operating hours are based on Owner input (existing conditions) and Ameresco projections (new conditions).

ECM 8 ENERGY SAVINGS CALCULATIONS			
Equipment	Annual Calculated Hot Water	Annual Calculated Steam	Annual Natural Gas Requirement
	Heating Demand in Therms	Demand in Therms	at 75% Thermal Efficiency (Therms)
Condensing Boilers (New)	86,407		115,209
Steam Boilers (New)		60,045	80,060
	Annual Natural Gas Requirement	Annual Natural Gas Requirement	
	at 90% Thermal Efficiency (Therms)	at 85% Thermal Efficiency (Therms)	
Condensing Boilers (New)	96,008		
Steam Boilers (New)		70,641	
1 <sup>st</sup> Year Energy Savings (Therms)	28,620		
Note 1: Existing steam boiler estimated thermal efficiency is 75%. Note 2: New steam boiler thermal efficiency is 85%. Note 3: New condensing boiler average thermal efficiency is 90%. Note 4: Baseline annual natural gas consumption is 250,570 therms. Note 5: Calculated annual natural gas consumption for food preparation is 18,250 therms; natural gas is used for gas griddle, convection ovens (east & west), gas fryers, combination range/oven and steam boiler. Note 6: Calculated annual natural gas consumption for laundry use (clothes washing (11,408 therms) and clothes drying (7,409 therms)) is 13,317 therms; this calculation is based on processing 109,500 pounds of laundry annually. Note 7: Calculated annual natural gas consumption for kitchen water heating is 5,560 therms; this is based on annually heating 467,200 gallons of water 110 degrees. Note 8: Calculated annual natural gas consumption for domestic water heating is 22,244 therms (see calculation in ECM #9).			

ECM 9 ENERGY SAVINGS CALCULATIONS			
Equipment	Gallons of Water Per Year	Gallons of Water Per Year	BTU Requirement Per Year
	Heated 110 Degrees	Heated 60 Degrees	To Heat Water (In Therms)
Laundry Water Heater (New)	34,821		319
Kitchen Water Heater (New)	186,880	280,320	3,113
Domestic Water Heater (New)		3,504,000	17,513
	Natural Gas Requirement	Natural Gas Requirement	Natural Gas Requirement
	at 75% Thermal Efficiency (Note 1)	at 92% Thermal Efficiency (Note 2)	at 90% Thermal Efficiency (Note 3)
Laundry Water Heater (New)	425	347	
Kitchen Water Heater (New)	4,151	3,384	
Domestic Water Heater	23,351		19,459
1 <sup>st</sup> Year Energy Savings (Therms)	4,737		
Note 1: Estimated thermal efficiency of existing steam boilers. Note 2: New gas water heater rated thermal efficiency. Note 3: New condensing hot water boiler average thermal efficiency. Note 4: Annual laundry water heating demand based on calculations provided by RJ Kool Company for ozone injected laundry operation (34,821 gallons per year). Note 5: Annual kitchen water heating demand is based on use information provided by the Owner (new water heater 3 hour average delivery is 646 gallon per hour); hot water is provided for dish machine, three compartment sink, pre-scraper, vegetable/prep sink, hand washing sink, lavatory sink, mop sink and hose bib; kitchen is opened 17 hours daily; calculated hot water heating demand is 12% of connected demand; savings calculation reflects the installation of new thermostatic water controllers that will permit both 110 degree and 160 degree hot water to kitchen equipment (currently only 160 degree hot water supply is provided). Note 6: Annual domestic water heating demand is based on estimated use information provided by the Owner; connected maximum hot water demand (after water conservation measures are implemented) is 80 gallons per minute (42,048,000 gallons per year); the gallons per year used in the calculation represents than 1% of connected capacity at maximum demand.			

ECM 10 ENERGY SAVINGS CALCULATIONS					
Equipment	Volume Control	Motor	Annual kWh	Hours of	Notes
		Horsepower/Voltag	Consumption	Operation/Year	
P-3 (Secondary Pump)	Constant Volume	25	50,580	4,380	Courts/Office Building Secondary Pump
P-4 (Secondary Pump)	Constant Volume	25	50,580	4,380	Courts/Office Building Secondary Pump
P-7 (Secondary Pump)	Constant Volume	15	25,856	4,380	Detention Building Secondary Pump
P-8 (Secondary Pump)	Constant Volume	15	25,856	4,380	Detention Building Secondary Pump
P-9 (Primary Pump)	Constant Volume	15	34,771	4,380	Heat Exchanger #1 Primary Pump
P-10 (Primary Pump)	Constant Volume	15	34,771	4,380	Heat Exchanger #2 Primary Pump
New P-5 (Vari-prime)	Variable Volume	30	68,284	4,380	Lead/Standby Arrangement
New P-6 (Vari-prime)	Variable Volume	30	68,284	4,380	Lead/Standby Arrangement
1'st Year Energy Savings	85,846				

Note: All pump consumption (kWh) calculated using Bell & Gossett's ESP Plus Program; all operating hours are based on Owner Input (existing conditions) and Ameresco projections (new conditions).

ECM 11 ENERGY SAVINGS CALCULATIONS					
Equipment	Volume Control	Motor	Annual kWh	Hours of	Notes
		Horsepower/Voltage	Consumption	Operation/Year	
Lead Booster Pump	Constant Volume	7.5	23,981	8,760	Courts/Office Building (3,500 RPM)
Lag Booster Pump	Constant Volume	15	0	0	Courts/Office Building (3,500 RPM)
Lead Booster Pump	Constant Volume	15	72,982	8,760	Detention Building (3,500 RPM)
Lag Booster Pump	Constant Volume	15	0	0	Detention Building (3,500 RPM)
Lead Booster Pump	Variable Volume	2	8,068	4,380	Courts/Office Building (1,800RPM)
Standby Booster Pump	Variable Volume	2	8,068	4,380	Courts/Office Building (1,800RPM)
Lead Booster Pump	Variable Volume	7.5	19,017	4,380	Detention Building (1,800 RPM)
Standby Booster Pump	Variable Volume	7.5	19,017	4,380	Detention Building (1,800 RPM)
1'st Year Energy Savings	75,065				

operating hours are based on Owner input (existing conditions) and Ameresco projections (new conditions).

ECM 12 ENERGY SAVINGS CALCULATIONS			
Equipment	Water Savings Per Year (Units = 1,000 Gallons)	Sewer Savings Per Year (Units = 1,000 Gallons)	Notes
Courts/Office Booster Pump	527	527	Existing booster pump will be replaced
Detention Building Cooling Tower		2,244	Installation of a sewer revenue meter
Courts/Office Building Irrigation System		47	Installation of two sewer revenue meters
Detention Building Shower Heads	688	688	30 shower heads; install 2.0 and 2.5 GPM shower heads
1'st Year Water Savings (Gallons)	1,214,600	3,505,600	

Note 1: Courts/Office building booster pump water savings is a field measured value extrapolated for an annual consumption rate (no water loss with new booster pump).

