

PERFORMANCE CONTRACT

PARTIES: JOHNSON CONTROLS, INC. (JCI)
N22 W22922 Nancys Court
Waukesha, WI 53186

CITY OF MILWAUKEE
841 N. Broadway
Milwaukee, WI 53202

AGREEMENT DOCUMENTS: In addition to the terms and conditions of this Performance Contract, incorporated into this Agreement are the following (check as applicable).

- ☒ Schedule 1--Scope of Work Schedule
- ☒ Schedule 2--Assured Performance Guarantee Schedule
- ☒ Schedule 3--Services Schedule
 - ☒ Schedule 3 --Exhibit 1
- ☒ Schedule 4--Price and Payment Terms Schedule
 - ☒ Schedule 4a--Cash Payment Schedule

- 1. SCOPE OF THE AGREEMENT.** JCI agrees to install identifiable improvement measures as delineated in Scope of Work Schedule (Schedule 1) which will result in Project Benefits as set forth in the Assured Performance Guarantee (Schedule 2). After installation of the improvement measures, JCI agrees to provide the services identified in Services Schedule (Schedule 3), that include services that are necessary to monitor, measure, and achieve the identified Project Benefits, subject to the terms of the Assured Performance Guarantee (Schedule 2). The Customer agrees to take all actions identified in this Agreement that are necessary to achieve the Project Benefits identified. JCI shall supervise and direct the Work and Services and shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work and Services under this Agreement. JCI shall be responsible to pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work and Services. The Customer's payments to JCI and its interest in the Equipment will be based upon the terms of Schedule 4.
- 2. TERM.** The Term of this Agreement shall begin on the Commencement Date, which shall be July 1, 2008 or, if no date is included, the date of this Agreement. If the Work is divided into phases or individual projects for which individual prices have been negotiated, then separate Commencement Dates shall apply to each phase or individual project. The Work shall be completed by the Substantial Completion Date, which shall be the earlier of:

- (a) the date on which the Customer executes a Certificate of Substantial Completion; or
- (b) 12 months after the Commencement Date, subject to adjustments as set forth in Paragraph 3 below.

If the Work is divided into phases or individual projects for which individual prices have been negotiated, then separate Substantial Completion Dates shall apply to each phase or individual project. Substantial Completion means that JCI has provided sufficient materials and services to permit the Customer to operate the Equipment or achieve the intended Project Benefits. The Services shall commence on the Substantial Completion Date and shall continue for 36 months. The term of the Assured Performance Guarantee (see Schedule 2) shall coincide with the term of the Services Schedule (see Schedule 3). If for any reason, the Customer cancels or breaches this Agreement, including but not limited to the Service Schedule, the Assured Performance Guarantee shall automatically terminate. The Payment Term shall be defined in Price and Payment Term Schedule (Schedule 4).

- 3. DELAYS.** If JCI is delayed in the commencement or completion of the Work and/or Services by causes beyond its control and without its fault or negligence, including but not limited to inability to access property, fire, flood, labor disputes, unusual delays in deliveries, abnormal adverse weather conditions, acts of God, acts of war and acts of terrorism or by failure by the Customer to perform its obligations under the Performance Contract and Schedules or failure by the Customer to cooperate with JCI in the timely completion of the Work, then JCI shall provide written notice

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to the Customer of the existence, extent of, and reason for such delays. An equitable adjustment in Substantial Completion Date, Payment Terms and Assured Performance Guarantee shall be made as a result.

ACCESS. Customer is responsible to provide JCI, its subcontractors and/or its agents reasonable and safe access to all facilities and properties that are in the Customer's control which are subject to the Work and Services contained in this Agreement. Customer further agrees to assist JCI, its subcontractors and/or its agents to gain access to facilities and properties that are not controlled by the Customer which are subject to the Work and Services contained in this Agreement. An equitable adjustment in Substantial Completion Date, Payment Terms and Assured Performance Guarantee shall be made as a result of any failure to grant such access.

4. CERTIFICATE OF SUBSTANTIAL COMPLETION. The Certificate of Substantial Completion to be executed by the Customer shall include:

- a. an acknowledgement by the Customer of the buildings or Improvement Measures substantially completed and the Substantial Completion Date for each building or Improvement Measure;
- b. an acknowledgment by the Customer of receipt of manuals and training provided by JCI under the Agreement;
- c. an acknowledgement by the Customer of the warranty start date and warranty period;
- d. a punchlist of items remaining to be completed by JCI and,
- e. an acknowledgement by the Customer that
 - (i) changes of fire or alarm control points may significantly alter a life safety system, and contribute to a dangerous or life-threatening situation.
 - (ii) changes to fire or alarm points may also require approval of local fire authority; changes to other control points may be linked to the life safety system and affect it; and after each such change, the life safety system should be exercised to see that its integrity has not been violated and it functions properly, as was intended.
 - (iii) JCI does not warrant against system malfunction caused by improper use, misuse or wrong entry of data by the customer, and JCI shall not be liable for situations or damages that are the direct result of user-generated databases.

5. TAXES, PERMITS, AND FEES. JCI shall be responsible for obtaining all permits and related permit fees associated with the Work and Services. JCI shall pay sales, consumer, use, and other similar taxes and shall secure and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution. The Customer shall be responsible for securing any necessary approvals, easements, assessments, or zoning changes and shall be responsible for real estate and personal property taxes where applicable. JCI makes no representations regarding the tax implications or Customer's accounting treatment of this Agreement.

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6. **WARRANTY.** JCI warrants that materials and equipment furnished by JCI will be of good quality and new; that the Work will be free from defects not inherent in the quality required or permitted; and that the Work and Services will conform to the requirements of the Agreement Documents. JCI warrants that the Work shall be free from defects in material and workmanship arising from normal usage for a period of one year from the Substantial Completion Date and that its Services will be free from defects in workmanship, design, and material until the end of the Term, or for one year, whichever is earlier. Upon written notice from the Customer, JCI shall, at its option, repair or replace the defective Work or re-perform defective Services. These warranties do not extend to any Work or Services that have been abused, altered, misused, or repaired by the Customer or third parties without the supervision of and prior written approval of JCI; or if JCI serial numbers or warranty date decals have been removed or altered. The Customer must promptly report any failure of the Equipment to JCI in writing. All replaced Equipment or parts become JCI's property.

THESE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY AND FITNESS FOR A SPECIFIC PURPOSE.

Customer understands that JCI is a provider of services under this Agreement. JCI shall not be considered a merchant or a vendor of goods. **If JCI installs or furnishes a piece of equipment under this Agreement, and that equipment is covered by a warranty from the manufacturer, JCI will transfer the benefits of that manufacturer's warranty to Customer if this Agreement with Customer terminates before the equipment manufacturer's warranty expires.**

7. **CLEANUP.** JCI shall keep the premises and the surrounding area free from accumulation of waste materials or rubbish caused by the Work and, upon completion of the Work, JCI shall remove all waste materials, rubbish, tools, construction equipment, machinery, and surplus materials.
8. **SAFETY.** JCI shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work or Services. JCI shall comply with all applicable laws, ordinances, rules, regulations, and lawful orders of public authorities related to safety of persons or property.
9. **HAZARDOUS MATERIALS.** Unless specifically noted in Schedule 1, JCI's obligations expressly exclude any Work or Services of any nature associated or connected with the identification, abatement, cleanup, control, removal, or disposal of hazardous materials or substances, including but not limited to asbestos, lead or PCBs, in or on the premises in which JCI will be required to perform Work. **The Customer warrants and represents that, to the best of the Customer's knowledge, there is no asbestos or other hazardous materials in the Customer's building(s) or other premises in which JCI will be required to perform Work that will in any way affect JCI's Work.** Should JCI become aware of or suspect the presence of asbestos or other hazardous materials, JCI shall have the right to stop work in the affected area immediately and notify the Customer. The Customer will be responsible for doing whatever is necessary to correct the condition in accordance with all applicable statutes and regulations. The Customer agrees to assume responsibility for any claims arising out of or relating to the presence of asbestos or other hazardous materials in the Customer's buildings or any premises in which JCI will be required to perform Work.
10. **INSURANCE.** Prior to commencing the Work, JCI shall provide a certificate of insurance with Contractor showing its insurance coverage's, and JCI shall maintain such insurance in full force and effect at all times until the Work and Services have been completed, in the following minimum amounts:

COVERAGES	LIMITS OF LIABILITY
Workmen's Compensation Insurance or self insurance, including Employer's Liability	Statutory
Comprehensive General Liability Insurance, including Contractual.	\$5,000,000 One Occurrence \$5,000,000 Each Aggregate
Comprehensive Automobile Liability Insurance	\$5,000,000 Combined Single Limit

The above limits are obtained through primary and excess policies.

The Customer shall be responsible for obtaining any builder's risk insurance and shall assume full responsibility for any risk of loss to the Work.

- 11. INDEMNITY.** The Customer assumes all risk and liability for the use, operation, and storage of the Equipment, and for injuries or death to persons or damage to property arising out of the use, operation, or storage of the Equipment, except for any injuries or death to persons or damage to property caused by the negligence of JCI, its employees, agents or assigns. The Customer shall indemnify and hold harmless JCI, its employees, agents, and assigns from and against all claims, actions, damages, liabilities, and expenses, including attorney's fees, arising out of or related to this Agreement, except for injuries or death to persons or damage to property caused by the negligence of JCI, its employees, agents or assigns.

JCI shall indemnify and hold harmless the Customer, its employees, agents, and assigns against all claims, actions, damages, liabilities, and expenses, including attorney's fees, arising out of or related to any claims of patent infringement and any claims of construction or materialman's lien made by any subcontractor or materialman. JCI and the Customer agree that JCI shall be responsible only for such injury, loss, or damage caused by the intentional misconduct or the negligence act or omission of JCI. The obligations of JCI and of the Customer under this paragraph are further subject to paragraph 12 below.

- 12. LIABILITY AND FORCE MAJEURE.** JCI shall not be liable under this Agreement in an amount in excess of its primary general comprehensive policy limits. Neither JCI nor the Customer will be responsible to the other for any special, indirect, or consequential damages arising in any manner from the Work or Services. Neither party will be responsible to the other for damages, loss, injury, or delay caused by conditions that are beyond the reasonable control, and without the intentional misconduct or negligence, of that party. Such conditions include, but are not limited to: acts of God; acts of Government agencies; strikes; labor disputes; fire; explosions or other casualties; thefts; vandalism; riots or war; acts of terrorism; or unavailability of parts, materials or supplies. If this Agreement covers fire safety or security equipment, the Customer understands that JCI is not an insurer regarding those services. JCI shall not be responsible for any damage or loss that may result from fire safety or security equipment that fails to perform properly or fails to prevent a casualty loss. JCI is also not responsible for any injury, loss, or damage caused by equipment that is not Covered Equipment, as defined in Schedule 3.

- 13. JCI'S PROPERTY.** All materials furnished by and used by JCI personnel and/or JCI authorized subcontractors or agents at the installation site, including documentation, schematics, test equipment, software, and associated media remain the exclusive property of JCI. The Customer agrees not to use such materials for any purpose at any time. The Customer agrees to allow JCI personnel and/or JCI authorized subcontractors or agents to retrieve and to remove all such materials remaining after installation or maintenance operations have been completed. The Customer acknowledges that all JCI software included is proprietary and will be delivered only under the provisions of an appropriate Software License Agreement that will limit its use to the system purchased under this Agreement.

- 14. DISPUTES.** If a dispute arises under this Agreement, the parties shall promptly attempt in good faith to resolve the dispute by negotiation. All disputes not resolved by negotiation shall be resolved in accordance with the Commercial Rules of the American Arbitration Association in effect at that time, except as modified herein. All disputes shall be decided by a single arbitrator. A decision shall be rendered by the arbitrator no later than nine months after the demand for arbitration is filed, and the arbitrator shall state in writing the factual and legal basis for the award. No discovery shall be permitted. The arbitrator shall issue a scheduling order that shall not be modified except by the mutual agreement of the parties. Judgment may be entered upon the award in the highest state or federal court having jurisdiction over the matter. The prevailing party shall recover all costs, including attorney's fees, incurred as a result of the dispute. **If the Customer is a state or local governmental entity, then this paragraph may not apply.**

- 15. MODIFICATIONS.** Additions, deletions, and modifications to this Agreement may be made upon the mutual agreement of the parties in writing. The parties contemplate that such modifications may include but are not limited to the installation of additional improvement measures, energy conservation measures, facility improvement measures, and operational efficiency improvements or furnishing of additional services within the identified facilities, as well as other

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facilities owned or operated by the Customer. These modifications may take the form of additional phases of work or modifications to the original scope of Work or Services.

16. NOTICES. All notices or communications related to this Agreement shall be in writing and shall be deemed served if and when sent by facsimile or mailed by certified or registered mail to JCI at the address listed on page 1 of this Performance Contract and to JCI, ATTN: General Counsel - Controls, 507 East Michigan Street, Milwaukee, Wisconsin, 53202, and to Customer at the address listed on page 1 of this Performance Contract.

17. ADDITIONAL TERMS.

- A. Any failure of JCI to require strict performance by the Customer, or any waiver by JCI of any requirement under this Agreement, does not consent to or waive any subsequent failure or breach by the Customer.
- B. If any provision of this Agreement is invalid under any applicable law, that provision shall not apply, but the remaining provisions shall apply as written.
- C. The captions and titles in this Agreement are for convenience only and shall not affect the interpretation or meaning of this Agreement.
- D. This Agreement is the full Agreement between JCI and the Customer as of the date it is signed. All previous conversations, correspondence, agreements, or representations related to this Agreement (including any Project Development Agreement) are not part of the Agreement between JCI and the Customer and are superceded by this Agreement.
- E. This Agreement shall be construed in accordance with the laws of the state of the principal place of Business of the Customer at the time of the execution of this Agreement.
- F. If there is more than one Customer named in this Agreement, the liability of each shall be joint and several.

NOTICE

**JCI MAKES NO WARRANTIES AS TO THE EQUIPMENT EXCEPT
AS SET FORTH ABOVE.**

Dated July 1, 2008

CUSTOMER:

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

SCOPE OF WORK SCHEDULE

- 1. SUMMARY OF WORK:** The following summarizes the Work to be provided by JCI under this Agreement, as further defined below:

Scope Of Work Summary:
1. Boiler Replacement
2. Condition "A" assessment Unit Ventilators
3. Control System retrofits
4. Lighting Retrofits
5. Water Conservation Retrofits
6. LED Traffic Signal Retrofits

1. Boiler Replacement

Mechanical scope: Johnson Controls Supply and install four (4) high efficiency hot water modular boilers.

- Remove two (2) Weil McLain cast sectional boilers 3770-MBH hot water boilers, boiler circulating pumps, expansion tank, air separator and associated beaching in boiler room.
- Provide and install four (4) 2-MMBTU/hr high efficiency modular hot water boilers combined with four (4) boiler circulating pumps.
- Provide and install natural gas piping for the four (4) 2-MMBTU gas fired boilers.
- Provide and install other heating ancillary devices that include air separator, bladder expansion tank and A1294C stainless beaching.
- The combustion air for the boilers will be tied into the existing riser stacks.
- Provide and install pipe insulation
- Provide modifications to the existing housekeeping pads to meet the footprint of the new heating plant.
- Furnish and install three (3) wells for secondary hot water control and monitoring.
- Provide all required permits for new boilers.
- All asbestos removal will be done by the City of Milwaukee.

Electrical:

- Provide all required electrical power wiring, disconnects, starters and interlocks for four (4) new gas fired modular boilers, boiler circulating pumps, and boiler control panel.

Controls:

- Provide DDC control for the (4) four new hot water boilers.
- Sequence the boilers, modulate the burners and reset the hot water supply temperature.
- Interlock the four boiler circulating pumps.
- Provide start/stop & status to the existing secondary hot water pump.
- Connect N2 communication cable to the new DDC controller.

Note: The existing heating and cooling piping and pumping associated with the two pipe heating/cooling system will remain intact.

2. Condition "A" assessment Unit Ventilators

Scope: Johnson Controls will perform a condition "A" assessment of (34) thirty four Unit Ventilators.

- Perform a condition "A" assessment of the (34) thirty four Unit Ventilators. The assessment will involve a detailed inspection of the unit ventilators including, mechanical operations (e.g. motor condition, motor mounts, belts, bearings, coil condition) and controls (hot water valve, damper actuator, thermostat). Johnson Controls will make recommendations for mechanical repairs of each unit as necessary. Recommended unit ventilator repairs are not included in the scope of this contract.
- Johnson Controls will calibrate the existing controls for the (34) thirty four Unit Ventilators. It is expected that the Unit Ventilators will be able to maintain space temperature, setback in winter to a cooler room temperature, switch automatically from heating to cooling based on central plant configuration and operate with the economizer mode during winter operation.

Existing Unit Ventilator calibration for rooms with unit ventilators include:

- Space thermostats
- Switching from heating to cooling
- Space Temperature Setback operation
- Pressure electric switch

3. Control System Retrofits

Controls Scope: Johnson Controls will upgrade following control systems.

- Network system using N2 communication bus:
- Replace the existing NCM panel with a NAE panel.
- Extend N2 communication trunk within the building.
- Provide Safety Academy dynamic graphics on the City of Milwaukee existing central Metasys server.

Replace the pneumatic controllers to DDC controllers:

- Air Handlers AHU-1, 2, 3, 6, 13, 14, B1, B15.
- Reuse existing valve and damper pneumatic actuation.
- Provide an override timer by the room temperature sensor (AHU-1 will have two room temperature sensors with override timers to allow the Police rooms and the Fire Dept rooms to override individually).
- Connect N2 communication cable to the new DDC controllers.

Replace the pneumatic controllers to DDC controllers for Air Handler AHU-5:

- Replace valve and damper pneumatic actuation with electric actuation.
- Provide an override timer by the room temperature sensor.
- Connect N2 communication cable to the new DDC controller.

Replace the pneumatic actuation with electric actuation Air Handler AHU-8:

- Replace valve and damper pneumatic actuation with electric actuation.
- This controller is DDC and connected to the N2 communication bus already.

Controls for stand-alone water cooled air handler Air Handler AHU-B2:

- Replace pneumatic PE switch with a DDC enable/disable relay.
- Provide an override timer by the room temperature sensor.
- Schedule the unit enable/disable via the N2 communication network.

Replace the standalone thermostat to a networked thermostat rooftop unit serving Room 308 Police Office:

- Replace thermostat with a DDC thermostat.
- Connect N2 communication cable to the new DDC thermostat.

Provide a DDC lockout to a standalone thermostat for the rooftop unit serving Room 325 Police Room:

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- Schedule the rooftop unit to disable via a relay on the N2 communication network.

Provide temporary override timer to turn on the fans that already utilize DDC.

- Provide override timer switches that will provide a temporary override to the DDC schedule for Air Handlers AHU-4, 8, 9, 10, 11, 12, 15.
- Reuse the existing room temperature sensor and mount the new timer override next to the temperature sensor.
- Wire extra cable to associated air handler DDC control panels.

Upgrade the Domestic Hot Water Controls to utilize direct digital control.

- Provide DDC control for the existing domestic water heater, pumps and 3-way automatic valve.
- Reuse existing pneumatic actuation that resides on Domestic Converter.
- Connect N2 communication cable to the new DDC controller.

Digitally switch the existing Unit Vent North & South Zone Controls for time of day scheduling.

- Provide DDC control for the two unit vent zones.
- Reuse existing pneumatic switching valves.
- Schedule the two valves via the N2 communication bus.
- Provide two new Metastat room temperature sensors and an override **timer** on the 2nd floor (one in a north room, one in a south room).
- Remove existing pneumatic occupied/unoccupied switches from the equipment room.
- Monitor the status of the day/night switchline for both zones.
- Monitor the status of the heating/cooling switchline.

Provide and install a DDC lockout for the existing chiller.

- Schedule the chiller to disable via the N2 communication network.

Other required tasking.

- Startup of control systems.
- Training – 16 hours of on-site training by Johnson Controls.
- Co-ordination with the Johnson Controls project manager for scheduling requirements.
- Complete installation drawings and As-built drawings.
- All required software for energy saving sequences.
- **Setup** all scheduling, alarming, and totalization for the M&V requirements.

4. Upgrade the following Lighting fixtures to high efficiency Lighting:

Lighting Scope: Johnson Controls will furnish and install retrofits for the following lighting fixtures.

Room #	Floor	Room Type and Number	Existing Lighting System Description	Upgraded Lighting System Description	Quantity of Fixtures
101	1	OFFICE	Existing (2) lamp T8 lay-in parabolic cube fixture.	Reflector Kit: 2' T8 lamp and electronic ballast.	9
101	1	OFFICE	Existing (3) lamp T8 lay-in parabolic fixture.	Reflector Kit: T8 lamp and electronic ballast.	2
101	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
103	1	OFFICE	Existing (2) lamp T12 wraparound	Retrofit with 4' T8 lamps and	18

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			pendant mount fixture.	electronic ballast..	
103	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
104	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
105	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
105	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
106	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	20
106	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	2
107	1	LOUNGE	Existing (2) 60 watt incandescent drum fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
107	1	LOUNGE	No existing lighting control.	NEW: Occupancy Sensor	1
108	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
108	1	HALL	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
108	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
109	1	CLASSROOM	Existing (2) lamp T8 lay-in parabolic cube fixture.	Reflector Kit: 2' T8 lamp and electronic ballast.	10
110	1	COPY	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
110	1	COPY	No existing lighting control.	NEW: Occupancy Sensor	1

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113	1	STORAGE	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
113	1	STORAGE	No existing lighting control.	NEW: Occupancy Sensor	1
116	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
116	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
116	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
117	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
117	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
117	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	16
117	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
117	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
118	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
118	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
118	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
119	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic	2

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				ballast..	
119	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
119	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
119	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
120	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
120	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
120	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
120	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
121	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
121	1	OFFICE	Existing (3) 13 watt compact florescent fixture.	DON'T DO: not included in project	6
121	1	OFFICE	Existing (4) lamp T12 box fixture.	Reflector Kit: T8 lamp and electronic ballast.	1
121	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
124	1	OFFICE	Existing (4) lamp T12 box fixture.	Reflector Kit: T8 lamp and electronic ballast.	2
124	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
125	1	OFFICE	Existing (4) lamp T12 box fixture.	Reflector Kit: T8 lamp and electronic ballast.	2
125	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
127	1	JANITOR	Existing 200 watt	Compact	1

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		CLOSET	incandescent fixture.	Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	
128	1	LOUNGE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	2
128	1	LOUNGE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
128	1	LOUNGE	No existing lighting control.	NEW: Occupancy Sensor	1
129	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	2
129	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
129	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
131	1	HALL	Existing (2) 13 watt compact florescent fixture.	DON'T DO: not included in project	7
131	1	HALL	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
131	1	JANITOR CLOSET	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	2
131	1	HALL	Existing LED fixture.	DON'T DO: not included in project	1
132	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
132	1	LOUNGE	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
132	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
132	1	LOUNGE	No existing lighting control.	NEW: Occupancy	1

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				Sensor	
136	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
136	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
137	1	RESTROOM	Do not retrofit these Fixtures.	DON'T DO: not included in project	1
137	1	RESTROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
137	1	RESTROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
137	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
137	1	OFFICE	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
137	1	RESTROOM	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	16
137	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
137	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	3
138	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
138	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
139	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
139	1	RESTROOM	No existing	NEW:	1

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			lighting control.	Occupancy Sensor	
140	1	RESTROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
140	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
141	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
141	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
142	1	OFFICE	Existing (2) lamp T12 lay-in fixture.	Reflector Kit: 2' T8 lamp and electronic ballast.	7
142	1	OFFICE	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
148	1	STORAGE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	1
148	1	STORAGE	No existing lighting control.	NEW: Occupancy Sensor	1
149	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
149	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
150	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	6
150	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
151	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	5
151	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	1
151	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1

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151	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
152	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	1
152	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
153	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	1
153	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
158	1	CLASSROOM	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	4
158	1	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
159	1	CLASSROOM	Existing (2) lamp T8 box fixture.	Retrofit with 4' T8 lamps and electronic ballast..	25
159	1	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	2
161	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	4
161	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
162	1	STORAGE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
162	1	STORAGE	No existing lighting control.	NEW: Occupancy Sensor	1
164	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
164	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
164	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1

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164	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
166	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	12
175	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
175	1	OFFICE	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	38
175	1	OFFICE	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	7
175	1	HALL	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
175	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
175	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	1
175	1	RESTROOM	Existing 26 watt compact florescent fixture.	DON'T DO: not included in project	1
175	1	HALL	Existing LED fixture.	DON'T DO: not included in project	1
175	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	2
175	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
182	1	CLASSROOM	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	23
182	1	CLASSROOM	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	28
182	1	CLASSROOM	Existing vending machine. Soda.	NEW: Occupancy Sensor	2
182	1	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	3