Note 2: Detention Building cooling tower consumption savings based on water utility bill analysis for summer cooling months (amount exceeds evaporation/automatic blowdown rate due to Owner's manual blowdown operation).

Note 3: Courts/Office Building Irrigation savings based on water utility bill analysis for summer months (amount represents 3 year average lawn irrigation use).

Note 4: Detention Building sewer water savings based on equipment manufacturer's (Sloan Company) flow rate data and Owner use data (see note in calculation cell for input data).

Note 5: Detention Building shower water savings based on equipment manufacturer's (Sloan Company) flow rate data and Owner use data (see note in calculation cell for input data); note water savings calculation based only on Security Shower Heads (listed as SSH-1 on plumbing schedule, 19 total).





ECM 15 ENERGY SAVINGS CALCULATIONS										
Air Handling Unit Number	Unit Type	Motor Horse Power	Control (kW)	Control Efficiency	New Motor Efficiency	Operating Hours	Annual Load (kWh)	Energy Savings (kWh)		
AHU 1	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 1	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 2	Supply	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 2	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 3	Supply	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 3	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 4	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 4	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 5	Supply	7.5	5.60	0.855	0.917	3120	0.4424	1,380		
AHU 5	Return	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 6	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 6	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 7	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 7	Return	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 8	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 8	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 9	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 9	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 10	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 10	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 11	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 11	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 12	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 12	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 13	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 13	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 14	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 14	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 15	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 15	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 16	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 16	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 17	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 17	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 18	Supply	7.5	5.60	0.855	0.917	3120	0.4424	1,380		
AHU 18	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 19	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 19	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 20	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 20	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 21	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 21	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 22	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 22	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 23	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 23	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 24	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 24	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 25	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 25	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 26	Supply	5	3.73	0.835	0.895	3120	0.2995	934		
AHU 26	Return	3	2.24	0.814	0.895	3120	0.2488	776		
AHU 27	Supply	10	7.48	0.857	0.917	3120	0.5096	1,577		
AHU 27	Return	7.5	5.60	0.855	0.917	3120	0.4424	1,380		
AHU 28	Supply	10	7.48	0.857	0.917	3120	0.5096	1,577		
AHU 28	Return	7.5	5.60	0.855	0.917	3120	0.4424	1,380		
<b>Summary</b>										
AHU 1	Supply	15	11.19	0.863	0.924	8760	0.8560	7,499		
AHU 1	Return	3	2.24	0.814	0.895	8760	0.2488	2,180		
AHU 2	Supply	10	14.92	0.885	0.920	8760	0.8157	7,148		
AHU 2	Return	7.5	5.60	0.855	0.917	8760	0.2306	1,833		
AHU 3	Supply	15	11.19	0.863	0.924	8760	0.8560	7,499		
AHU 3	Return	5	3.73	0.835	0.895	8760	0.2995	2,623		
AHU 4	Supply	10	7.48	0.857	0.917	8760	0.5096	4,385		
AHU 4	Return	0	0.00	0.000	0.000	0	0.0000	0		
AHU 5	Supply	20	14.92	0.885	0.920	8760	0.8157	7,148		
AHU 5	Return	3	2.24	0.814	0.895	8760	0.2488	2,180		
AHU 6	Supply	10	14.92	0.885	0.920	8760	0.8157	7,148		
AHU 6	Return	3	2.24	0.814	0.895	8760	0.2488	2,180		
AHU 7	Supply	5	3.73	0.835	0.895	8760	0.2995	2,623		
AHU 7	Return	3	2.24	0.814	0.895	8760	0.2488	2,180		
AHU 8	Supply	5	3.73	0.835	0.895	8760	0.2995	2,623		
AHU 8	Return	0	0.00	0.000	0.000	0	0.0000	0		
Savings: 112,235										
<b>PERCENT OF MOTOR OPERATING HOURS</b>										
MOTOR RATED SPEED/DOWN	KOP	OPERATING HOURS	CS	CS	CS	CS	CS	CS	CS	
			ACTUAL	PER UNIT HP	PER UNIT HP	SYSTEM EFFICIENCY (MOTOR & CONTROLS)	PER SPEED IN CS	PER HP PER HP		
100%	0.0%	16.00	1	0.716	89%	81%	0.738	0.821	12.79	13.15
90%	10%	14.49	0.719	0.514	69%	83%	0.733	0.836	41.64	35.77
80%	20%	135.47	0.512	0.382	51%	76%	0.746	0.500	115.88	77.79
70%	30%	307.23	0.343	0.256	36%	79%	0.701	0.345	215.79	106.60
60%	40%	349.40	0.316	0.161	21%	71%	0.614	0.234	231.55	78.20
50%	50%	1,013.67	0.135	0.003	17%	66%	0.545	0.142	1042.33	271.24
40%	60%	245.19	0.054	0.048	10%	58%	0.445	0.082	119.42	20.21
30%	70%	78.93	0.022	0.020	5%	54%	0.433	0.060	33.23	4.58
0.3770										
<b>RETURN FROM MOTOR INSTALLATION</b>										
DESIGNATION	POWER	BEFORE VFD (kW)	AFTER VFD (kW)	INSTALLATION (kW)						
AHU-1	1	5,411	2,002	3,409						
AHU-2	3	5,411	2,002	3,409						
AHU-3	3	5,411	2,002	3,409						
AHU-4	3	5,411	2,002	3,409						
AHU-5	3	5,411	2,002	3,409						
AHU-6	3	5,411	2,002	3,409						
AHU-7	3	5,411	2,002	3,409						
AHU-8	3	5,411	2,002	3,409						
AHU-9	3	5,411	2,002	3,409						
AHU-10	3	5,411	2,002	3,409						
AHU-11	3	5,411	2,002	3,409						
AHU-12	3	5,411	2,002	3,409						
AHU-13	3	5,411	2,002	3,409						
AHU-14	3	5,411	2,002	3,409						
AHU-15	3	5,411	2,002	3,409						
AHU-16	3	5,411	2,002	3,409						
AHU-17	3	5,411	2,002	3,409						
AHU-18	3	5,411	2,002	3,409						
AHU-19	3	5,411	2,002	3,409						
AHU-20	3	5,411	2,002	3,409						
AHU-21	3	5,411	2,002	3,409						
AHU-22	3	5,411	2,002	3,409						
AHU-23	3	5,411	2,002	3,409						
AHU-24	3	5,411	2,002	3,409						
AHU-25	3	5,411	2,002	3,409						
AHU-26	3	5,411	2,002	3,409						
AHU-27	3	5,411	2,002	3,409						
AHU-28	3	5,411	2,002	3,409						

## ATTACHMENT H

### Standards of Comfort

#### SECTION 1 Lighting Upgrades

- a) Lighting upgrades for each individual room/space will provide light levels and quality equal or greater to the existing light levels and quality for the room/space or the applicable IES Light Level Standards for the room/space, whichever is lower.