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189	1	RESTROOM	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
189	1	RESTROOM	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
191	1	OFFICE	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
191	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
197	1	STORAGE	Existing (2) 60 watt incandescent drum fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
201	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
201	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
202	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
202	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
203	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
203	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
204	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
204	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
205	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	30
205	2	CLASSROOM	No existing lighting control.	NEW: Occupancy	1

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206	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
206	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
207	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
207	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
208	2	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
208	2	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
208	2	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
209	2	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
209	2	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
210	2	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
210	2	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
212	2	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
212	2	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
213	2	LOUNGE WOMENS	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1

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213	2	LOUNGE WOMENS	Existing (3) 60 watt incandescent lamp.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	4
213	2	LOUNGE WOMENS	No existing lighting control.	NEW: Occupancy Sensor	2
218	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	42
218	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	2
222	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	30
222	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
223	2	CLASSROOM	Existing (2) lamp T12 lay-in fixture.	Reflector Kit: 2' T8 lamp and electronic ballast.	5
223	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
224	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
224	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
225	2	CLASSROOM	Existing (2) lamp T8 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	36
225	2	CLASSROOM	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	6
225	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
225	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
227	2	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	4

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235	2	LIBRARY	Existing (2) lamp T8 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
235	2	LIBRARY	Existing (2) lamp T8 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
235	2	LIBRARY	Existing (2) lamp T8 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	5
235	2	LIBRARY	Existing (2) lamp T8 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
235	2	LIBRARY	Existing (2) lamp T8 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	3
235	2	LIBRARY	Existing (4) lamp T8 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	32
235	2	LIBRARY	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	15
235	2	LIBRARY	Existing LED fixture.	DON'T DO: not included in project	2
236	2	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	2
237	2	CLASSROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
237	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
238	2	CLASSROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
238	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
239	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
239	2	CLASSROOM	Existing (2) lamp T12 wraparound	Retrofit with 4' T8 lamps and	2

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			pendant mount fixture.	electronic ballast..	
239	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
239	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	2
239	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
302	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
302	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
302	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
303	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
303	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
305	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	14
305	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
306	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
306	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
307	3	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	1
308	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	30
308	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1

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313	3	RESTROOM	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	6
314	3	STORAGE	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	2
315	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
315	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
316	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
316	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	3
316	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
317	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	24
317	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	2
319	3	OFFICE	Existing (3) lamp T8 lay-in parabolic fixture.	Reflector Kit: T8 lamp and electronic ballast.	3
319	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
320	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
320	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
321	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	30
321	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
324	3	CONFERENCE ROOM	Existing (2) lamp T12 wraparound	Retrofit with 4' T8 lamps and	36

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			pendant mount fixture.	electronic ballast..	
324	3	CONFERENCE ROOM	No existing lighting control.	NEW: Occupancy Sensor	2
325	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	25
325	3	OFFICE	No existing lighting control.	NEW: Daylight Harvesting Control	1
326	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
326	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
326	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
327	3	OFFICE	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	3
327	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
327	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
328	3	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	2
328	3	MECHANICAL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	3
329	3	MECHANICAL	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
329	3	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	1
329	3	MECHANICAL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	1
330	3	MECHANICAL	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2

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330	3	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	2
	1	HALL	Do not retrofit these Fixtures.	DON'T DO: not included in project	32
	1	HALL	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	15
	1	HALL	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	3
	2	ELEVATOR	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
	2	HALL	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
	3	HALL	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
	3	HALL	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
	1	BACKSTAGE	Existing (2) 60 watt incandescent drum fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	4
	1	RESTROOM	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	6
	2	RESTROOM	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	6
	1	STORAGE	Existing (2) lamp T12 vanity wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
	1	STORAGE	Existing (2) lamp T12 vanity	Retrofit with 4' T8 lamps and	2

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			wraparound fixture.	electronic ballast..	
	1	BACKSTAGE	Existing (2) lamp fixture T12 slimline strip fixture.	NEW: T8 fixture	2
	1	GYM	Existing (4) lamp T8 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	136
	1	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	6
	1	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	2
	1	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	32
	1	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	5
	2	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	14
	2	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	18
	3	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	20
	3	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	8
	1	GYM	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	84
	2	HALL	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
	1	HALL	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	6
	1	HALL	Existing 26 watt compact florescent fixture.	DON'T DO: not included in project	30
	1	BACKSTAGE	Existing 26 watt compact florescent fixture.	DON'T DO: not included in project	1

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	1	HALL	Existing 26 watt compact florescent fixture.	DON'T DO: not included in project	4
	1	BACKSTAGE	Existing 42 watt compact flourescent lamp.	DON'T DO: not included in project	5
	1	HALL	Existing 42 watt compact flourescent lamp.	DON'T DO: not included in project	2
	2	JANITOR CLOSET	Existing 42 watt compact flourescent lamp.	DON'T DO: not included in project	2
	1	HALL	Existing LED fixture.	DON'T DO: not included in project	4
	1	GYM	Existing LED fixture.	DON'T DO: not included in project	6
	1	HALL	Existing LED fixture.	DON'T DO: not included in project	6
	2	HALL	Existing LED fixture.	DON'T DO: not included in project	4
	3	HALL	Existing LED fixture.	DON'T DO: not included in project	3
	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	2
	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
	2	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
102A	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
102A	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
102A	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
102A	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
102B	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1

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102B	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
102C	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
102C	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
104A	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
104A	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
104B	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
104B	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
104C	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
104C	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
104D	1	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	6
104D	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
1-101	1	VESTIBULE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	2
1-101	1	VESTIBULE	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	4
1-101	1	VESTIBULE	Existing LED fixture.	DON'T DO: not included in project	2
1-101	1	VESTIBULE	Existing vending machine. Soda.	NEW: Occupancy Sensor	1

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1-101	1	VESTIBULE	No existing lighting control.	NEW: Occupancy Sensor	1
1-104	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
1-104	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
1-105	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
1-105	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
1-108	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
1-108	1	RESTROOM	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
1-108	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
1-109	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
1-109	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
1-110	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
1-110	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
1-113	1	OFFICE	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	4
1-113	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
1-114	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic	2

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				ballast..	
1-114	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
1-114	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
1-115	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
1-115	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	NEW: T8 fixture	1
1-115	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
1-115	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
1-139	1	STORAGE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
1-139	1	STORAGE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
1-139	1	STORAGE	No existing lighting control.	NEW: Occupancy Sensor	1
122-- 123	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
122-- 123	1	OFFICE	Existing 100 watt incandescent can fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	4
122-- 123	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	2
125- 126	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
125- 126	1	OFFICE	Existing 100 watt incandescent can	Compact Fluorescent	2

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			fixture.	Lamp: Screw-in Compact Fluorescent Lamp	
125-126	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	2
127-128	1	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
127-128	1	OFFICE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	8
127-128	1	OFFICE	Existing 100 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
127-128	1	OFFICE	Existing 40 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	6
127-128	1	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
127-128	1	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
166-158	1	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	6
166-191	1	HALL	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
166-191	1	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	15
166-191	1	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	2
166-191	1	HALL	Existing 26 watt compact florescent fixture.	DON'T DO: not included in project	4
166-191	1	HALL	Existing LED fixture.	DON'T DO: not included in project	2
170-171	1	STORAGE	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact	2

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				Fluorescent Lamp	
170-171	1	STORAGE	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	1
220-221	2	CLASSROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
220-221	2	CLASSROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
220-221	2	CLASSROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
220-221	2	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	2
301-301A	3	OFFICE	Existing (2) lamp T8 egg crate fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
301-301A	3	OFFICE	Existing (2) lamp T12 strip fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
301-301A	3	OFFICE	Existing (2) lamp T12 vanity wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
301-301A	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	26
301-301A	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	3
309-309A	3	RESTROOM	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
309-309A	3	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
309-309A	3	RESTROOM	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
309-309A	3	RESTROOM	No existing lighting control.	NEW: Occupancy	4

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				Sensor	
322-323	3	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
322-323	3	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
B-1	BASEMENT	FITNESS	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	35
B-1	BASEMENT	THEATHER	Existing (4) lamp T8 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast.	30
B-1	BASEMENT	FITNESS	Existing LED fixture.	DON'T DO: not included in project	3
B10	BASEMENT	MECHANICAL	Existing 42 watt compact flourescent lamp.	DON'T DO: not included in project	1
B11	BASEMENT	MECHANICAL	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
B11	BASEMENT	MECHANICAL	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
B11	BASEMENT	MECHANICAL	Existing 42 watt compact flourescent lamp.	DON'T DO: not included in project	7
B12	BASEMENT	RESTROOM	Existing (2) 60 watt incandescent vanity fixture	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
B12	BASEMENT	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
B-1-2	BASEMENT	CLASSROOM	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	8
B13	BASEMENT	RESTROOM	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
B13	BASEMENT	RESTROOM	No existing lighting control.	NEW: Occupancy Sensor	1
B-1-3	BASEMENT	HALL	Existing (2) 60	Compact	2

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			watt incandescent drum fixture.	Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	
B-1-3	BASEMENT	HALL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	5
B-1-3	BASEMENT	HALL	Existing 65 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
B-1-3	BASEMENT	HALL	Existing LED fixture.	DON'T DO: not included in project	1
B-14	BASEMENT	STORAGE	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
B-15	BASEMENT	STORAGE	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
B-16	BASEMENT	CLASSROOM	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	12
B-16	BASEMENT	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	1
B-16	BASEMENT	CLASSROOM	No existing lighting control.	NEW: Occupancy Sensor	2
B-16B	BASEMENT	FIRING RANGE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	32
B-16B	BASEMENT	FIRING RANGE	No existing lighting control.	NEW: Occupancy Sensor	1
B-17	BASEMENT	VESTIBULE	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
B-17	BASEMENT	VESTIBULE	Existing LED fixture.	DON'T DO: not included in project	1
B-19-22	BASEMENT	GYM LOCKER MEN'S	Existing (2) 100 watt incandescent fixture.	NEW: T8 fixture	3
B-19-22	BASEMENT	GYM LOCKER MEN'S	Existing (2) 60 watt incandescent	Compact Fluorescent	1

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			vanity fixture	Lamp: Screw-in Compact Fluorescent Lamp	
B-19-22	BASEMENT	GYM LOCKER MEN'S	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
B-19-22	BASEMENT	GYM LOCKER MEN'S	No existing lighting control.	NEW: Occupancy Sensor	2
B-2	BASEMENT	CAFETERIA	Existing (2) lamp T12 wraparound fixture,	Retrofit with 4' T8 lamps and electronic ballast..	2
B-2	BASEMENT	CAFETERIA	Existing (4) lamp T12 lay-in fixture	Reflector Kit: T8 lamp and electronic ballast	36
B-2	BASEMENT	CAFETERIA	Existing vending machine. Snack.	NEW: Occupancy Sensor	1
B-2	BASEMENT	CAFETERIA	Existing vending machine. Soda.	NEW: Occupancy Sensor	2
B-2	BASEMENT	CAFETERIA	No existing lighting control.	NEW: Occupancy Sensor	1
B-23	BASEMENT	GYM LOCKER MEN'S	Existing (2) 100 watt incandescent fixture.	NEW: T8 fixture	9
B-23	BASEMENT	GYM LOCKER MEN'S	Existing 60 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	21
B-24a-c	BASEMENT	VESTIBULE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 2' T8 lamps and electronic ballast..	1
B-24a-c	BASEMENT	VESTIBULE	Existing (2) lamp T12 industrial fixture.	Retrofit with 4' T8 lamps and electronic ballast..	15
B-24a-c	BASEMENT	VESTIBULE	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
B-24a-c	BASEMENT	VESTIBULE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	2
B-24a-c	BASEMENT	VESTIBULE	Existing LED fixture.	DON'T DO: not included in project	1

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B-25	BASEMENT	HALL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	3
B-27	BASEMENT	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	6
B-27	BASEMENT	HALL	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
B-27	BASEMENT	HALL	Existing LED fixture.	DON'T DO: not included in project	1
B-28	BASEMENT	MECHANICAL	Existing (1) lamp T12 slimline strip fixture.	Reflector Kit: T8 lamp and electronic ballast	2
B-28	BASEMENT	MECHANICAL	Existing (2) lamp T12 industrial fixture.	Retrofit with 4' T8 lamps and electronic ballast..	5
B-28	BASEMENT	MECHANICAL	Existing (2) lamp fixture T12 slimline strip fixture.	NEW: T8 fixture	1
B-28	BASEMENT	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	4
B-28	BASEMENT	MECHANICAL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	5
B-29	BASEMENT	GUN CLEANING ROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	10
B-29	BASEMENT	GUN CLEANING ROOM	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	5
B-29	BASEMENT	GUN CLEANING ROOM	Existing 100 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
B-29	BASEMENT	GUN CLEANING ROOM	Existing LED fixture.	DON'T DO: not included in project	1
B-29	BASEMENT	GUN CLEANING ROOM	No existing lighting control.	NEW: Occupancy Sensor	1
B-29a	BASEMENT	RANGE VESTIBULE	Existing (2) 26 watt compact florescent fixture.	DON'T DO: not included in project	8
B-29a	BASEMENT	RANGE VESTIBULE	Existing (2) lamp T8 lay-in fixture.	Retrofit with 4' T8 lamps and	12

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				electronic ballast..	
B-29a	BASEMENT	RANGE VESTIBULE	Existing (2) lamp T8 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	3
B-29a	BASEMENT	RANGE VESTIBULE	Existing LED fixture.	DON'T DO: not included in project	2
B2-B16	BASEMENT	HALL	Existing (4) lamp T12 lay-in fixture.	Reflector Kit: T8 lamp and electronic ballast	28
B2-B16	BASEMENT	HALL	Existing LED fixture.	DON'T DO: not included in project	4
B-3	BASEMENT	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
B-3	BASEMENT	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
B32	BASEMENT	HALL	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	12
B32	BASEMENT	HALL	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	5
B32	BASEMENT	HALL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	5
B--34	BASEMENT	GYM LOCKER MEN'S	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	14
B--34	BASEMENT	GYM LOCKER MEN'S	Existing (2) lamp T12 wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast..	3
B--34	BASEMENT	GYM LOCKER MEN'S	Existing LED fixture.	DON'T DO: not included in project	2
B-35-36	BASEMENT	HALL ALL	Existing (1) lamp T12 vanity wraparound fixture.	Retrofit with 4' T8 lamps and electronic ballast.	13
B-35-36	BASEMENT	HALL ALL	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	5

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B-35-36	BASEMENT	HALL ALL	Existing (2) lamp fixture T12 slimline strip fixture.	NEW: T8 fixture	2
B-35-36	BASEMENT	HALL ALL	Existing 200 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
B-35-36	BASEMENT	HALL ALL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	3
B-35-36	BASEMENT	HALL ALL	Existing LED fixture.	DON'T DO: not included in project	3
B-36	BASEMENT	MECHANICAL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	8
B-37	BASEMENT	STREET SCENE	Existing (2) lamp T12 industrial fixture.	Retrofit with 4' T8 lamps and electronic ballast..	11
B-37	BASEMENT	STREET SCENE	Existing 100 watt incandescent fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	1
B-37	BASEMENT	STREET SCENE	Existing LED fixture.	DON'T DO: not included in project	2
B-38	BASEMENT	STORAGE	Existing (2) lamp T12 industrial fixture.	Retrofit with 4' T8 lamps and electronic ballast..	1
B-4	BASEMENT	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
B-4	BASEMENT	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
B-5	BASEMENT	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
B-5	BASEMENT	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
B-6	BASEMENT	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
B-6	BASEMENT	OFFICE	No existing lighting control.	NEW: Occupancy	1

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				Sensor	
B-7	BASEMENT	OFFICE	Existing (2) lamp T12 wraparound pendant mount fixture.	Retrofit with 4' T8 lamps and electronic ballast..	18
B-7	BASEMENT	OFFICE	Existing vending machine. Soda.	NEW: Occupancy Sensor	1
B-7	BASEMENT	OFFICE	No existing lighting control.	NEW: Occupancy Sensor	1
B9	BASEMENT	MECHANICAL	Existing 42 watt compact fluorescent lamp.	DON'T DO: not included in project	4
121-8	1	HALL	Existing (2) 13 watt compact florescent fixture.	DON'T DO: not included in project	9
121-8	1	HALL	Existing LED fixture.	DON'T DO: not included in project	1
S-1	3	STAIRS	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	14
S-2	3	STAIRS	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	12
S-2	3	STAIRS	Existing (2) lamp T12 lay-in fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
S-3	3	STAIRS	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	14
S-6	1	STAIRWELL	Existing (2) 60 watt incandescent drum fixture.	Compact Fluorescent Lamp: Screw-in Compact Fluorescent Lamp	2
	1	VESTIBULE	Existing (1) lamp T12 strip Fixture.	Retrofit with 4' T8 lamps and electronic ballast..	10
	BASEMENT	MECHANICAL ROOM HALL	Existing (2) lamp T12 industrial fixture.	Retrofit with 4' T8 lamps and electronic ballast..	4
	BASEMENT	FREIGHT HALL TO ELEVATOR	Existing 100 watt incandescent, lay-in fixture.	Compact Fluorescent Lamp: Screw-in Compact	1

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				Fluorescent Lamp	
	BASEMENT	MECHANICAL ROOM HALL	Existing 200 watt incandescent fixture.	NEW: T8 fixture	4
	BASEMENT	JANITOR CLOSET	Existing 42 watt compact flourescent lamp.	DON'T DO: not included in project	2

5. Plumbing Retrofits

Plumbing Scope: Johnson Controls will furnish and install following retrofits for low flow and low flush plumbing.

Room	Existing Fixture Description	Existing Qty	Measure Description
MRR 1	Closet Wall Elongated Pre71	6	New Wall Mount Closet and New Valve with Dual Flush Handle
MRR 1	Lavatory Sink Wash Basin Foot Pedal	2	Don't Do
MRR 1	Urinal Wall Timer	4	New .5 gpf Urinal Valve and supply piping
MRR 2	Urinal Floor Timer	2	New .5 gpf Urinal Valve and supply piping
MRR 2	Lavatory Sink 6" Vertical	2	Retrofit with 0.5 gpm vandal proof spray moderator
MRR 2	Closet Floor Elongated Pre71	2	New floor mounted elongated bowl and new 1.6 gpf valve
MRR 3	Closet Floor Elongated Pre71	1	New floor mounted elongated bowl and new 1.6 gpf valve
MRR 3	Lavatory Sink 4" Standard	1	Retrofit with 0.5 gpm vandal proof spray moderator
WRR 1	Closet Wall Elongated Pre71	1	New wall mounted elongated bowl with new 1.6 gpf valve - 16" VB Tube
WRR 1	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
WLR	Closet Wall Elongated Sloan	7	New wall mounted elongated bowl with new 1.6 gpf valve - 16" VB Tube
WLR	Lavatory Sink Wash Basin Foot Pedal	2	Don't Do
WLR	Shower Brass Standard	6	Don't Do
Training Offices	Closet Floor Elongated Pre71	3	New floor mounted elongated bowl and new 1.6 gpf valve
Training Offices	Lavatory Sink 4" Standard	16	Retrofit with 0.5 gpm vandal proof spray moderator
Break Rm	Kitchen Sink 8" Standard	1	Retrofit with 1.5 gpm VP laminar flow moderator
RM 138	Closet Floor Elongated Pre71	1	New floor mounted elongated bowl and new 1.6 gpf valve
RM 138	Lavatory Sink 4" Standard	1	Retrofit with 0.5 gpm vandal proof spray moderator
RM 141	Closet Floor Elongated Pre71	1	New floor mounted elongated bowl and new 1.6 gpf valve
RM 141	Lavatory Sink 4" Standard	1	Retrofit with 0.5 gpm vandal proof spray moderator
Fire Dept Area	Closet Wall Elongated Tank	1	New Wall Mt Elongated Tank Toilet
Fire Dept Area	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
Rm 110	Kitchen Sink 8" Standard	1	Retrofit with 1.5 gpm VP laminar flow moderator
Break Rm	Kitchen Sink 8" Standard	1	Retrofit with 1.5 gpm VP laminar flow moderator

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Basement Shower Rm	Shower Brass Standard	24	Don't Do
Fire Arm Cleaning	Lavatory Sink Wash Basin Foot Pedal	1	Don't Do
Basement MRR 1	Closet Wall Elongated Pre71	3	New Wall Mount Closet and New Valve with Dual Flush Handle
Basement MRR 1	Lavatory Sink Wash Basin Foot Pedal	1	Don't Do
Printing-Stores	Closet Wall Elongated Pre71	1	New wall mounted elongated bowl with new 1.6 gpf valve - 16" VB Tube
Printing-Stores	Lavatory Sink 4" Standard	1	Retrofit with 0.5 gpm vandal proof spray moderator
Printing-Stores	Kitchen Sink 8" Standard	1	Retrofit with 1.5 gpm VP laminar flow moderator
2nd FL MRR	Closet Wall Elongated Pre71	6	New Wall Mount Closet and New Valve with Dual Flush Handle
2nd FL MRR	Lavatory Sink Wash Basin Foot Pedal	2	Don't Do
2nd FL MRR	Urinal Wall Timer	4	New .5 gpf Urinal Valve and supply piping
2nd FL WRR 1	Closet Wall Elongated Sloan	1	New wall mounted elongated bowl with new 1.6 gpf valve - 16" VB Tube
2nd FL WRR 1	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
2nd FL WRR 1	Closet Wall Elongated Pre71	1	New wall mounted elongated bowl with new 1.6 gpf valve - 16" VB Tube
2nd FL WRR 1	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
3rd FL MRR	Closet Wall Elongated Pre71	6	New Wall Mount Closet and New Valve with Dual Flush Handle
3rd FL MRR	Lavatory Sink Wash Basin Foot Pedal	2	Don't Do
3rd FL MRR	Urinal Wall Timer	4	New .5 gpf Urinal Valve and supply piping
3rd FL WRR 1	Closet Wall Elongated Sloan	1	New wall mounted elongated bowl with new 1.6 gpf valve - 16" VB Tube
3rd FL WRR 1	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
3rd FL WRR 1	Closet Wall Elongated Pre71	1	New wall mounted elongated bowl with new 1.6 gpf valve - 16" VB Tube
3rd FL WRR 1	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
RM 117	Closet Wall Elongated Pre71	1	New Wall Mount Closet and New Valve with Dual Flush Handle
RM 117	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
RM 134	Closet Wall Elongated Pre71	1	New Wall Mount Closet and New Valve with Dual Flush Handle
RM 134	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
RM 137	Closet Wall Elongated Pre71	1	New Wall Mount Closet and New Valve with Dual Flush Handle
RM 137	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator

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RM 138	Closet Wall Elongated Pre71	1	New Wall Mount Closet and New Valve with Dual Flush Handle
RM 138	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
RM 141	Closet Wall Elongated Pre71	1	New Wall Mount Closet and New Valve with Dual Flush Handle
RM 141	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
RM 151	Lavatory Sink 6" Vertical	1	Retrofit with 0.5 gpm vandal proof spray moderator
Gym Stage	Closet Wall Elongated Pre71	2	New Wall Mount Closet and New Valve with Dual Flush Handle
Gym Stage	Lavatory Sink 6" Vertical	2	Retrofit with 0.5 gpm vandal proof spray moderator

6. LED Traffic Signal Retrofits:

Scope: Johnson Controls will furnish and install all material and labor to retrofit existing traffic signals at 198 identified intersections, with new GE Lumination LED modules.

- The traffic signal retrofit will involve the following bulb types, quantities and LED modules:

Bulb Type	Quantity	LED Module Model Number
12" Red	1065	DR6-RTFB-17A
12" Yellow	1066	DR6-YTFB-17A-YX
12" Green	1037	DR6-GTFB-17A
8" Red	1207	DR4-RTFB-17A
8" Yellow	1248	DR4-YTFB-17A-YX
8" Green	1232	DR4-GTFB-17A
12" Red Arrow	8	DR6-RTAAN-17A
12" Yellow Arrow	242	DR6-YTAAN-17A-YX
12" Green Arrow	304	DR6-GTAAN-17A
Pedestrian Walking Man	1522	PS5-WFM3-01A (9") PS6-WFM3-01A (12")
Pedestrian Hand	1522	PS5-PFH1-01A (9") PS6-PFH1-01A (12")
12" Programmable Visibility Red	67	DR3-RCFB-01A
12" Programmable Visibility Yellow	58	DR3-YCFB-01A
12" Programmable Visibility Green	56	DR3-GCFB-01A
12" Programmable Visibility Red Arrow	2	DR3-RCFB-01A
12" Programmable Visibility Yellow Arrow	9	DR3-YCFB-01A
12" Programmable Visibility Green Arrow	10	DR3-GCFB-01A

- Johnson Controls will conduct a physical audit of each of the 198 intersections identified, prior to installation, to confirm existing bulb types/quantities and scheduling for each intersection to be affected by the project. This physical audit for planning and material ordering will also allow for a one-time change order to reconcile the minor adjustment expected as field installation takes place at each intersection.
- The new LED modules will meet current ITE performance standards and will be retrofitted into existing signal housings.
- Installation will be conducted by two crews completing a minimum of two intersections per day. During installation, traffic signals will remain operational and traffic control will be implemented through the use of lane closures and appropriate signage resulting in minimal disruption.