#### SECTION 2 Mechanical

The Owner agrees to operate this equipment to the agreed upon setpoints listed herein. Any deviation from the operating setpoints will result in adjustments to the Baseline as defined elsewhere in the Energy Services Agreement. In cases where the operating setpoint will be dynamically reset by the agreed upon programmed action of the building automation system the "reset operating setpoint" shall take precedence.

- a) Boosted Domestic Water
  - i) Courts/Office Building
    - (1) The boosted domestic water supply pressure setpoint will be based on the minimum supply water pressure required to properly operate the plumbing fixtures located on the top floor of the building.
    - (2) The existing pressure reducing valves located throughout this building will be adjusted as required to minimize the required boosted domestic water supply pressure.
    - (3) The boosted domestic water supply pressure setpoint may be reduced when the building is in the unoccupied mode of operation. Unoccupied in this instance is defined as no people are in the entire building.
  - ii) Detention Building
    - (1) The boosted domestic water supply pressure setpoint will be based on the minimum supply water pressure required to properly operate the plumbing fixtures located on the top floor of the building.
    - (2) The existing pressure reducing valves located throughout this building will be adjusted as required to minimize the required boosted domestic water supply pressure..
    - (3) The boosted domestic water supply pressure setpoint will not be adjusted from the setpoint described above since the building is continuously occupied.
- b) Domestic Hot Water Heater
  - i) Detention Building
    - (1) The domestic water temperature setpoint shall be 110 degrees F. in accordance with Section 504.3 of the 2009 Edition of the International Energy Conservation Code.
    - (2) An ASSE approved thermostatic mixing valve shall be installed on the supply line of the domestic hot water heater and shall be set to prevent the domestic hot water supply temperature from exceeding 120 degrees F. in accordance with Section 890.1220.9A of the Illinois Plumbing Code (77 Administrative Code, Part 890).
- c) Laundry Hot Water Heater
  - i) Detention Building
    - (1) The domestic hot water temperature setpoint for the three commercial washers shall be the lower of the hot water temperature setpoint that is recommended by the equipment manufacturer or 160 degrees F.
    - (2) The domestic hot water temperature setpoint for the two compartment sink shall be 110 degrees F.

- d) Kitchen Hot Water Heater
  - i) Detention Building
    - (1) The domestic hot water temperature setpoint for the commercial dish machine shall be the lower of the hot water temperature setpoint that is recommended by the equipment manufacturer or 160 degrees F.
    - (2) The domestic hot water temperature setpoint for the three compartment sinks, scraping tables and related plumbing fixtures shall be 110 degrees F.
- e) Chilled Water System
  - i) Detention Building
    - (1) The temperature setpoint of the chilled water produced by the central plant water chillers will be dynamically reset by the building automation system to maintain a fixed return temperature of 50 degrees. The minimum temperature setpoint of the chilled water leaving either water chiller will be 44 degrees F.
    - (2) The temperature setpoint of the condenser water produced by the cooling tower will be dynamically reset by the building automation system. The maximum temperature setpoint of the condenser water leaving the cooling tower will be 85 degrees F.
    - (3) The condenser water temperature will be maintained by modulating the speed of the two cooling tower fans.
- f) Variable Primary Chilled Water System
  - i) The differential pressure setpoint for the variable primary chilled water system shall be 5 psig.
  - ii) The differential pressure value will be measured at the control valve in this building that is located the furthest from the variable primary chilled water distribution pump. One differential pressure transmitter will be located in the Courts/Office building and one will be located in the Detention building.
- g) Variable Primary Hot Water System
  - i) The differential pressure setpoint for the variable primary hot water system shall be 5 psig.
  - ii) The differential pressure value will be measured at the control valve in this building that is located the furthest from the variable primary hot water distribution pump. One differential pressure transmitter will be located in the Courts/Office building and one will be located in the Detention building.
- h) Building Hot Water Heating System
  - i) Detention Building
    - (1) The building hot water heating system temperature setpoint for the four condensing boilers shall be dynamically reset by the building automation system to maintain a fixed return temperature of 110 degrees. The minimum temperature setpoint for the leaving hot water will be 120 degrees F.
- i) Steam Generation System
  - i) Detention Building
    - (1) The two steam boilers supply low pressure steam for the air handling unit humidification systems (both buildings) and pre-heating of the outdoor air introduced into most of the Detention building air handling units.
    - (2) The operating steam pressure for the steam boiler shall be 10 psig which is the same as the existing operating pressure.
- j) Flue Gas Exhaust System
  - i) Detention Building
    - (1) The two steam boilers supply low pressure steam for the air handling unit humidification systems (both buildings) and pre-heating of the outdoor air introduced into most of the Detention building air handling units.
    - (2) The steam boilers will be served by a flue gas exhaust system.

- (3) The pressure setpoint of the flue gas exhaust system shall be determined by the flue gas exhaust system manufacturer's representative from data obtained during the commissioning process.

k) Humidification Systems

i) Courts/Office Building

- (1) Each of the twenty-eight air handling units that serve this building is equipped with a direct injection steam humidification system.
- (2) The relative humidity level of the return air will be used to control the humidifiers for each air handling unit. The relative humidity setpoint will be dynamically reset based on the temperature of the outdoor air. This approach will avoid condensation on the interior of the building envelope when the outdoor air temperature is below 32 degrees F.
- (3) The minimum return air relative humidity setpoint will be 15% and the maximum return air relative humidity setpoint will be 40%.

ii) Detention Building

- (1) Four of the eight air handling units that serve this building are equipped with a direct injection steam humidification system.
- (2) The relative humidity level of the return air will be used to control the humidifiers for each air handling unit. The relative humidity setpoint will be dynamically reset based on the temperature of the outdoor air. This approach will avoid condensation on the interior of the building envelope when the outdoor air temperature is below 32 degrees F.
- (3) The minimum return air relative humidity setpoint will be 15% and the maximum return air relative humidity setpoint will be 40%.

l) Air Handling Systems

i) Courts/Office Building

- (1) Twenty-eight single path variable air volume air handling units serve this building.
- (2) The minimum amount of outdoor air admitted by each air handling unit during the occupied mode of operation will be equal to the amount of air exhausted by the associated exhaust fan(s) or the minimum code required ventilation level, whichever is the highest.
- (3) The admittance of additional outdoor air during the occupied mode of operation based on a comparative enthalpy sequence of operation will be permitted.
- (4) The static pressure setpoint for each air handling unit supply fan will be dynamically reset by the building automation system in accordance with Section 503.4.2 of the 2009 Edition of the IECC. The speed of the supply fan motor will be varied to achieve the static pressure setpoint.
- (5) The speed of the return fan will be matched to the supply fan speed.
- (6) Both the supply and return fans shall have a minimum speed setpoint that will be established during system commissioning.
- (7) The supply air temperature setpoint will be dynamically reset by the building automation system based on outside air temperature.
- (8) The room temperature setpoint for each variable air volume box during the occupied mode of operation will be 72 degrees F. The room thermostat will allow this temperature setpoint to be adjusted plus or minus two degrees from this setpoint by the building occupant.
- (9) To prevent simultaneous heating and cooling the minimum air flow volume for each variable air volume box with reheating capabilities will be based on the requirements included in Section 6.5.2 of ANSI/ASHRAE/IESNA Standard 90.1-2008.
- (10) During the unoccupied mode of operation each air handling unit shall remain off. When any room temperature associated with the air handling unit falls below 60 degrees F. (during the heating season) or 82 degrees F. (during the cooling season) the air handling unit shall re-start to raise (heating season) or lower (cooling season) the room temperature by a minimum of 4 degrees. Space temperatures for spaces that need 24 hour cooling will not be set back.
- (11) All air handling unit control systems shall include an optimum start program that will start each air handling unit in sufficient time to meet the scheduled occupancy time. The time required to warm-up or cool-down the space shall be in accordance with Section 6.4.3.1.3 of ANSI/ASHRAE/IESNA Standard 90.1-2008.

ii) Detention Building

- (1) Five single path variable air volume air handling units, two multi-zone constant air volume air handling units and one single path constant air volume air handling unit serve this building.
- (2) The minimum amount of outdoor air admitted by each air handling unit during the occupied mode of operation will be equal to the amount of air exhausted by the associated exhaust fan(s) or the minimum code required ventilation level, whichever is the highest.
- (3) The admittance of additional outdoor air during the occupied mode of operation based on a comparative enthalpy sequence of operation will be permitted if the required carbon dioxide transmitters are provided.
- (4) The static pressure setpoint for each variable air volume air handling unit supply fan (AHU-1, AHU-2, AHU-3 and AHU-7) will be dynamically reset by the building automation system in accordance with Section 503.4.2 of the 2009 Edition of the IECC. The speed of the supply fan motor will be varied to achieve the static pressure setpoint.
- (5) The speed of the return fan for each variable air volume air handling unit will be matched to the supply fan speed.
- (6) Both the supply and return fans for each variable air volume air handling unit shall have a minimum speed setpoint that will be established during system commissioning.
- (7) The supply air temperature setpoint for all air handling units will be dynamically reset by the building automation system.
- (8) The room temperature setpoint for each variable air volume box during the occupied mode of operation will be 72 degrees F. The room thermostat will allow this temperature setpoint to be adjusted plus or minus two degrees from this setpoint by the occupant. To prevent simultaneous heating and cooling the minimum air flow volume for each variable air volume box with reheating capabilities will be based on the requirements included in Section 6.5.2 of ANSI/ASHRAE/IESNA Standard 90.1-2008.
- (9) During the unoccupied mode of operation each air handling unit that is not scheduled to run continuously shall remain off. When any room temperature associated with the air handling unit falls below 60 degrees F. (during the heating season) or 82 degrees F. (during the cooling season) the air handling unit shall re-start to raise (heating season) or lower (cooling season) the room temperature by a minimum of 4 degrees.
- (10) All air handling unit control systems shall include an optimum start program to start each air handling unit in sufficient time to meet the scheduled occupancy time. All air handling unit control systems shall include an optimum start program that will start each air handling unit in sufficient time to meet the scheduled occupancy time. The time required to warm-up or cool-down the space shall be in accordance with Section 6.4.3.1.3 of ANSI/ASHRAE/IESNA Standard 90.1-2008.
- (11) The control program that controls the two multi-zone air handling units (AHU-5 & AHU-6) shall disallow simultaneous hot deck and cold deck operation. The hot deck will be enabled if more zones are calling for heating and the cold deck will be enabled if more zones are calling for cooling. The zone temperature setpoint shall be 72 degrees. The Using Agency shall have the capability to lower or raise the individual zone temperatures during the inmate sleeping hours.
- (12) The air handling unit that supplies conditioned air to the kitchen and laundry (AHU-4) shall maintain a 72 degrees F. setpoint during the occupied mode of operation. The temperature setpoint during the unoccupied mode of operation shall be 60 degrees. This air handling unit does not include a cooling coil.
- (13) The air handling unit that supplies conditioned air to the gymnasium (AHU-8) shall maintain a 68 degrees F. setpoint during the occupied mode of operation. The temperature setpoint during the unoccupied mode of operation shall be 60 degrees. This air handling unit does not include a cooling coil.

m) Miscellaneous Systems

- i) Finned tube radiation units that serve equipment rooms and stairwells shall maintain a temperature setpoint of 65 degrees F. The finned tube radiation units will be controlled by the new energy management system.

- ii) Hot water unit heaters that serve equipment rooms and storage areas shall maintain a temperature setpoint of 65 degrees F. Hot water unit heaters that serve entry-ways shall maintain a temperature setpoint of 72 degrees F. The hot water unit heaters will be controlled by the new energy management system.
- iii) The two steam unit heaters that serve the Courts /Office penthouse equipment room shall maintain a setpoint of 65 degrees F. The steam unit heaters will be controlled by the new energy management system..
- iv) The individual cooling only fan coil units and associated and exhaust fans that serve the elevator equipment rooms shall maintain the higher of the temperature setpoint recommended by the elevator maintenance contractor or 80 degrees F.