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- All waste disposal, recycling and applicable permits are included as a part of our project proposal. All material will be received and staged for installation by Johnson Controls/subcontractor.
- Johnson Controls will include a warranty on LED module material, workmanship and intensity for a term of 72 months and a warranty on installation for a term of 12 months.
- Johnson Controls will include delivery of product for the City to hold as inventory in case of traffic signal knockdowns where immediate LED signal replacements are required.
 - Johnson Controls will include seed inventory to support maintenance for following GE Lumination products and counts of each of the 198 intersections identified:

Bulb Type	Quantity	LED Module Model Number
12" Red	10	DR6-RTFB-17A
12" Yellow	10	DR6-YTFB-17A-YX
12" Green	10	DR6-GTFB-17A
8" Red	10	DR4-RTFB-17A
8" Yellow	10	DR4-YTFB-17A-YX
8" Green	10	DR4-GTFB-17A
12" Red Arrow	1	DR6-RTAAN-17A
12" Yellow Arrow	10	DR6-YTAAN-17A-YX
12" Green Arrow	10	DR6-GTAAN-17A
Pedestrian Walking Man	10	PS5-WFM3-01A (9") PS6-WFM3-01A (12")
Pedestrian Hand	10	PS5-PFH1-01A (9") PS6-PFH1-01A (12")
12" Programmable Visibility Red	1	DR3-RCFB-01A
12" Programmable Visibility Yellow	1	DR3-YCFB-01A
12" Programmable Visibility Green	1	DR3-GCFB-01A
12" Programmable Visibility Red Arrow	1	DR3-RCFB-01A
12" Programmable Visibility Yellow Arrow	1	DR3-YCFB-01A
12" Programmable Visibility Green Arrow	1	DR3-GCFB-01A

Dated July 1, 2008

CUSTOMER:

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

ASSURED PERFORMANCE GUARANTEE SCHEDULE

1. DEFINITIONS. The following terms are defined for purposes of this Schedule as follows:

Project Benefits are the Measured savings, cost avoidance &/or Billable Usage increases that occur in the Guarantee Term plus the Non-Measured savings, cost avoidance &/or Billable Usage increases achieved for that year as set forth in paragraph 3, Reconciliation, of this Schedule.

Annual Guaranteed Project Benefits are the portion of the Total Guaranteed Project Benefits to be achieved in any one year of the Guarantee Term, calculated and adjusted as set forth in this Schedule.

Annual Project Benefits are the Project Benefits achieved for any one year of this Agreement.

Project Benefits Surplus is the amount by which the Annual Project Benefits that exceed the Annual Guaranteed Project Benefits in any one-year of the Guarantee Term.

Project Benefits Shortfall is the amount by which the Annual Guaranteed Project Benefits exceeds the Annual Project Benefits in any one-year of the Guarantee Term.

Guarantee Term is the term of this Assured Performance Guarantee. As outlined in paragraph 2 of this Agreement, the Guarantee Term shall coincide with the term of Services and shall be 36 months from the Substantial Completion Date, unless terminated earlier.

Installation Period means the period between the Commencement Date and the first day of the month following the Substantial Completion Date. For purposes of the annual reconciliation, Project Benefits achieved during the Installation Period shall be considered Project Benefits achieved during the first year of the Guarantee Term.

Measured Project Benefits are achieved and calculated as set forth in paragraph 3, Reconciliation, of this Schedule.

Non-Measured Project Benefits are the Project Benefits that have been agreed by the parties will be deemed achieved on the Substantial Completion Date and are set forth in Exhibit 2 of this Schedule. JCI and the Customer agree that Non-Measured Project Benefits may include, but are not limited to, future capital or operational costs avoided as a result of this Agreement. Customer agrees and acknowledges that JCI shall not be responsible for the achievement of such Project Benefits, as the actual realization of those Project Benefits is not within JCI's control. Customer acknowledges that it has evaluated sufficient information to believe that the Non-Measured Project Benefits will occur. As a result, Non-Measured Project Benefits shall not be measured or monitored at any time during the Guarantee Term, but rather shall be deemed achieved on the Substantial Completion Date.

Billable Usage Increases are the incremental increases in billable usage that occur as a result of guaranteed meter efficiency improvements as calculated in (Schedule 2, Exhibit 6) pursuant to billing information as provided by the Customer.

Total Guaranteed Project Benefits are the Total Guaranteed Project Benefits to be achieved during the entire Guarantee Term, calculated and adjusted as set forth in this Schedule.

Total Project Benefits are the Project Benefits achieved during the entire term of this Agreement.

Equipment is the product(s) installed by JCI, its subcontractors and/or its agents as outlined in Schedule 1 (Scope of Work).

Service is the scope of work provided by JCI, its subcontractors and/or its agents as outlined in Schedule 3 (Service Schedule).

Baseline is the mutually agreed upon calculated figures and/or usage amounts that reflect existing conditions and assumptions as set forth in Schedule 2, Exhibit 6.

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2. **GUARANTEE.** Subject to the terms and conditions of this Agreement, JCI guarantees that the Customer will achieve \$1,280,923 of Total Guarantee Project Benefits during the Term of the Agreement.

- 3. RECONCILIATION.** Within 60 days after the Substantial Completion Date, or earlier if otherwise specified in this Performance Contract, JCI will calculate the Project Benefit achieved during the Installation Period and advise the Customer of the amount of such Project Benefits. The frequency and the methods of reconciliation to be used during the Guarantee Term have been approved by the Customer at the time that this Agreement was executed and are defined in the Exhibits attached to this Schedule. Except by mutual agreement of the parties, no changes to the frequency or methods of reconciliation may be made during the Guarantee Term; but, if a utility providing energy to the Customer modifies its method of billing during the Guarantee Term, or if the Customer changes its utility suppliers or method of purchasing, JCI may, at its option, adjust the reconciliation methods to methods appropriate to the utility's revised method of billing.

Customer agrees and acknowledges that JCI shall not be responsible for the achievement of such Project Benefits, as the actual realization of those Project Benefits is not within JCI's control. Customer acknowledges that it has evaluated sufficient information to believe that the Non-Measured Project Benefits will occur. As a result, Non-Measured Project Benefits shall not be measured or monitored at any time during the Guarantee Term, but rather shall be deemed achieved on the Substantial Completion Date.

- 4. CHANGES IN USE.** The Customer agrees to notify JCI, within five (5) business days, of any actual or intended change, whether before or during the Guarantee Term, in the use of any facility or equipment to which this Schedule applies, or of any other condition arising before or during the Guarantee Term, that reasonably could be expected to change the amount of Project Benefits to which this Schedule applies. Such a change or condition would include, but is not limited to: changes in the primary use of any facility; changes to the hours of operation of any facility; changes or modifications to the Equipment or Services provided under this Agreement; failure of the premises to meet local building codes; changes in utility suppliers, method of utility billing, or method of utility purchasing; improper maintenance of the Equipment or of any related equipment other than by JCI; changes to the equipment or to any facility required by changes to local building codes; or additions or deletions of equipment at any facility. Such a change or condition need not be identified in the Base Line in order to permit JCI to make an adjustment.

Upon receipt of such notice, or if JCI independently learns of any such change or condition, JCI shall calculate and send to the Customer a notice of adjustment to the Base Line to reflect the impact of such change or condition, and the adjustment shall become effective as of the date that the change or condition first arose. Should the Customer fail to provide JCI with notice of any such change or condition, JCI may make reasonable estimates as to the impact of such change or condition and as to the date on which such change or condition first arose in calculating the impact of such change or condition, and such estimates shall be conclusive.

- 5. PROJECT BENEFIT SURPLUSES OR SHORTFALLS .** If the Annual Project Benefits during a specific year of the Guarantee Term, plus amounts credited from surpluses in the Installation Period and earlier years of the Guarantee Term, are less than the Annual Guaranteed Project Benefits for that year, JCI may apply the difference against any unpaid balances from the Customer then existing under the Agreement. If there are any remaining amounts, JCI may, where permitted by law, (a) carry over the difference to the next year of the Performance Contract so as to increase the Annual Guaranteed Project Benefits in that year or (b) at the Customer's written election, pay the Customer any remaining Project Benefit shortfalls, however JCI reserves the right to bill Customer for these Project Benefit shortfall payments should subsequent years of the Agreement yield Project Benefit surpluses. Upon the mutual agreement of the parties, JCI may also provide additional products or services, in the value of the shortfall, at no additional cost to the Customer. Where Project Benefit shortfalls have occurred, JCI reserves the right, subject to the approval of the Customer, which shall not be unreasonably withheld, to implement additional operational improvements or conservation measures, at no cost to the Customer, that will generate additional Project Benefits in future years of the Guarantee Term. Such payment or credit shall be the sole and exclusive remedy of the Customer for any failure by JCI to achieve guaranteed Project Benefits under this Agreement, including any alleged breach of any other express or implied warranty of Project Benefits. JCI may credit any Project Benefit Surplus, in whole or in part, toward the Annual Guaranteed Project Benefits in any future year of the Guarantee Term.

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The following Exhibits are attached and made part of this Schedule:

Exhibit 1	Annual Reconciliation & Guaranteed Project Benefit Allocation
Exhibit 2	Non-Measured Project Benefits
Exhibit 3	Responsibilities of Customer
Exhibit 4	Unit Utility Rates and Costs
Exhibit 5	Primary Operations Schedules Pre & Post Retrofit
Exhibit 6	Calculation of Base Line and Project Benefits

- ☒ FEMP or IPMVP Option A
- ☒ FEMP or IPMVP Option B
- ☐ FEMP or IPMVP Option C
- ☐ FEMP or IPMVP Option D

ANNUAL RECONCILIATION & GUARANTEED PROJECT BENEFIT ALLOCATION

Year	Utility Cost Avoidance	Operations & Maintenance Cost Avoidance	Future Capital Cost Avoidance	Mutually Agreed Billable Usage Increases	Total Guaranteed Project Benefits
Implem.	\$	\$	\$	\$	\$
1	\$338,861	\$94,971	\$	\$	\$433,832
2	\$349,027	\$68,259	\$	\$	\$417,286
3	\$359,498	\$70,307	\$	\$	\$429,805
Totals	\$1,047,386	\$233,537	\$	\$	\$1,280,923

CUSTOMER:

JOHNSON CONTROLS, INC.

Initials:_____

Initials:_____

Non-Measured Project Benefits

The Project Benefits identified below shall be Non-Measured Project Benefits (as defined above) under this Schedule. The amount of the Non-Measured Project Benefits shall be deemed to increase during each year of the Guarantee Term by the escalation percentages set forth below.

Source of Non-Measured Project Benefits	First Year Project Benefits	Escalation
Building Lighting Material Savings	\$ 1,722	3 %
Repairs for two (2) cast sectional boilers (one time)	\$ 28,700	0 %
Controls, Lighting and Plumbing Maintenance Avoidance Savings	\$ 7,200	3 %
Traffic Light Cost Avoidance	\$ 57,349	3 %
TOTAL NON-MEASURED PROJECT BENEFITS	\$ 94,971	N/A

Dated July 1, 2008

CUSTOMER:

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

CUSTOMER RESPONSIBILITIES

In order for JCI to perform its obligations under this Agreement with respect to the Work, the Assured Performance Guarantee, and the M&V Services, Customer shall be responsible for:

1. Properly maintaining, and performing appropriate preventative maintenance on, all equipment and building systems affecting the Assured Performance Guarantee in accordance with manufacturers' standards and specifications;
2. Providing the utility bills, reports, and similar information reasonably necessary for administering JCI's obligations under the Assured Performance Guarantee within five (5) days of Customer receipt and/or generation or JCI's request therefor;
3. Providing all records relating to energy and/or water usage and related maintenance of the premises and relevant equipment requested by JCI;
4. Providing and installing utility sub-meters on all new construction and/or additions built during the Guarantee Term as recommended by JCI or, alternatively, paying JCI's applicable fees for calculating necessary adjustments to the Assured Performance Guarantee as a result of the new construction;
5. Providing and maintaining a dedicated telephone line and/or TCP/IP remote connection to facilitate remote monitoring of relevant equipment;
6. Promptly notifying JCI of any change in use or condition described in Schedule 5 of Schedule 2 or any other matter that may impact the Assured Performance Guarantee;
7. Taking all actions reasonably necessary to achieve the Non-Measured Project Benefits;
8. Johnson Controls will conduct a physical audit of each intersection, prior to installation, to confirm existing bulb types/quantities and scheduling for each intersection to be affected by the project. This physical audit for planning and material ordering will also allow for a one-time change order to reconcile guaranteed savings for the LED traffic signal ECM.

CUSTOMER:

JOHNSON CONTROLS, INC.

Initials: _____

Initials: _____

Unit Utility Rates and Costs

The unit energy costs by month for Base year of the Guarantee are set forth below and shall be used for all calculations made under this Schedule.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Electric On Peak	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh	\$0.068 /kWh
Electric Off Peak	\$0.039 /kWh	\$0.039 /kWh	\$0.039/kWh	\$0.039/kWh	\$0.039 /kWh	\$0.039 /kWh	\$0.039 /kWh	\$0.039/kWh	\$0.039/kWh	\$0.039/kWh	\$0.039 /kWh	\$0.039 /kWh
Demand	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW	\$12.4 /kW
Therms	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Traffic /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh	\$0.11 /kWh
Water/ Sewer	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal	\$4.45 /1000 gal

% Annual Energy Costs Increase

The following table identifies the percentage increases that will be made to the amounts in the table for each succeeding year of the Guarantee.

Year	Electric	Demand	Gas	Water/ Sewer			
1	3 %	3 %	3 %	3 %			
2	3 %	3 %	3 %	3 %			
3	3 %	3 %	3 %	3 %			
4	3 %	3 %	3 %	3 %			
5	3 %	3 %	3 %	3 %			
6	3 %	3 %	3 %	3 %			
7	3 %	3 %	3 %	3 %			
8	3 %	3 %	3 %	3 %			
9	3 %	3 %	3 %	3 %			
10	3 %	3 %	3 %	3 %			

CUSTOMER:

JOHNSON CONTROLS, INC.

Initials:_____

Initials:_____

Primary Operations Schedules Pre & Post Retrofit

Pre-Retrofit Facility/area

Safety Academy Pre-Retrofit Fan System Scheduling:

Name	CURRENT SCHEDULE	CURRENT SCHEDULE	CURRENT SCHEDULE	SUMMER CURRENT SCHEDULE	SUMMER CURRENT SCHEDULE	SUMMER CURRENT SCHEDULE
	Holiday	Weekend	Weekday	Holiday	Weekend	Weekday
AHU-1	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-2	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-3	24 HRS	24HRS	24HRS	24 HRS	24HRS	24HRS
AHU-4	6AM-10PM	OFF	6AM-10PM	6AM-6PM	OFF	6AM-6PM
AHU-5	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-6	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-7	OFF	OFF	OFF	OFF	OFF	OFF
AHU-8	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-9	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-10	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM
AHU-11	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM
AHU-12	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM	6AM-10PM
AHU-13	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-14	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
AHU-15	24 HRS	24 HRS	24 HRS	24 HRS	24 HRS	24 HRS
B1	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
B15	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS
UV NORTH	24HRS	24HRS	24HRS	24HRS	24HRS	24HRS

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UV SOUTH

24HRS

24HRS

24HRS

24HRS

24HRS

24HRS

Minimum room temperature during heating season: ____70____ to ____68____ degrees F

Heating season is ____October____ to ____May____.

Maximum room temperature during cooling season: ____74____ to ____82____ degrees F

Cooling season is ____June____ to ____September____.

Safety Academy Pre-Retrofit Lighting Hours:

Area Description	Total Number of on-peak Hours in Winter	Total Number of off-peak Hours in Winter	Total Number of on-peak Hours in Summer	Total Number of off-peak Hours in Summer	Total Annual Hours of Operation
Auditorium	1,131	348	564	174	2,217
Classrooms	1,392	348	694	174	2,608
Conf. Room	1,392	348	694	174	2,608
Classrooms, w/sensor	1,392	348	694	174	2,608
Gyms	2,262	348	1,128	174	3,912
Gym lockers	2,262	348	1,128	174	3,912
Gyms w/sensor	2,262	348	1,128	174	3,912
Halls & common areas	2,262	348	1,128	174	3,912
Hallways, w/sensor	2,262	348	1,128	174	3,912
Kitchen	1,131	348	564	174	2,217
Cafeteria	1,131	348	564	174	2,217
Maintenance Areas	2,262	348	1,128	174	3,912
Offices	1,392	348	694	174	2,608
Offices, w/sensor	1,392	348	694	174	2,608
Library	1,131	348	564	174	2,217
Restrooms	2,262	348	1,128	174	3,912
Restrooms, w/sensor	2,262	348	1,128	174	3,912
Storage Areas	348	0	174	0	522
Warehouse	2,262	348	1,128	174	3,912
Outside Areas	0	2,435	0	1,215	3,650
24 Hour Areas	2,262	3,581	1,128	1,788	8,760

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Post-Retrofit Facility/area

Safety Academy Post-Retrofit Fan System Scheduling:

Name	PROPOSED SCHEDULE	PROPOSED SCHEDULE	PROPOSED SCHEDULE	SUMMER PROPOSED SCHEDULE	SUMMER PROPOSED SCHEDULE	SUMMER PROPOSED SCHEDULE
	Holiday	Weekend	Weekday	Holiday	Weekend	Weekday
AHU-1	Off	Off	7AM-5PM	Off	Off	7AM-5PM
AHU-2	Off	Off	7AM-6PM	Off	Off	7AM-6PM
AHU-3	OFF	7AM-12PM / Sunday	7AM-6PM	OFF	7AM-12PM Sunday	7AM-6PM
AHU-4	6AM-6PM	OFF	6AM-6PM	OFF	OFF	5AM-6PM
AHU-5	OFF	OFF	5AM-6PM	OFF	OFF	5AM-6PM
AHU-6	24 HRS OVERRIDE	24 HRS OVERRIDE	24HRS OVERRIDE	24 HRS OVERRIDE	24 HRS OVERRIDE	24HRS OVERRIDE
AHU-7	OFF	OFF	OFF	OFF	OFF	OFF
AHU-8	OFF	OFF	7AM-4PM	OFF	OFF	7AM-4PM
AHU-9	OFF	OFF	7AM-10PM	OFF	OFF	7AM-10PM
AHU-10	OFF	OFF	5:30 AM-4PM	OFF	OFF	7AM-4PM
AHU-11	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE
AHU-12	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE
AHU-13	OFF	7AM-10PM	7AM-10PM	OFF	7AM-10PM	7AM-10PM
AHU-14	7AM-11PM	7AM-11PM	7AM-11PM	7AM-11PM	7AM-11PM	7AM-11PM

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	Due to Equip. 24hrs	Due to Equip. 24hrs	Due to Equip. 24hrs	Due to Equip. 24hrs	Due to Equip. 24hrs	Due to Equip. 24hrs
AHU-15						
B1	OFF	7AM-11PM	7AM-11PM	OFF	7AM-11PM	7AM-11PM
B15	OFF	7AM-11PM	7AM-11PM	OFF	7AM-11PM	7AM-11PM
UV NORTH	OFF	7AM-11PM	7AM-11PM	OFF	7AM-11PM	7AM-11PM
UV SOUTH	OFF	7AM-11PM	7AM-11PM	OFF	7AM-11PM	7AM-11PM

Minimum room temperature during heating season: ____70____ to ____62____ degrees F

Heating season is ____October____ to ____May____.

Maximum room temperature during cooling season: ____74____ to ____85____ degrees F

Cooling season is ____June____ to ____September____.

Safety Academy Post-Retrofit Lighting Hours:

Area Description	Total Number of on- peak Hours in Winter	Total Number of off- peak Hours in Winter	Total Number of on- peak Hours in Summer	Total Number of off- peak Hours in Summer	Total Annual Hours of Operation
Auditorium	1131	348	564	174	2217
Classrooms	1392	348	694	174	2608
Conf. Room	1392	348	694	174	2608
Classrooms, w/sensor	905	226	451	113	1695
Gyms	2262	348	1128	174	3912
Gym lockers	2262	348	1128	174	3912
Gyms w/sensor	2262	348	1128	174	3912
Halls & common areas	2262	348	1128	174	3912
Hallways, w/sensor	2262	348	1128	174	3912
Kitchen	1131	348	564	174	2217
Cafeteria	1131	348	564	174	2217
Maintenance Areas	2262	348	1128	174	3912
Offices	1392	348	694	174	2608
Offices, w/sensor	905	226	451	113	1695
Library	1131	348	564	174	2217
Restrooms	2262	348	1128	174	3912
Restrooms,	1470	226	733	113	2543

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w/sensor					
Storage Areas	348	0	174	0	522
Warehouse	2262	348	1128	174	3912
Outside Areas	0	2435	0	1215	3650
24 Hour Areas	2262	3581	1128	1788	8760

CUSTOMER:

JOHNSON CONTROLS, INC.

Initials:_____

Initials:_____

**FEMP or IPMVP
☒ Option A
Partially Measured Retrofit Isolation**

Project Benefits are determined by partial field measurement of the energy use of the system(s) to which an improvement measure was applied, separate from the energy use of the rest of the facility. Measurements will be short-term with only one-time measurements in the pre & post-retrofit installation period.

Partial measurement means that some but not all parameter(s) will be Non-Measured. Careful review of improvement measure design and installation will ensure that Non-Measured values fairly represent the probable actual value. Stipulations will be shown in the M&V Plan along with analysis of the significance of the error they may introduce.

Engineering calculations using short-term pre & post-retrofit measurements and stipulations. The finding of these pre & post-retrofit measurements calculations of Project Benefits will then be Non-Measured for the life of the contract.

**FEMP or IPMVP
☒ Option B
Retrofit Isolation**

Project Benefits are determined by field measurement of the energy use of the systems to which the improvement measure was applied, separate from the energy use of the rest of the facility. Short-term, long-term or continuous measurements are taken throughout the pre & post-retrofit period of the contract.

Engineering calculations using short term, long-term or continuous pre & post-retrofit measurements will be used to calculate the Project Benefits for the life of the contract.

MEASUREMENT & VERIFICATION SERVICES

JCI will provide the M&V Services set forth below in connection with the Assured Performance Guarantee.

1. During the Installation Period, a JCI Performance Assurance Engineer will track Measured Project Benefits. JCI will report the Measured Project Benefits achieved during the Installation Period, as well as any Non-Measured Project Benefits applicable to the Installation Period, to Customer within 60 days of the commencement of the Guarantee Term.
2. Within 60 days of each anniversary of the commencement of the Guarantee Term, JCI will provide Customer with an annual report containing:
 - A. an executive overview of the project's performance and Project Benefits achieved to date;
 - B. a summary analysis of the Measured Project Benefits accounting; and
 - C. depending on the M&V Option, a detailed analysis of the Measured Project Benefits calculations.
3. During the Guarantee Term, a JCI Performance Assurance Engineer will monitor the on-going performance of the Improvement Measures, as specified in this Agreement, to determine whether anticipated Measured Project Benefits are being achieved. In this regard, the Performance Assurance Engineer will periodically assist Customer, on-site or remotely, with respect to the following activities:
 - A. review of information furnished by Customer from the facility management system to confirm that control strategies are in place and functioning;
 - B. advise Customer's designated personnel of any performance deficiencies based on such information;
 - C. coordinate with Customer's designated personnel to address any performance deficiencies that affect the realization of Measured Project Benefits; and

- D. inform Customer of opportunities to further enhance project performance and of opportunities for the implementation of additional Improvement Measures.