Tag	Location	Serves	Design CFM	Weekday Schedule	Weekend Schedule	Holidays	Comments
AHU-1/AS-1	Equipment Room 0M01	Basement VAV Boxes 1 thru 3	3,890/6,030	7AM to 5PM	Off	12 days per year	Runs continuously because it serves Telephone Room
AHU-1/AS-2	Equipment Room 0M04	Basement VAV Boxes 10 thru 13	3,200/3,300	7AM to 5PM	Off	12 days per year	
AHU-1/AS-3	Equipment Room 0M07	Basement VAV Boxes 6 thru 9	5,030/5,030	7AM to 5PM	Off	12 days per year	Extended runtime because it serves Main Entrance
AHU-1/AS-4	Equipment Room 1M02	1 <sup>st</sup> Floor VAV Boxes 14, 14A, 15 thru 20, 23	7,090/7,030	6AM to 6PM	Off	12 days per year	
AHU-1/AS-5	Equipment Room 1M01	1 <sup>st</sup> Floor VAV Boxes 21 thru 27, 28 thru 30	8,300/8,240	7AM to 5PM	Off	12 days per year	
AHU-1/AS-6	Equipment Room 1M05	1 <sup>st</sup> Floor VAV Boxes 44 thru 56	7,810/7,180	7AM to 5PM	Off	12 days per year	
AHU-1/AS-7	Equipment Room 1M08	1 <sup>st</sup> Floor VAV Boxes 37 thru 43	7,850/7,850	6AM to 6PM	Off	12 days per year	Extended runtime since it serves County Board Room
AHU-1/AS-8	Equipment Room 2M01	2 <sup>nd</sup> Floor VAV Boxes 57 thru 69	8,090/7,970	7AM to 5PM	Off	12 days per year	
AHU-1/AS-9	Equipment Room 2M06	2 <sup>nd</sup> Floor VAV Boxes 83 thru 94	7,330/7,330	7AM to 5PM	Off	12 days per year	
AHU-1/AS-10	Equipment Room 2M07	2 <sup>nd</sup> Floor VAV Boxes 99 thru 101	7,880/7,330	7AM to 5PM	Off	12 days per year	
AHU-1/AS-11	Equipment Room 4M02	3 <sup>rd</sup> Floor VAV Boxes 104 thru 116	6,370/6,710	7AM to 5PM	Off	12 days per year	
AHU-1/AS-12	Equipment Room 4M01	3 <sup>rd</sup> Floor VAV Boxes 95 thru 103	6,520/6,080	7AM to 5PM	Off	12 days per year	
AHU-1/AS-13	Equipment Room 4M04	3 <sup>rd</sup> Floor VAV Boxes 117 thru 121	4,540/4,540	7AM to 5PM	Off	12 days per year	
AHU-1/AS-14	Equipment Room 4M07	3 <sup>rd</sup> Floor VAV Boxes 117 thru 124	3,990/6,930	7AM to 5PM	Off	12 days per year	
AHU-1/AS-15	Equipment Room 5M01	4 <sup>th</sup> Floor VAV Boxes 133 thru 142	6,830/6,170	7AM to 5PM	Off	12 days per year	
AHU-1/AS-16	Equipment Room 5M01	4 <sup>th</sup> Floor VAV Boxes 143 thru 152	6,120/6,600	7AM to 5PM	Off	12 days per year	
AHU-1/AS-17	Equipment Room 5M03	4 <sup>th</sup> Floor VAV Boxes 153 thru 158	6,310/6,130	7AM to 5PM	Off	12 days per year	
AHU-1/AS-18	Equipment Room 5M06	4 <sup>th</sup> Floor VAV Boxes 157 thru 159, 161 thru 165	8,460/6,600	7AM to 5PM	Off	12 days per year	
AHU-1/AS-19	Equipment Room 6M01	5 <sup>th</sup> Floor VAV Boxes 168 thru 170, PNAV 1 & 2	5,270/5,130	7AM to 5PM	Off	12 days per year	
AHU-1/AS-20	Equipment Room 6M01	5 <sup>th</sup> Floor VAV Boxes 171 thru 179	5,610/5,200	7AM to 5PM	Off	12 days per year	
AHU-1/AS-21	Equipment Room 6M03	5 <sup>th</sup> Floor VAV Boxes 185 thru 192	5,200/6,080	7AM to 5PM	Off	12 days per year	
AHU-1/AS-22	Equipment Room 6M08	5 <sup>th</sup> Floor VAV Boxes 189 thru 190, PNAV 3 & 4	5,180/5,130	7AM to 5PM	Off	12 days per year	
AHU-1/AS-23	Equipment Room 7M01	6 <sup>th</sup> Floor VAV Boxes 193 thru 197, PNAV 5 & 6	5,270/5,130	7AM to 5PM	Off	12 days per year	
AHU-1/AS-24	Equipment Room 7M01	6 <sup>th</sup> Floor VAV Boxes 198 thru 203	4,690/4,730	7AM to 5PM	Off	12 days per year	
AHU-1/AS-25	Equipment Room 7M05	6 <sup>th</sup> Floor VAV Boxes 208 thru 213	5,000/4,000	7AM to 5PM	Off	12 days per year	
AHU-1/AS-26	Equipment Room 7M06	6 <sup>th</sup> Floor VAV Boxes 194 thru 207, PNAV 7 & 8	5,270/6,270	7AM to 5PM	Off	12 days per year	
AHU-1/AS-27	Equipment Room 8M02	7 <sup>th</sup> Floor VAV Boxes 218 thru 240, PNAV 11 & 13	11,190/11,050	7AM to 5PM	Off	12 days per year	
AHU-1/AS-28	Equipment Room 8M02	7 <sup>th</sup> Floor VAV Boxes 218 thru 227, PNAV 9 & 10	11,530/10,810	7AM to 5PM	Off	12 days per year	
Indicates supply/return fan is currently controlled by BAS							

Tag	Location	Serves	Design CFM	Weekday Schedule	Weekend Schedule	Holidays	Comments
AHU-2/AS-1	Equipment Room 106	Basement VAV Boxes 1 thru 10	9,410/6,930	7AM to 5PM	Off	12 days per year	Runs Continuously
AHU-2/AS-2	Equipment Room 106	1 <sup>st</sup> Floor VAV Boxes 10 thru 60	19,115/15,110	7AM to 5PM	Off	12 days per year	Runs Continuously
AHU-2/AS-3	Equipment Room 106	2 <sup>nd</sup> Floor VAV Boxes 61 thru 95	14,440/7,730	7AM to 5PM	Off	12 days per year	Runs Continuously
AHU-2/AS-4	Equipment Room 210	2 <sup>nd</sup> Floor Kitchen & Laundry	30,300	2AM to 7PM	On		Runs Continuously
AHU-2/AS-5	Equipment Room 403	3 <sup>rd</sup> Floor North Cell Block	17,650/6,110	7AM to 5PM	Off	12 days per year	Runs Continuously
AHU-2/AS-6	Equipment Room 405	3 <sup>rd</sup> Floor Center Core VAV Boxes 97 thru 101	3,090/2,450	7AM to 5PM	Off	12 days per year	Runs Continuously
AHU-2/AS-7	Equipment Room 405	Gymnasium Room 321	3,000	7AM to 7PM	On-Saturday Off Sunday		
Indicates supply/return fan is currently controlled by BAS							