**Schedule 2
Exhibit 6**

4. For specified Improvement Measures utilizing an “Option A” M&V protocol, JCI will:
- A. conduct pre and post installation measurements required under this Agreement;
 - B. confirm the building management system employs the control strategies and set points specified in this Agreement; and
 - C. analyze actual as-built information and adjust the Baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).
5. For specified Improvement Measures utilizing an “Option B” M&V protocol, JCI will:
- A. confirm that the appropriate metering and data points required to track the variables associated with the applicable Improvement Measures’ benefits calculation formulas are established; and
 - B. set up appropriate data capture systems (e.g., trend and totalization data on the facility management system) necessary to track and report Measured Project Benefits for the applicable Improvement Measure.

**Measurement and Verification -
Improvement Measures for City of Milwaukee**

The following table lists the proposed Infrastructure Improvement Measures with the M&V Protocols that JCI recommends for this project.

M&V Summary

City of Milwaukee Safety Academy Improvement Measure Description		M&V Protocol	
1.0	High Efficiency Boilers	Option A	MSPG
2.0	HVAC and Control Improvements	Option B	MSPG
3.0	High Efficiency Lighting Retrofit	Option A	MSPG
4.0	Water Conservation Improvements	Option A	Validation Only

City of Milwaukee Improvement Measure Description		M&V Protocol	
5.0	LED Traffic Signal Retrofits	Option A	MSPG

Reporting:

Measure and Verification reporting will be conducted at the completion of the project (Installation Savings Report) and annually in all contract years. The JCI Performance Assurance Engineer will also deliver observation and recommendation reports after quarterly site visits.

The following pages describe the M&V Protocols for each ECM

Schedule 2

Exhibit 6

1.0 High Efficiency Boiler System Upgrade

Objective

The objective of this M&V plan is to demonstrate gross annual savings through the use of a calibrated spreadsheet model, per Option A protocol.

Parameters to be Monitored

1. Installation status of measure
2. Pre and Post Retrofit Combustion efficiency

Sampling Plan

First law boiler efficiency of existing boilers will be checked prior to removal. Efficiency of new boilers will be based upon manufacturer's data and verification of operation after the installation is complete.

Data Collection Plan

- Data Sought: Verification of installation and check of operation
- Measured Parameters and Units: First law of thermodynamics efficiency of new boilers and existing heating equipment (boilers or June Aire furnaces)
- Points of Measurement: Validation of operation, through BAS
- Metering Equipment Identification: Combustion analyzer, temperature sensors, water or air flow measuring devices, and metering device for natural gas.
- Metering Equipment Calibration: N/A
- Quality Control: JCI Performance Assurance Engineer will over-see setup and execution of M&V plan.
- Data Collection Plan: Installation documentation will be retrieved and spot measurements will be taken to verify measure.

Analysis Method

Option A will be used to verify the savings for this improvement measure. Commissioning documents indicate system performance acceptance. Engineering calculations will be listed to demonstrate energy savings. Combustion efficiency will be monitored to validate that the energy savings are achieved during the length of the guarantee.

Plan for Future Periodic Measurements and Performance Calculation

The savings for this measure will be determined after the completion of the installation period and will be considered satisfied after the first reporting period. An annual combustion efficiency inspection will be proposed as a separate service contract to ensure ongoing saving for this improvement measure.

Energy savings were calculated by applying increased boiler efficiency ratings to the energy simulation computer program eQuest. Existing boiler efficiency inputs were determined using existing equipment rating, burner cycling and standby losses.

The following table lists AFUE efficiencies used in the energy simulation program. The efficiencies used were conservatively estimated and displayed in the following table.

Building	Existing Efficiency	Boiler Cycling and Losses	Net AFUE
Safety Academy	79%	4%	75%

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The new boilers used for the retrofit will be Thermal Solutions modular boilers rated at 88% efficient and capable of a 4:1 burner turndown.

2.0 HVAC and Controls Improvement

Objective

The objective of this M&V plan is to demonstrate gross annual savings through the use of a calibrated spreadsheet model, per Option B protocol.

Parameters to be Monitored

1. Validate Installation status of measure
2. Compare models and schedules within models to actual schedules upon completion of installation
3. Via service agreement, maintain schedules within building automation system to ensure that savings are being achieved

Sampling Plan

Control upgrades will be checked to verify operation after the installation period. Ongoing performance assurance work will ensure on a quarterly basis that the schedules are maintained over the length of the service contract.

Data Collection Plan

- Data Sought: Verification of installation and random check of operation
- Measured Parameters and Units: Spot check of control parameters
- Points of Measurement: Validation of control parameters, through BAS
- Metering Equipment Identification: N/A
- Metering Equipment Calibration: N/A
- Quality Control: JCI Performance Assurance Engineer will over-see setup and execution of M&V plan.
- Data Collection Plan: Installation documentation will be retrieved and spot measurements will be taken to verify measure.

Analysis Method

Option B will be used to verify the savings for this improvement measure. A spreadsheet will be used to list the control measures, and other pertinent information. Engineering calculations or EQuest models will be listed to demonstrate energy savings. Controls measure parameters will be monitored to validate that the controls are operating as intended. This check will be done with both JCI and city personnel.

3.0 Lighting Improvement

Objective

The objective of this M&V plan is to demonstrate gross annual savings of lighting based KWH through the measurement and verification process (Option A protocols).

Parameters to be monitored

1. Sample population fixture wattages pre and post
2. Sample population lighting levels (foot candles) Pre and Post
3. Lighting hours of operation
4. Utility cost per unit

Parameter variables to be stipulated and agreed upon

1. Post retrofit hours of operation of lighting systems to be same as pre retrofit hours of operation
2. Post retrofit foot candles remain constant throughout rated life of bulbs
3. Sample population data applies to all fixtures of same fixture type.

Parameter variables to be measured

1. Sample population fixture wattages pre and post
2. Sample population lighting levels (foot candles) pre and post
3. Utility cost per unit

Sampling Plan

JCI PAS will review contractor's documentation from the pre and post lighting retrofit data, and measure post retrofit performance in sample population. Review of contractor documentation from pre and post lighting retrofit lighting levels, and measure post retrofit lighting levels in sample areas. The JCI lighting level sample areas will include a reading in each area with retrofit activity. Post retrofit sample readings will verify fixture wattage reduction values for input to the calculation variable data. Post retrofit lighting levels will confirm lighting level performance characteristics.

Data Collection Plan

- Obtain contractor pre-retrofit and post-retrofit lighting performance values
- JCI to collect post-retrofit lighting performance values from sample populations in each building to verify calculations

Analysis Method

Based on pre lighting retrofit lighting survey report data, engineering calculations, post retrofit sample measurements. (Option A protocol). Pre Retrofit value minus Post Retrofit value will indicate projected financial savings through calculations analysis.

Plan for Future Periodic Measurements and Performance Calculation

The savings for this measure will be determined once during post retrofit performance. Subsequent lighting hours and fixture watt performance will be stipulated and agreed upon. The cost per KWH will be adjusted to reflect changes in electric rates. \$/KWH values will be calibrated annually to reflect financial impact. The same formulas will be used for all calculations for a period of three years from the first complete utility billing cycle after project completion.

4.0 Water Conservation Improvement

Objective

The objective of this M&V plan is to demonstrate performance of the water conservation retrofit for compliance with manufacturer and project specifications, and to quantify financial impact of reduced cost using FEMP Option A protocols.

Parameters to be monitored

1. Confirm installation in compliance with project specifications
2. Confirm proper operation (based on customer remarks and documentation of failures)
3. Pre and post measurements on select water consuming devices to verify consumption
4. Engineering calculation spreadsheet data

Parameter Variables to be Stipulated and agreed upon

1. Engineering calculations spreadsheet data values not listed as measured, are agreed upon

Parameter Variables to be measured

1. Select water consuming devices will be subject to pre and post measurements. These will be representative of the populations of equipment
2. Savings calculations agreed upon subject to operational verification of measure
3. Some pieces of equipment are not able to be tested. In these cases, calculations acceptable to both the Zoo and Johnson Controls, Inc. will be utilized

Sampling Plan

Commissioning activities will validate installation and operation to manufacturer and project specifications.

JCI will discuss installation with Zoo Personnel to determine if there are observed defects in installation materials. Corrective actions to defects will be taken; appropriate corrections to savings calculations will be made.

Data Collection Plan

- Data Sought: Verify installation to manufacturer and project specifications.
- Points of Measurement: varies.
- Metering Equipment Identification: New water meters will be installed in the following buildings: Aviary; connect existing water meter to the BAS at the Feline Building; Macaque House; and Small Mammals.
- Metering Equipment Calibration: N/A.
- Quality Control: JCI Performance Assurance Engineer will over-see setup and execution of M&V plan.
- Data Collection Plan: Confirm proper operation through exception based identification of non compliance, calibrate energy consumption savings calculations if appropriate, update financial impact of energy savings annually based on utility rate structures obtained from utility bills.

Analysis Method

Engineering spreadsheet calculations used to determine financial impact of FIM based pre minus post retrofit engineering calculation spreadsheets. Annual savings is considered agreed upon pending installation acceptance. Annual savings will be adjusted for financial impact based on changes in utility rates.

Plan for Future Periodic Measurements and Performance Calculation

The savings for this measure will be considered agreed upon, but recalculated annually to reflect annual changes in cost. The same formulas will be used for all calculations for each year after project completion. The new water meters and also the meter that will be connected into the BAS (Feline Building) will be used to trend the usage of water / sewer to ensure an understanding of consumption and to ensure that malfunctions are caught in a timely fashion.

5.0 LED Traffic Lighting

Objective

The objective of this M&V plan is to demonstrate performance of the Traffic lighting ECM, and to quantify financial impact of reduced energy consumption. The Traffic Lighting ECM will utilize FEMP Option A protocols.

Parameters to be monitored

1. Traffic Lighting energy consumption (calculated based on sample population data collection)
2. Total ECM energy savings values (calculated based upon data collected for sample population). Savings will be calculated as Pre consumption minus Post consumption equals savings

Parameter variables to be Stipulated and agreed upon

1. Traffic Signal Lighting Hours of Operation will be identified based on Traffic Department records. The hours of operation will be stipulated and agreed upon for all energy consumption calculations
2. The sample population will be 16 intersections
3. Utility Prices; Utility Unit costs will be based on current utility rate structures and escalation rates identified in proposal and contract documents

Parameter variables to be measured

1. Sample Fixture Voltage, and Amperage will be measured once during pre retrofit baseline data collection and once during post retrofit data collection. Thereafter, variables will be stipulated and agreed upon in energy consumption calculations.

Sampling Plan

One time pre and post retrofit measurements for the identified sample population will be completed. Data collected during the measurement process will be extrapolated to the total project. The calculated energy consumption values and pre minus post savings values will be extrapolated to represent annual performance values. Annual performance values will be updated each year to represent changes in the cost of energy based on the utility unit price structure identified in proposal and contract documents

Data Collection Plan

- Data Sought: Pre and Post Retrofit Traffic signal voltage, amperage, hours of use, utility unit costs
- Points of Measurement: 1 Time Pre and 1 Time Post retrofit measured voltage, and amperage. Hours of use and utility unit costs stipulated per proposal and contract documents
- Metering Equipment Identification: Fluke 39 (or equivalent).
- Metering Equipment Calibration: N/A.
- Quality Control: JCI Performance Assurance Specialist will over-see setup and execution of M&V plan.
- Data Collection Plan: Initial and annual update of savings reported based on data collected and stipulated values

Analysis Method

Based on pre retrofit measurements, engineering calculations, post retrofit sample measurements. (Option A protocol). Pre Retrofit value minus Post Retrofit value will indicate projected financial savings through calculations analysis.

Plan for Future Periodic Measurements and Performance Calculation

Energy savings data will be collected one (1) time for this ECM. Annual performance values will be updated each year to represent changes in the cost of energy based on the utility unit price structure identified in proposal and contract documents

SERVICES SCHEDULE

1. **SCOPE OF SERVICE.** JCI and the Customer agree that the services checked below will be provided by JCI at the Customer's facility.