Tag	Location	Serves	Design CFM	Weekday Schedule	Weekend Schedule	Holidays	Comments
EP-5	Equipment Room 1M01	Toilets 2A12 & 1B06	110	7AM to 5PM	Off	12 per year	Runs with AHU-6 or AHU-8
EP-6	Equipment Room 1M03	Toilets 1F07	60	7AM to 5PM	Off	12 per year	Runs with AHU-6
EP-7	Equipment Room 1M01	Toilets 2M02 & 2D05	120	7AM to 5PM	Off	12 per year	Runs with AHU-6
EP-8	Equipment Room 2M06	Toilets 2D06 & 2M03, Janitor's Closet	120	7AM to 5PM	Off	12 per year	Runs with AHU-6 or AHU-10
EP-9	Equipment Room 1C01	Dixie Hood Room 2B04	480				EP-5 & Dixie Hood have been removed from the building
EP-10	Equipment Room 4M01	3 <sup>rd</sup> Floor Cells North End & 3 <sup>rd</sup> 4 <sup>th</sup> Floor Private Restrooms	3,030				Runs Continuously
EP-11	Equipment Room 4M05	1509, 4B05 & 4B05	320	7AM to 5PM	Off	12 per year	Runs with AHU-14 or AHU-18
EP-12	Equipment Room 5M01	5 <sup>th</sup> Floor North Private Restrooms	540	7AM to 5PM	Off	12 per year	Runs with AHU-20
EP-13	Equipment Room 5M03	5 <sup>th</sup> Floor South Private Restrooms	420	7AM to 5PM	Off	12 per year	Runs with AHU-21
EP-14	Equipment Room 5M01	6 <sup>th</sup> Floor North Private Restrooms	360	7AM to 5PM	Off	12 per year	Runs with AHU-24
EP-15	Equipment Room 5M03	6 <sup>th</sup> Floor South Private Restrooms	340	7AM to 5PM	Off	12 per year	Runs with AHU-25
EP-16	Equipment Room 7M01	7 <sup>th</sup> Floor North Private Restrooms	340	7AM to 5PM	Off	12 per year	Runs with AHU-28
EP-17	Equipment Room 7M05	7 <sup>th</sup> Floor South Private Restrooms	420	7AM to 5PM	Off	12 per year	Runs with AHU-27
EP-18	Roof	Cells North 5 <sup>th</sup> , 6 <sup>th</sup> & 7 <sup>th</sup> Floors	420	7AM to 5PM	Off	12 per year	Runs with AHU-21 or AHU-25 or AHU-27
EP-19	Roof	Cells South 5 <sup>th</sup> , 6 <sup>th</sup> & 7 <sup>th</sup> Floors	180	7AM to 5PM	Off	12 per year	Runs with AHU-19 or AHU-21 or AHU-28
EP-20	Penhouse	Men Restrooms Floors 1 thru 7	5,160	7AM to 5PM	Off	12 per year	Runs with AHU-6 thru AHU-28
EP-21	Equipment Room 8M01	Elevator Equipment	460				Controlled by pneumatic thermostat set @ 50 degrees
EP-18	Equipment Room 8M07	Elevator Equipment	460				Controlled by pneumatic thermostat set @ 50 degrees
EP-19	Equipment Room 8M03	Elevator Equipment	460				Controlled by pneumatic thermostat set @ 50 degrees
EP-20	Equipment Room 8M04	Elevator Equipment	460				Controlled by pneumatic thermostat set @ 50 degrees
EP-21	Equipment Room 8M05	Elevator Equipment	460				Controlled by pneumatic thermostat set @ 50 degrees
Indicates exhaust fan is currently controlled by BAS							