- ☐ Primary Air Conditioning Equipment (PRIME)
- ☐ Primary Air Conditioning Equipment (Basic)
- ☐ Fire Detection and Management Systems (Premium)
- ☐ Fire Detection and Management Systems (Basic)
- ☐ Facility Operations
- ☐ Reciprocating Air Conditioning Equipment (Premium)
- ☐ Reciprocating Air Conditioning Equipment (Basic)
- ☐ Associated Air Conditioning and Heating Covered Equipment (Premium)
- ☐ Associated Air Conditioning and Heating Covered Equipment (Basic)
- ☐ Maintenance Management Services
- ☐ Primary Heating Covered Equipment (Premium)
- ☐ Primary Heating Covered Equipment (Basic)
- ☐ Automatic Temperature Controls (Premium)
- ☐ Automatic Temperature Controls (Basic)
- ☐ Training
- ☐ Facility Management Systems (Premium)
- ☐ Facility Management Systems (Basic)
- ☐ Security Management Systems (Premium)
- ☐ Security Management Systems (Basic)
- ☒ Performance Reporting Services
- ☐ Performance Consulting Service
- ☐ Energy System Management Services

2. EXTENDED SERVICE OPTIONS FOR PREMIUM AND PRIME COVERAGES. On-site repair services will be provided during JCI's normal business hours, unless one of the following options is checked:

- ☐ 24-5 Extended Service--JCI will provide on-site response 24 hours a day, 5 days a week
(Monday thru Friday, except JCI holidays)
- ☐ 24-7 Extended Service--JCI will provide on-site response 24 hours a day, 7 days a week
(including holidays)

3. DEFINITIONS. The terms used in this Services Schedule shall be defined as follows:

- (a) **COVERED EQUIPMENT** means the equipment for which services are to be provided under this Services Schedule and installed under Schedule 1 and any other Covered Equipment Lists attached to this Services Schedule.
- (b) **EQUIPMENT FAILURE** means the sudden and accidental failure of moving parts or electric or electronic components that are part of the Covered Equipment and that are necessary for its operation.
- (c) **SCHEDULED SERVICE VISITS** include labor required to perform inspections and preventive maintenance on Covered Equipment.
- (d) **SCHEDULED SERVICE MATERIALS** include materials required to perform Scheduled Service Visits on Covered Equipment.
- (e) **REPAIR LABOR** includes labor necessary to restore Covered Equipment to working condition following an equipment failure and excludes total equipment replacement due to obsolescence or unavailability of parts.
- (f) **REPAIR MATERIALS** include materials necessary to restore Covered Equipment to working condition following an equipment failure and excludes total equipment replacement due to obsolescence or unavailability of parts. At JCI's option, Repair Materials may be new, used, or reconditioned. All Repair Materials are covered by the warranty as described below.
- (g) **BASIC COVERAGE** includes Scheduled Service Visits, plus Scheduled Service Materials if otherwise noted in this Services Schedule, for Covered Equipment.
- (h) **PREMIUM LEVEL COVERAGE** includes BASIC COVERAGE as well as Repair Labor, plus Repair Material if otherwise noted in this Services Schedule, for Covered Equipment.
- (i) **EXTENDED SERVICE** includes extended service for repairs and is available only if Customer has PREMIUM or PRIME coverage. The price for Extended Service, if chosen by Customer, is part of the total price Customer will pay. Should a defect be found during an Extended Service visit that JCI is not responsible for under this Services Schedule; Customer agrees to pay JCI's standard fee for any services rendered. Should Repair Labor or Repair Materials be performed in periods beyond the Extended Service period, Customer agrees to pay JCI's standard fee for any services rendered beyond the Extended Service period. **PRIME LEVEL COVERAGE** includes BASIC COVERAGE as well as Repair Labor, plus Repair Materials if otherwise set forth in this Services Schedule, for Covered Equipment consisting of centrifugal, absorption, or screw chillers. **PRIME LEVEL COVERAGE** also includes Repair Labor, and Repair Materials if otherwise set forth in this Services Schedule, for diagnosed imminent equipment failure as well as actual equipment Failure, and the following:
 - (i) JCI will analyze diagnostic tests including PreVue Vibration Analysis and spectrochemical oil analysis megohm readings. All diagnostic tests must be performed at JCI-prescribed frequencies and to JCI-

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specified test standards. Coverage will include Repair Labor and Repair Material for heat exchanger tubes if an Eddy Current Analysis, acceptable to JCI, has been performed in the three years prior to this Services Agreement Schedule and is provided to JCI, or such a test will be performed as part of this Services Agreement Schedule.

- (ii) Should JCI's analysis suggest the existence or the possibility of equipment deterioration outside anticipated or acceptable conditions, JCI may at its option take corrective steps necessary to prevent further deterioration or breakdown of the Covered Equipment. JCI retains sole judgment over whether equipment conditions are considered acceptable, whether corrective steps should be taken, or what steps, if any, need to be taken. Performance of any corrective steps under this PRIME coverage is not a guarantee that equipment failure or downtime will not occur.
- (j) **EXTENDED SERVICE** includes extended service for repairs and is available only if Customer has PREMIUM or PRIME coverage. The price for Extended Service, if chosen by Customer, is part of the total price Customer will pay. Should a defect be found during an Extended Service visit that JCI is not responsible for under this Services Schedule; Customer agrees to pay JCI's standard fee for any services rendered. Should Repair Labor or Repair Materials be provided in periods beyond the Extended Service period, Customer agrees to pay JCI's standard fee for any services rendered beyond the Extended Service period.

4. INITIAL EQUIPMENT INSPECTION FOR PREMIUM OR PRIME COVERAGES. JCI will inspect the Covered Equipment within 45 days of the date of this Services Schedule or as seasonal or operational conditions permit. JCI will advise Customer if JCI finds any Covered Equipment not in working order or in need of repair. With the Customer's approval, JCI will perform the work necessary to put the Covered Equipment in proper working condition. To the extent that Covered Equipment is not subject to warranty or other obligation of JCI for its repair, this work will be done at JCI's standard fee for parts and labor in effect at that time. If the Customer does not want JCI to do the work identified by JCI, or if Customer does not have the work done, the Covered Equipment will be removed from the list of Covered Equipment and the price of this Services Schedule will then be adjusted.

5. CUSTOMER OBLIGATIONS AND COMMITMENTS TO JCI. The Customer warrants that, to the best of Customer's knowledge, all Covered Equipment is in good working condition and the Customer has given JCI all information of which Customer is aware concerning the condition of the Covered Equipment. The Customer agrees that, during the term of this Services Schedule, the Customer will:

- (a) operate the Covered Equipment according to the manufacturer's recommendations;
- (b) keep accurate and current work logs and information on the Covered Equipment as recommended by the manufacturer;
- (c) provide an adequate environment for Covered Equipment as recommended by the manufacturer or as recommended by JCI, including adequate space, electrical power, air conditioning, and humidity control;
- (d) notify JCI immediately of any Covered Equipment malfunction, breakdown, or other condition affecting the operation of the Covered Equipment;
- (e) allow JCI to start and stop, periodically turn off, or otherwise change or temporarily suspend equipment operations so that JCI can perform the services required under this Services Schedule; and
- (f) provide proper condenser and boiler water treatment, as necessary, for the proper functioning of Covered Equipment, if such services are not JCI's responsibility under this Services Agreement Schedule.

The Customer acknowledges that its failure to meet these obligations will relieve JCI of any responsibility for any breakdown, or any necessary repair or replacement, of any Covered Equipment and may require adjustments under Schedule 2, Assured Performance Guarantee Schedule.

6. CHANGES TO COVERED EQUIPMENT. To the extent permitted under the Performance Contract, the Customer retains the right to make changes or alterations to the Covered Equipment. If, in JCI's opinion, such changes or alterations substantially affect JCI's services or obligations, JCI shall have the right to make appropriate changes to the scope or to the price of this Services Schedule or to both.

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- 7. ACCESS.** The Customer will give JCI full access to all equipment that is either Covered Equipment or associated with it when JCI requests such access. If access cannot be provided, JCI's obligations under this Services Schedule will be suspended until such access to the equipment is provided. Matters affecting JCI's access to the equipment may include, but are not limited to, the removal, replacement, repair, refinishing, restoration, reconstruction, or other remedial actions taken by the Customer with respect to Covered Equipment or to the Customer's facility. Suspension of JCI's duties for this reason will not cancel or suspend any of the Customer's obligations under this Services Schedule.
- 8. EXCLUSIONS.** JCI's services under this Services Agreement Schedule do not include:
- (a) supplies, accessories, or any items normally consumed during the use of Covered Equipment, such as ribbons, bulbs, and paper;
 - (b) calls resulting from lack of operator-level preventive maintenance, site-related problems, or operator error;
 - (c) service calls due to failures resulting from acts of God, abuse or misuse of Covered Equipment, or alterations, modifications, or repairs to Covered Equipment not performed or provided by JCI;
 - (d) the furnishing of materials and supplies for painting or refinishing Covered Equipment;
 - (e) electrical work to the Customer's facility necessary because of Covered Equipment;
 - (f) service calls resulting from attachments made to Covered Equipment or other equipment not covered by this Services Schedule;
 - (g) the repair or replacement of ductwork, casings, cabinets, structural supports, tower fill/slats/basin, hydronic and pneumatic piping, and vessels, gaskets, and piping not normally replaced or maintained on a scheduled basis, and removal of oil from pneumatic piping;
 - (h) service calls resulting from the effects of erosion, corrosion, acid cleaning, or damage from unexpected or especially severe freezing weather that is beyond what is prevented by JCI's normal maintenance;
 - (i) work caused by any operation of, adjustments to, or repair to, Covered Equipment by others not authorized in advance by JCI;
 - (j) work caused by the negligence of others, including but not limited to equipment operators and water treatment companies;
 - (k) service calls due to failures caused by improper environmental conditions affecting Covered Equipment or electrical power fluctuations, if due to conditions beyond JCI's control, and service calls required because JCI had previously been denied access to the Covered Equipment; and
 - (l) disposal of hazardous wastes. Hazardous wastes remain the property and the responsibility of the Customer even when removed from equipment or replaced by JCI as provided by the terms of this Services Schedule. The Customer shall be responsible for the proper storage and disposal of hazardous wastes. This includes, but is not limited to, used oil, contaminated or uncontaminated refrigerant, and PCBs.
- 9. Price.** The total price for JCI's Services during the Term of this Service Schedule is \$13,599 Year 1, \$14,007 Year 2, \$14,427 Year 3.
This amount will be paid to JCI in quarterly installments as shown on the attached Schedule 4A (next page).
These payments will be due and payable when the Customer received JCI's invoice and in advance of the services JCI is to provide.

Dated July 1, 2008

CUSTOMER:

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

PRICE AND PAYMENT TERMS SCHEDULE

1. The Customer shall make payments to JCI for Work performed, as well as payments for Services rendered pursuant to the Services Schedule.

4 (a) The price to be paid by the Customer for the Work shall be \$2,336,322. Progress payments (including payment for materials delivered to JCI and work performed on and off-site) shall be made to JCI as follows:

Month One payment-July 15, 2008: \$700,896
Month Two payment-August 15, 2008: \$467,264
Month Three payment-September 15, 2008: \$233,632
Month Four payment-October 15, 2008: \$116,816
Month Five payment-November 15, 2008: \$116,816
Month Six payment-December 15, 2008: \$116,816
Month Seven payment-January 15, 2009: \$233,632
Month Eight payment-February 15, 2009: \$116,816
Month Nine payment-March 15, 2009: \$116,816
Final payment due upon substantial completion/project close out: \$116,818

Final payment, constituting the entire unpaid balance for the Work, shall be made to JCI within 30 days after the Substantial Completion Date. Payments may be withheld on account of any breach of this Agreement by JCI and claims by third parties (including JCI subcontractors and material suppliers), but only to the extent that written notice has been provided to JCI and JCI has failed, within ten days of the date of receipt of such notice, to provide adequate security to protect Customer from any loss, cost, or expense related to such claims.

4 (b) The total price for JCI's Services during the three year Term of this Agreement is \$42,033. This amount will be paid to JCI in quarterly installments as shown below. These payments will be due and payable when the Customer receives JCI's invoice and in advance of the services JCI is to provide and shall be made throughout the Service Term.

Year 1 – Quarterly Payment Amount: \$3,999.75 (begin April 15, 2009)
Year 2 – Quarterly Payment Amount: \$3,501.75 (begin April 15, 2010)
Year 3 – Quarterly Payment Amount: \$3,606.75 (begin April 15, 2011)

2. **CUSTOMER PURCHASE ORDERS.** The Customer acknowledges and agrees that any purchase order issued by Customer, in accordance with this Agreement, is intended only to establish payment authority for the Customer's internal accounting purposes. No purchase order shall be considered to be a counteroffer, amendment, modification, or other revision to the terms of this Agreement. No term or condition included in the Customer's purchase order will have any force or effect.

Dated July 1, 2008

CUSTOMER:

JOHNSON CONTROLS, INC.

Signature:_____

Signature:_____

Printed Name:_____

Printed Name:_____

Title:_____

Title:_____

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