Tag	Location	Serves	Design CFM	Weekday Schedule	Weekend Schedule	Holidays	Comments
EF-1	Room 002	Lockers	2,900	7AM to 5PM	Off	12 per year	EF-1 runs when AHU-1 runs
EF-2	Room 043	Toilets	450	7AM to 5PM	Off	12 per year	EF-2 runs when AHU-1 runs
EF-3	Room 024	Dark Rooms	1,000	7AM to 5PM	Off	12 per year	EF-3 runs when AHU-1 runs
EF-4	Room 025	Toilets	900	7AM to 5PM	Off	12 per year	EF-4 runs when AHU-1 runs
EF-5	Room 1016	Cells	1,455				EF-5 runs continuously and is associated with AHU-2
EF-6	Room 1A42	Toilets	900				EF-6 runs continuously and is associated with AHU-2
EF-7	Room 1A14	Toilets	500				EF-7 runs continuously and is associated with AHU-2
EF-8	Room 1A65	Toilets	275				EF-8 runs continuously and is associated with AHU-2
EF-9	Room 1C04	Toilets	75				EF-9 runs continuously and is associated with AHU-2
EF-10	Room 2C00	Cells	1,100				EF-10 runs continuously and is associated with AHU-3
EF-11	Room 2A00	Cells	940				EF-11 runs continuously and is associated with AHU-3
EF-12	Room 2A00	Cells	950				EF-12 runs continuously and is associated with AHU-3
EF-13	Room 2A00	Cells	1,010				EF-13 runs continuously and is associated with AHU-3
EF-14	Room 250	Patient Rooms	880				EF-14 runs continuously and is associated with AHU-3
EF-15	Room 226	Toilets	800				EF-15 runs continuously and is associated with AHU-3
EF-16	Room 206	Toilets	900				EF-16 runs continuously and is associated with AHU-3
EF-17	Room 22D	Dishwasher	1,000				EF-17 is interlocked with the dishwasher hood
EF-18	Roof	Storage	200				EF-18 runs continuously and is associated with AHU-5
EF-19	Roof	Storage	200				EF-19 runs continuously and is associated with AHU-5
EF-20	Roof	Storage	200				EF-20 runs continuously and is associated with AHU-6
EF-21	Roof	Toilets	200				EF-21 runs continuously and is associated with AHU-6
EF-22	Roof	Toilets	50				EF-22 runs continuously and is associated with AHU-7
EF-23	Roof	Storage	270				EF-23 runs continuously and is associated with AHU-7
EF-24	Room 322	Cells	750	7AM to 7PM	On Saturday; Off Sunday		EF-24 runs when AHU-8 runs
EF-25	Room 320	Cells	1,250	7AM to 7PM	On Saturday; Off Sunday		EF-25 runs when AHU-8 runs
EF-26	Roof	Cells 3A	1,060				EF-26 runs continuously and is associated with AHU-5
EF-27	Roof	Cells 3A	960				EF-27 is associated with AHU-5 and is controlled by smoke management system
EF-28	Roof	Cells 3B	1,480				EF-28 is associated with AHU-5 and is controlled by smoke management system
EF-29	Roof	Cells 3B	1,580				EF-29 runs continuously and is associated with AHU-5
EF-30	Roof	Cells 3C	1,270				EF-30 runs continuously and is associated with AHU-5
EF-31	Roof	Cells 3C	1,270				EF-31 is associated with AHU-5 and is controlled by smoke management system
EF-32	Roof	Cells 3D	1,270				EF-32 is associated with AHU-5 and is controlled by smoke management system
EF-33	Roof	Cells 3D	1,470				EF-33 runs continuously and is associated with AHU-5
EF-34	Roof	Cells 3E	1,555				EF-34 runs continuously and is associated with AHU-5
EF-35	Roof	Cells 3E	1,455				EF-35 is associated with AHU-5 and is controlled by smoke management system
EF-36	Roof	Cells 3F	1,410				EF-36 is associated with AHU-5 and is controlled by smoke management system
EF-37	Roof	Cells 3F	1,510				EF-37 runs continuously and is associated with AHU-5
EF-38	Roof	Cells 3G	1,420				EF-38 runs continuously and is associated with AHU-5
EF-39	Roof	Cells 3G	1,320				EF-39 is associated with AHU-5 and is controlled by smoke management system
EF-40	Roof	Cells 3H	1,330				EF-40 is associated with AHU-6 and is controlled by smoke management system
EF-41	Roof	Cells 3H	1,430				EF-41 runs continuously and is associated with AHU-6
EF-42	Roof	Cells 3I	1,555				EF-42 runs continuously and is associated with AHU-6
EF-43	Roof	Cells 3I	1,455				EF-43 is associated with AHU-6 and is controlled by smoke management system
EF-44	Roof	Cells 3K	1,455				EF-44 is associated with AHU-6 and is controlled by smoke management system
EF-45	Roof	Cells 3K	1,455				EF-45 runs continuously and is associated with AHU-6
EF-46	Roof	Cells 3L	1,590				EF-46 runs continuously and is associated with AHU-6
EF-47	Roof	Cells 3L	1,590				EF-47 is associated with AHU-6 and is controlled by smoke management system
EF-48	Roof	Cells 3M	1,590				EF-48 is associated with AHU-6 and is controlled by smoke management system
EF-49	Roof	Cells 3M	1,590				EF-49 runs continuously and is associated with AHU-6
EF-50	Roof	Cells 3N	1,480				EF-50 runs continuously and is associated with AHU-6
EF-51	Roof	Cells 3N	1,480				EF-51 is associated with AHU-6 and is controlled by smoke management system
EF-52	Roof	Cells 3P	1,440				EF-52 is associated with AHU-6 and is controlled by smoke management system
EF-53	Roof	Cells 3P	1,540				EF-53 runs continuously and is associated with AHU-6
EF-54	Roof	Kitchen Hood	18,000	2AM to 9PM	On		EF-54 is associated with SF-1 and serves the kitchen hood
EF-55	2nd Floor	Female A Block	500				EF-55 is associated with AHU-3 and is controlled by smoke management system
EF-56	2nd Floor	Female B Block	500				EF-56 is associated with AHU-3 and is controlled by smoke management system
EF-57	2nd Floor	Female 2C North	500				EF-57 is associated with AHU-3 and is controlled by smoke management system
EF-58	2nd Floor	Female 2C South	500				EF-58 is associated with AHU-3 and is controlled by smoke management system
EF-59	Room 043	Hood in Room 044	700				EF-59 is controlled manually and is associated with AHU-1
EF-60	Room 043	Hood in Room 033	700				EF-60 is controlled manually and is associated with AHU-1
EF-61	Room 2A00	Recirculation and Freeze Protection	1,000				EF-61 runs continuously for recirculation and freeze protection of overhang space
EF-62	Room 2C00	Recirculation and Freeze Protection	1,000				EF-62 runs continuously for recirculation and freeze protection of overhang space
EF-63	Room 204	Recirculation and Freeze Protection	500				EF-63 runs continuously for recirculation and freeze protection of overhang space
EF-64	Room 213	Recirculation and Freeze Protection	500				EF-64 runs continuously for recirculation and freeze protection of overhang space
EF-65	Room 220	Recirculation and Freeze Protection	1,000				EF-65 runs continuously for recirculation and freeze protection of overhang space
EF-66	Room 222	Recirculation and Freeze Protection	1,000				EF-66 runs continuously for recirculation and freeze protection of overhang space
EF-67	Room 245	Recirculation and Freeze Protection	1,000				EF-67 runs continuously for recirculation and freeze protection of overhang space
Indicates exhaust fan is currently controlled by BAS							



ATTACHMENT I

**(a) Davis-Bacon Act and Copeland Act Compliance (40 U.S.C. 3141 et seq., 18 U.S.C. 875, 29 C.F.R. Parts 1, 3 and 5)**

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Section (a)(4) hereof. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) Sangamon County shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. Sangamon County shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and Sangamon County agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by Sangamon County to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise Sangamon County or will notify Sangamon County within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and Sangamon County do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), Sangamon County shall refer the questions, including the views of all interested parties and the recommendation of Sangamon County, to

the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise Sangamon County or will notify Sangamon County within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. Sangamon County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, Sangamon County may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to Sangamon County. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the

employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to Sangamon County, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Sangamon County or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, Sangamon County may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on

the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as Sangamon County may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**(b) Compliance with Contract Work Hours and Safety Standards Act (40 U.S.C 3701 et seq., 29 C.F.R Part 5).** As used in this section, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. Sangamon County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

General Decision Number: IL100004 05/14/2010 IL4

Superseded General Decision Number: IL20080004

State: Illinois

Construction Types: Building and Residential

County: Sangamon County in Illinois.

BUILDING & RESIDENTIAL CONSTRUCTION PROJECTS (including single family homes and garden apartments up to and including 4 stories)

Modification Number	Publication Date
0	03/12/2010
1	03/19/2010
2	04/16/2010

ASBE0037-005 10/03/2005

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 29.64	13.46

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\* BOIL0363-001 01/01/2010

	Rates	Fringes
BOILERMAKER.....	\$ 31.38	22.57

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BRIL0008-021 05/01/2009

	Rates	Fringes
Bricklayer, Caulker, Cleaner, Pointer & Stonemason.....	\$ 25.64	16.57

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CARP0016-003 05/01/2009

	Rates	Fringes
CARPENTER		
Building: Carpenter and Lather..	\$ 28.66	14.75
Building: Piledriver.....	\$ 29.16	14.75
Residential.....	\$ 22.93	16.29

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CARP1051-006 05/01/2009

	Rates	Fringes
MILLWRIGHT.....	\$ 28.27	17.14

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ELEC0193-002 06/01/2008

	Rates	Fringes
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ELECTRICIAN (residential, 3 floors or less). .....\$ 19.70 7.25

ELEC0193-005 06/03/2009

	Rates	Fringes
ELECTRICIAN.....	\$ 34.22	12.13

ELEV0092-002 05/01/2002

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 26,615	7.455 + A&B

**FOOTNOTES:**

a. Paid Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Day after Thanksgiving; Veterans' Day and Christmas Day.

b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 yrs; Employer contributes 6% of regular hourly rate to vacation pay credit for employee who has worked in business less.

ENGI0965-003 05/01/2009

	Rates	Fringes
Operating Engineers:		
Group 1.....	\$ 31.10	16.55
Group 2.....	\$ 28.75	16.55
Group 3.....	\$ 25.15	16.55
Group 4.....	\$ 32.60	16.55

**PREMIUM PAY-**

CRANES WITH BOOMS - 120-200 ft. 1.00 per hour; \$.02 Per Foot For Each Foot Above 200; MULTIPLE UNIT MACHINES- 1.00 per hour; UNDERGROUND WORK- 1.00 per hour; UNDER AIR PRESSURE- 1.00 per hour; LONG BOOMS ON STATIONARY TOWER CRANES-1.00 per hour. Above Long Boom Scale

Hazardous Waste/Asbestos Removal Workers receive the following wages and fringe benefits:

Level A (highest level of respiratory, skin, and eye protection) receives \$2.00 per hour above journeyman.

Level B (same as Level A, but a lower level of skin protection) receives \$1.50 per hour above journeyman.

Level C (same as Level B, but a lower level of respiratory protection) receives \$1.00 per hour above journeyman.

**OPERATING ENGINEER CLASSIFICATIONS:**

GROUP 1: Asphalt Plant Engineer; Asphalt screed man; Apsco concrete spreader; Asphalt paver; Asphalt roller on bituminous concrete; Athey loaders; Cableways; Cherry Picker; ClamShell; C.M.I.

& Similar Type Autograde Formless Paver, Autograde Placer & Finisher; Concrete Breaker; Concrete plant Oper; Concrete Pumps; Cranes; Derricks; Derrick boats; Draglines; Earth auger boring machine, Elevating Graders; Engineers on dredge; Gravel processing machines; Head equipment greaser; High lift or fork lift; Hoist with two drums or 2 or more loadlines; Locomotive; Mechanics; Motor graders or auto patrols; Operators or levelman on dredges; Power boat oper; Pug mill oper; (Asphalt plat); Orange peels; Overhead cranes; Paving mixer; Piledrivers; Pipe wrapper & Painting machines; Push dozers, or Push cats; Rock crusher; Ross carrier or similar machine; Scoops; Skimmers 2 cu yd capacity & Under: Sheep foot roller (self propelled); Shovels; Skimmer; Scoops; Test hole drilling machines; Tower machine; Tower mixer; Track Tupe & Loaders; Track type forklifts or high lifts; Track jacks & Tampers; Trackors; Sideboom; Trenching machine; Ditching machine; Tunnel lugger; Wheel type end loader; Winch cat; Scoops (Allor tournapull)

GROUP 2: Asphalt booster & Heater; Asphalt distributor; Asphalt plant fireman; Building Elevator; Bull float or flexplane; Concrete finishing machine; Concrete saw, self propelled; Concrete spreader machine; Gravel or stone spreader, Power operated; Hoist automatic; Hoist with one drum & one load line; Oiler on 2 paving mixers when used in tandem boom or winch truck; Post hole diggers; Mechanical; Road or street sweeper, Self-propelled; Scissors hoist; Seaman tiller; Straw machine; Vibratory compactor; Well drill machine; & Mud jacks.

GROUP 3: Air compressor, Track or self-propelled; Bulk cement batching- plants; Conveyors; Concrete miers (Except Plant, Paver, Tower) Firement, Generators; Greasers; Light plants; Mechanical theater; Oilers; Power from graders; Power sub-grader; Pug mill, When used other than asphalt operation; Rollers (Except bitumin ous); Tractors w/o Power attachments regardless of size or type; Truck crane oiler; & driver ( one man ); Vibratory hammer; Water pump; Welding machine ( one 300 amp or over) Combinations of five of any air compressors; Conveyors, Welding Machines, Water pumps; Light plants or Generators shall be in batteries or with in 300 FT.

Group 4: Lattice Boom crawler crane, Lattice Boom truck crane, Telescopic truck mounted crane, Tower crane

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IRON0046-008 05/01/2009

	Rates	Fringes
IRONWORKER.....	\$ 28.50	16.64

\* LABO0477-003 05/01/2009

	Rates	Fringes
LABORER		
Asbestos Abatement Worker...	\$ 27.89	12.84
General Laborer.....	\$ 27.89	13.64

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MARB0004-002 05/01/2009

	Rates	Fringes
Marble Setter, Terrazzo Worker & Tile Setter	.....\$ 25.66	16.33

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MARB0109-002 05/01/2009

	Rates	Fringes
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Marble, Tile & Terrazzo Workers... \$ 24.16 16.33

PAIN0090-004 05/01/2009

	Rates	Fringes
PAINTER		
Building.....	\$ 27.99	12.77
Residential.....	\$ 25.49	12.77

Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

PAIN1168-002 05/01/2009

	Rates	Fringes
GLAZIER.....	\$ 29.88	13.01

PLAS0018-033 05/01/2009

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER..	\$ 21.70	10.55
PLASTERER.....	\$ 27.00	16.57

PLUM0137-002 04/01/2009

	Rates	Fringes
Plumber, Pipefitter, Steamfitter		
Building.....	\$ 37.00	13.40
Residential.....	\$ 30.99	13.40

ROOF0112-002 06/01/2009

	Rates	Fringes
ROOFER, Including Built Up, Composition and Single Ply Roofs..	\$ 27.25	12.90

SHEE0218-002 06/01/2007

Residential

	Rates	Fringes
Sheet Metal Worker.....	\$ 18.64	15.95

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SHEE0218-003 06/01/2009

BUILDING

	Rates	Fringes
SHEET METAL WORKER.....	\$ 30.26	19.92

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TEAM0916-001 05/01/2009

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 28.605	13.50+a
Group 2.....	\$ 29.005	13.50+a
Group 3.....	\$ 29.205	13.50+a
Group 4.....	\$ 29.455	13.50+a
Group 5.....	\$ 30.205	13.50+a

FOOTNOTE: a. \$31.40 per day

CLASSIFICATIONS:

GROUP 1: Drivers on 2 axles hauling less than 9 tons; air compressor & welding machines and brooms, including those pulled by separate units; Truck Driver Helper, warehouse employees; Mechanic Helpers; greasers and firemen; pick-up trucks when hauling material, tools, or workers to and from and on the job site; and forklifts up to 6,000 lb capacity.

GROUP 2: 2 or 3 axles hauling more than 9 tons but hauling less than 16 tons; A-frame winch trucks; hydrolift trucks; Vactor Trucks or similar equipment when used for transportation purposes; Forklift over 6,000 lb.capacity; winch trucks; and four axle combination units.

GROUP 3: 2, 3 or 4 Axles hauling 16 tons or more; 5-Axles or more combination units; drivers on water pulls; articulated dump trucks; mechanics and working forepersons.

GROUP 4: Low Boy and Oil Distributors.

GROUP 5: Drivers who require special protective clothing while employed on hazardous waste work.

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.  
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.  
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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION