

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

ADDENDUM TO PERFORMANCE CONTRACT
(SOURCEWELL CONTRACT #070121-JHN)

THIS ADDENDUM ("Addendum") is entered into by and between **Fort Bend County**, ("Customer"), a body corporate and politic under the laws of the State of Texas, and **Johnson Controls, Inc.** ("JCI"), a Texas corporation; hereinafter referred to collectively as "Parties."

RECITALS

WHEREAS, the parties have executed and accepted that certain Performance Contract for the implementation of Facility Improvement Measures for the Customer, (hereinafter the "Contract"), attached hereto as Exhibit A and incorporated by reference, utilizing Sourcewell Contract No. 070121-JHN; and

WHEREAS, the following changes are incorporated as if a part of the Contract:

1. **Scope of Work.** Subject to this Addendum, JCI will perform Work for Customer as described in Exhibit A and in accordance with the requirements of Sourcewell Contract No. 070121-JHN.
2. **Compensation and Limit of Appropriation.**
 - A. The Maximum Compensation for the performance of the Work to be performed by JCI under the Contract is Eleven Million Three Hundred Eighty Thousand Eight Hundred Forty and 0/100 dollars (\$11,380,840.00). In no case shall the amount paid by Customer under the Contract exceed the Maximum Compensation without a written agreement executed by the parties.
 - B. All performance of the Work by JCI including any changes in the Scope of Services and revision of work satisfactorily performed will be performed only when approved in advance and authorized by Customer.
 - C. JCI clearly understands and agrees, such understanding and agreement being of the absolute essence of the Contract, that Customer shall have available the total maximum sum of Eleven Million Three Hundred Eighty Thousand Eight Hundred Forty and 0/100 dollars (\$11,380,840.00) specifically allocated to fully discharge any and all liabilities Customer may incur.

- D. JCI does further understand and agree, said understanding and agreement also being of the absolute essence of the Contract, that the total maximum compensation that JCI may be entitled to and the total maximum sum that Customer may become liable to pay to JCI shall not under any conditions, circumstances, or interpretations thereof exceed Eleven Million Three Hundred Eighty Thousand Eight Hundred Forty and 0/100 dollars (\$11,380,840.00).
2. **Taxes.** County is a body corporate and politic under the laws of the State of Texas and claims exemption from sales and use taxes. A copy of a tax-exempt certificate will be furnished upon request.
3. **Insurance.** Customer and the members of Fort Bend County Commissioners Court ("Commissioners Court") shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of JCI shall contain a waiver of subrogation in favor of Customer and members of Commissioners Court. If required coverage is written on a claims-made basis, JCI warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the Contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that Work under the Contract is completed.
3. **Arbitration.** Customer does not agree to submit disputes arising out of the Contract to binding arbitration. Therefore, any references to binding arbitration or the waiver of a right to litigate a dispute are hereby deleted.
4. **Applicable Law.** The laws of the State of Texas govern all disputes arising out of or relating to this Contract. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Contract and waive the right to sue or be sued elsewhere. Nothing in the Contract shall be construed to waive the County's sovereign immunity.
5. **Notices.**
- A. Each party giving any notice or making any request, demand, or other communication (each, a "Notice") pursuant to the Contract shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of the Contract, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).

- B. Each party giving a Notice shall address the Notices to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

Customer: Fort Bend County
Attn: Director, Facilities Management and Planning
301 Jackson Street, Suite 301
Richmond, Texas 77469

Copy to: Fort Bend County
Attn: County Judge
401 Jackson Street, 1st Floor
Richmond, Texas 77469

JCI: Johnson Controls, Inc.
8323 N. Eldridge Parkway
Houston, Texas 77041

Copy to: Johnson Controls, Inc.
Attn: General Counsel – Building Efficiency Americas
507 East Michigan Street
Milwaukee, Wisconsin 53202

- C. A Notice is effective only if the party giving or making the Notice has complied with subsection 5.A. and 5.B. and if the addressee has received the Notice. A Notice is deemed received as follows:
- i) If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.
 - ii) If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

6. **Indemnity.** The parties agree that under the Constitution and laws of the State of Texas, County cannot enter into an agreement whereby County agrees to indemnify or hold harmless another party; therefore, all references of any kind to County defending, indemnifying, holding or saving harmless JCI or any other party for any reason are hereby deleted. **JCI shall Indemnify and defend county against all third**

party losses, liabilities, claims, causes of action, and other expenses, including reasonable attorney's fees, arising from damage to persons, including bodily injury, disease, or death or to tangible property to the extent caused by the negligent or intentional act, error or omission of JCI or its agents, servants or employees.

7. **Texas Public Information.** JCI expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by JCI shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed. **The terms and conditions of the Agreement are not proprietary or confidential information.**

8. **Certain State Law Requirements for Contracts.** For purposes of section 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, JCI hereby verifies that JCI and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:

- A. Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization, is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.
- B. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, JCI does not boycott Israel and is authorized to agree in such contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in section 808.001 of the Texas Government Code.
- C. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, JCI does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the

term of such contracts. "Boycott energy company" has the meaning provided in section 809.001 of the Texas Government Code.

- D. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, JCI does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in section 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in section 2274.001(6) and (7) of the Texas Government Code.
9. **Human Trafficking.** By signature below, JCI acknowledges that Fort Bend County is opposed to human trafficking and that no County Funds will be used in support of services or activities that violate human trafficking laws.
10. **Modifications.** The parties may not amend or waive this Contract, except by a written agreement executed by both parties.

{EXECUTION PAGE FOLLOWS}

IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the date signed by the last party hereto.

FORT BEND COUNTY

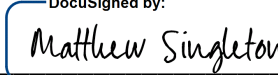
JOHNSON CONTROLS, INC.

KP George, County Judge

Date

ATTEST:

Laura Richard

DocuSigned by:

46E926B1675B49F...

Authorized Agent – Signature

Matthew Singleton

Authorized Agent- Printed Name

Area General Manager

Title

8/7/2023

Date

AUDITOR'S CERTIFICATE

I hereby certify that funds in the amount of \$_____ are available to pay the obligation of Fort Bend County within the foregoing Agreement.

Robert Ed Sturdivant, County Auditor

Exhibit A: Performance Contract

i:\agreements\2023 agreements\facilities\johnson control inc (23-fac-100977)\addendum to performance contract (kcj - 08.02.2023)

EXHIBIT A

PERFORMANCE CONTRACT

This Performance Contract (this “Agreement”) is made this 11th day of July 2023 between:

PARTIES

Johnson Controls, Inc. (“JCI”)
8323 N. Eldridge Pkwy., Houston, TX 77041

and

FORT BEND COUNTY (“Customer”)
301 Jackson Street, Suite 301, Richmond, TX 77469

RECITALS

WHEREAS, Customer desires to retain JCI to perform the work specified in Schedule 1 (Scope of Work) hereto (the “Work”) relating to the installation of the improvement measures (the “Improvement Measures”) described therein; and

WHEREAS, Customer is authorized and empowered under applicable Laws (as defined below) to enter into this Agreement, and has taken all necessary action under applicable Laws to enter into this Agreement; and

WHEREAS, Customer has selected JCI to perform the Work after it determined JCI’s proposal was the most advantageous to Customer in accordance with all applicable procurement and other Laws.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the parties agree as follows:

AGREEMENT

1. **SCOPE OF THE AGREEMENT.** JCI shall perform the Work set forth in Schedule 1. After the Work is Substantially Complete (as defined below) and the Certificate of Substantial Completion is executed by Customer and JCI, JCI shall provide the assured performance guarantee (the “Assured Performance Guarantee”) and the measurement and verification services (the “M&V Services”) set forth in Schedule 2 (Assured Performance Guarantee). Customer shall make payments to JCI for the Work and the M&V Services in accordance with Schedule 4 (Price and Payment Terms).
2. **AGREEMENT DOCUMENTS:** In addition to the terms and conditions of this Agreement, the following Schedules are incorporated into and shall be deemed an integral part of this Agreement:

Schedule 1 – Scope of Work

Schedule 2 – Assured Performance Guarantee

Schedule 3 – Customer Responsibilities

Schedule 4 – Price and Payment Terms

Attachment 1 – Notice to Proceed

Attachment 2 – Change Order

Attachment 3 – Certificate of Substantial Completion

Attachment 4 – Certificate of Final Completion

Attachment 5 – Scope, Savings Supporting Documents, and Drawings (Electronic Files Only)

3. **NOTICE TO PROCEED; SUBSTANTIAL COMPLETION; M&V SERVICES.** This Agreement shall become effective on the date of the last signature on the signature page below. JCI shall commence performance of the Work within ten (10) business days of receipt of Customer's Notice to Proceed, a form of which is attached hereto as Attachment 1, and shall achieve Substantial Completion of the Work by the Substantial Completion date, which shall be the earlier of:

- (a) the date on which Customer executes a Certificate of Substantial Completion substantially in the form attached hereto as Attachment 3;
- or
- (b) 21 months after JCI's receipt of Notice to Proceed, subject to adjustments set forth in Section 4 and Section 5 below.

For purposes of this Agreement, "Substantial Completion" means that JCI has provided sufficient materials and services to permit Customer to operate the Improvement Measures. The M&V Services shall commence on the first day of the month following the month in which Customer executes a Certificate of Substantial Completion and shall continue throughout the Guarantee Term, subject to earlier termination of the Assured Performance Guarantee as provided herein. Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails to fulfill any of Customer's responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, the Assured Performance Guarantee shall automatically terminate and JCI shall have no liability thereunder.

4. **DELAYS AND IMPACTS.** If JCI is delayed or impacted in the commencement, performance, or completion of the Work and/or M&V Services by causes beyond its control and without its fault, including but not limited to inability to access property; concealed or unknown conditions encountered at the project, differing from the conditions represented by Customer in the bid documents or otherwise disclosed by Customer to JCI prior to the commencement of the Work; a Force Majeure Event (as defined below) condition; failure by Customer to perform its obligations under this Agreement; or failure by Customer to cooperate with JCI in the timely completion of the Work, JCI shall provide written notice to Customer of the existence, extent of, and reason for such delays and impacts. Under such circumstances, an equitable adjustment in the time for performance, price, scope and payment terms, and the Assured Performance Guarantee shall be made.
5. **ACCESS.** Customer shall provide JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties in Customer's control that are subject to the Work and M&V Services. Customer further agrees to assist JCI, its subcontractors, and its agents to gain access to facilities and properties that are not controlled by Customer but are necessary for JCI to complete the Work and provide the M&V Services. An equitable adjustment in the time for performance, price and payment terms, and Assured Performance Guarantee shall be made as a result of any failure to grant such access.
6. **PERMITS, TAXES, AND FEES.** Unless otherwise specified in Schedule 3 (Customer Responsibilities), JCI shall be responsible for obtaining all building permits required for it to perform the Work. Unless otherwise specified in Schedule 1 (Scope of Work), Customer shall be responsible for obtaining all other permits, licenses, approvals, permissions and certifications, including but not limited to, all zoning and land use changes or exceptions required for the provision of the Work or the ownership and use of the Improvement Measures. JCI shall not be obligated to provide any changes to or improvement of the facilities or any portion thereof required under any applicable building, fire, safety, sprinkler or other applicable code, standard, law, regulation, ordinance or other requirement unless the same expressly regulates the installation of the Improvement Measures. Without limiting the foregoing, JCI's obligations with respect to the Work is not intended to encompass any changes or improvements that relate to any compliance matters (whether known or unknown) that are not directly related to the installation of the Improvement Measures or which have been imposed or enforced because of the occasion or opportunity of review by any governmental authority. Customer shall be responsible for and shall pay when due all assessments, charges and sales, use, property, excise, or other

taxes now or hereafter imposed by any governmental body or agency upon the provision of the Work or the M&V Services, implementation or presence of the Improvement Measures, the use of the Improvement Measures or payments due to JCI under this Agreement, other than taxes upon the net income of JCI. Customer shall also be responsible for real or personal property taxes relating to equipment or material included in the Improvement Measures. Any fees, taxes, or other lawful charges paid by JCI on account of Customer shall become immediately due from Customer to JCI.

7. **WARRANTY.** JCI will perform the Work in a professional, workman-like manner. JCI will promptly re-perform any non-conforming Work for no charge, as long as Customer provides written notice to JCI within one (1) year following Substantial Completion or such other period identified in Schedule 1. If JCI installs or furnishes goods or equipment under this Agreement, and such goods or equipment are covered by an end-user warranty from their manufacturer, JCI will transfer the benefits of such warranty to Customer. The foregoing remedy with respect to the Work, together with any remedy provided by goods or equipment manufacturers, shall be Customer's sole and exclusive remedies for warranty claims. Customer agrees that the one (1) year period following Substantial Completion, or such other period identified in Schedule 1, shall be a reasonable time for purposes of submitting valid warranty claims with respect to the Work. These exclusive remedies shall not have failed of their essential purpose so long as JCI transfers the benefits of any goods or equipment end-user warranty to Customer and remains willing to re-perform any non-conforming Work for no charge within the one (1) year period described above or such other period identified in Schedule 1. NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE PROVIDED BY JCI. JCI does not guaranty that any Improvement Measures will perform in accordance with the manufacturer's specifications over the term of this Agreement, other than with respect to the limited warranty applicable to equipment actually manufactured by JCI, or if the performance failure is related to JCI's workmanship, each as described above. Customer's sole remedy for failed or non-performing Improvement Measures not related to JCI's workmanship is to pursue claims under any manufacturer's warranty claims then in effect. This warranty does not extend to any Work that has been abused, altered, or misused, or repaired by Customer or third parties without the supervision or prior written approval of JCI. Except with respect to goods or equipment manufactured by JCI and furnished to Customer hereunder, for which JCI shall provide its express written manufacturer's warranty, JCI shall not be considered a merchant or vendor of goods or equipment.
8. **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.
9. **SAFETY; COMPLIANCE WITH LAWS.** JCI shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work and M&V Services. Each of JCI and Customer shall comply with all applicable laws, ordinances, rules, regulations, and lawful orders of public authorities (collectively, "Laws") in connection with its performance hereunder.
10. **HAZARDOUS MATERIALS.**
 - A. JCI shall be responsible for removing or disposing of any JCI Hazardous Materials and for the remediation of any areas to the extent impacted by the release of JCI Hazardous Materials. For any Non-JCI Hazardous Materials, Customer shall supply JCI with any information in its possession relating to the presence of such materials if their presence may affect JCI's performance of the Work. It is JCI's policy to seek certification for facilities constructed prior to 1982 that no asbestos containing materials are present, and Customer shall at its own cost and expense provide such certification for buildings it owns or aid JCI in obtaining such certification from facility owners in the case of buildings that Customer does not own, if JCI will undertake Work in the facility that could disturb such asbestos containing materials. If Customer becomes aware of or suspects the presence of Non-JCI Hazardous Materials that may interfere with Work, it will immediately provide notice to JCI. Upon such notice, or if JCI becomes aware of or suspects the presence of Non-JCI Hazardous Materials that may interfere with Work, JCI shall promptly stop the Work in

the affected area. As between Customer and JCI, Customer shall be responsible at its sole expense for removing and disposing of Non-JCI Hazardous Materials from its facilities and the remediation of any areas impacted by the release of Non-JCI Hazardous Materials in conformance with all applicable laws and addressing the impact of its disturbance before JCI continues with its Work.

B. To the fullest extent permitted by law, Customer shall indemnify and hold harmless JCI and its directors, officers, employees, agents, representatives, shareholders, affiliates, and successors and assigns, from and against any and all losses, costs, damages, expenses (including reasonable legal fees and defense costs), claims, causes of action or liability, directly or indirectly, relating to or arising from Customer's negligent use, storage, release, discharge, handling or presence of Non-JCI Hazardous Materials (actual or alleged and regardless of the cause of such condition) on, under or about the facilities, or Customer's failure to comply with this Article 10.

C. Definitions Applicable to this Article 10:

1. "Hazardous Materials" – Hazardous Materials are any material or substance that, whether by its nature or use, is now or hereafter defined or regulated as a hazardous waste, hazardous substance, pollutant or contaminant under applicable laws relating to or addressing public or employee health and safety and protection of the environment, or which is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, mutagenic or otherwise hazardous or which is or contains petroleum, gasoline, diesel, fuel, another petroleum hydrocarbon product, or polychlorinated biphenyls. Hazardous Materials specifically includes without limitation mold, lead-based paint and asbestos containing materials.
2. "JCI Hazardous Materials" – JCI Hazardous Materials are any Hazardous Materials brought onto Customer's premises by JCI in providing the Work.
3. "Non-JCI Hazardous Materials" – Non-JCI Hazardous Materials are any Hazardous Materials located on, about or under Customer's premises, other than JCI Hazardous Materials.

11. CHANGE ORDERS. The parties, without invalidating this Agreement, may request changes in the Work to be performed under this Agreement, consisting of additions, deletions, or other revisions to the Work ("Change Orders"). The price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted in accordance with the Change Order. Such adjustments shall be determined by mutual agreement of the parties. JCI may delay performance until adjustments arising out of the Change Order are clarified and agreed upon. Any Change Order must be signed by an authorized representative of each party. If concealed or unknown conditions are encountered at the project, differing from the conditions represented by Customer in the bid documents or otherwise disclosed by Customer to JCI prior to the commencement of the Work, price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted. Claims for equitable adjustment may be asserted in writing within a reasonable time from the date a party becomes aware of a change to the Work by written notification. Failure to promptly assert a request for equitable adjustment, however, shall not constitute a waiver of any rights to seek any equitable adjustment with respect to such change.

12. CUSTOMER FINANCING; TREATMENT; TAXES. The parties acknowledge and agree that JCI is not making any representation or warranty to Customer with respect to matters not expressly addressed in this Agreement, including, but not limited to:

- a. Customer's ability to obtain or make payments on any financing associated with paying for the Improvement Measures, related services, or otherwise;
- b. Customer's proper legal, tax, accounting, or credit rating agency treatment relating to this Agreement; and
- c. the necessity of Customer to raise taxes or seek additional funding for any purpose.

Customer is solely responsible for its obligations and determinations with respect to the foregoing matters. In addition, the parties acknowledge and agree that Customer shall be responsible to comply, at its cost and expense, with all Laws that may be applicable to it relating to performance contracting, including, without limitation, any requirements relating to the procurement of goods and/or services and any legal, accounting, or engineering opinions or reviews required or obtained in connection with this Agreement. Customer is a body corporate and politic under the laws of the State of Texas and claims exemption from sales and use taxes. A copy of a tax-exempt certificate will be furnished to JCI upon request.

13. **INSURANCE.** JCI shall maintain insurance in the amounts set forth below in full force and effect at all times until the Work has been completed, and shall provide a certificate evidencing such coverage promptly following Customer's request therefor.

COVERAGES	LIMITS OF LIABILITY
Workmen's Compensation Insurance or self-insurance, including Employer's Liability	Statutory
Commercial General Liability Insurance	\$5,000,000 Per Occurrence \$5,000,000 Aggregate
Comprehensive Automobile Liability Insurance	\$5,000,000 Combined Single Limit
The above limits may be obtained through primary and excess policies, and may be subject to self-ensured retentions.	

Customer shall be responsible for obtaining builder's risk insurance coverage for the Improvement Measures and shall at all times be responsible for any loss or casualty to the Improvement Measures. Customer shall also maintain insurance coverage, of the types and in the amounts customary for the conduct of its business, throughout the term of this Agreement.

14. **INDEMNIFICATION.** To the fullest extent permitted by applicable Law, JCI shall indemnify Customer with respect to any third-party claim alleging bodily injury, including death, or property damage, but only to the proportionate extent such injury or damage is caused by the negligence or willful misconduct of JCI or a party for which JCI is responsible. A condition precedent to any obligation of JCI to indemnify Customer pursuant to this Section 14 shall be for Customer to promptly advise JCI of the claim pursuant to the notice provision of this Agreement.
15. **LIMITATION OF LIABILITY.** Neither JCI nor Customer will be responsible to the other for any special, indirect, consequential, remote, punitive, exemplary, loss of profits or revenue, loss of use, or similar damages, regardless of how characterized and regardless of a party having been advised of the possibility of such potential losses or relief, arising in any manner from this Agreement, the Work, the Improvement Measures, the premises, the M&V Services, or otherwise. WITHOUT LIMITING JCI'S EXPRESS OBLIGATIONS UNDER THE ASSURED PERFORMANCE GUARANTEE, JCI'S liability under this agreement, regardless of the form of action, shall in no event exceed the amount of the payments actually received by jci under Schedule 4. If this Agreement covers fire safety or security equipment, Customer understands that JCI is not an insurer regarding those services, and that JCI shall not be responsible for any damage or loss that may result from fire safety or security equipment that fails to prevent a casualty loss. The foregoing waivers and limitations are fundamental elements of the basis for this Agreement between JCI and Customer, and each party acknowledges that JCI would not be able to provide the work and services contemplated by this Agreement on an economic basis in the absence of such waivers and limitations, and would not have entered into this Agreement without such waivers and limitations.

- 16. FORCE MAJEURE EVENTS.** Neither party will be responsible to the other for damages, loss, injury, or delay caused by Force Majeure Events. As used herein, "Force Majeure Events" are conditions that are beyond the reasonable control and without the intentional misconduct or negligence of a party, either foreseeable or unforeseeable, including, without limitation, severe weather, flooding, seismic disturbances, acts of God, acts or omissions of government agencies, condemnation, strikes, labor disputes, epidemics, pandemics, disease, quarantines or other public health risks and/or responses, fires, explosions or other casualties, thefts, vandalism, riots or war, acts of terrorism, electrical power outages, interruptions or degradations in telecommunications, computer, or electronic communications systems, changes in Laws, data breach, cyber-attacks, ransomware, or unavailability, delayed delivery or an increase of 5% or more in cost of any parts, materials or supplies to be used in the project between date of contract and date of installation. If a party is delayed in achieving one or more of its schedule milestones set forth in the Agreement due to a Force Majeure Event, the affected party will be entitled to extend the relevant completion date by the magnitude of the Force Majeure Event plus additional time to overcome the effect of the delay. If the Force Majeure Event directly or indirectly increases JCI's cost to perform, Customer is obligated to reimburse JCI for such increased costs.
- 17. JCI'S PROPERTY.** All materials furnished or used by JCI personnel and/or JCI subcontractors or agents at the installation-site, including documentation, schematics, test equipment, software and associated media remain the exclusive property of JCI or such other third-party. Customer agrees not to use such materials for any purpose at any time without the express authorization of JCI. Customer agrees to allow JCI personnel and/or JCI subcontractors or agents to retrieve and to remove all such materials remaining after installation or maintenance operations have been completed. Customer acknowledges that any software furnished in connection with the Work and/or M&V Services is proprietary and subject to the provisions of any software license agreement associated with such software.
- 18. DISPUTES.** JCI and Customer will attempt to settle any controversy, dispute, difference, or claim between them concerning the performance, enforcement, or interpretation of this Agreement (collectively, "Dispute") through direct discussion in good faith, but if unsuccessful, will submit any Dispute to non-binding mediation in the nearest major metropolitan area of the state where the project is performed. If the parties are unable to agree on a mediator or a date for mediation, either party may request JAMS, Inc. to appoint a mediator and designate the time and procedure for mediation. Such mediator shall be knowledgeable, to each party's reasonable satisfaction, with respect to matters concerning construction law. Neither JCI nor Customer will file a lawsuit against the other until not less than sixty (60) days after the mediation referred to herein has occurred, unless one or both parties is genuinely and reasonably concerned that any applicable statute of limitations is on the verge of expiring. The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in either Fort Bend County, Texas or the U.S. District Court closest to Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity. JCI AND CUSTOMER HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL AS TO ANY CLAIM OR CAUSE OF ACTION BASED UPON, ARISING OUT OF OR DIRECTLY OR INDIRECTLY RELATED TO THIS AGREEMENT, INCLUDING CONTRACT, TORT AND STATUTORY CLAIMS, AND EACH OF THE PARTIES HERETO ACKNOWLEDGES THAT THIS WAIVER IS A MATERIAL INDUCEMENT TO ENTER INTO A BUSINESS RELATIONSHIP, THAT EACH HAS RELIED ON THIS WAIVER IN ENTERING INTO THIS AGREEMENT, AND THAT EACH WILL CONTINUE TO RELY ON THIS WAIVER IN THEIR RELATED FUTURE DEALINGS UNDER THIS AGREEMENT. Customer does not agree to submit disputes arising out of the Agreement to binding arbitration. Neither party agrees to pay any and/or all attorney fees incurred by the other party in any way associated with the Agreement.

- 19. GOVERNING LAW.** This Agreement and the construction and enforceability thereof shall be interpreted in accordance with the laws of the state where the Work is conducted.
- 20. 179D BENEFITS.** As a result of JCI's design and implementation of this Project, a federal income tax deduction under Section 179D of the Internal Revenue Code ("IRC 179D") may become available to JCI as the party primarily responsible for designing energy efficiency improvements implemented at Customer's facilities. Congress provided in IRC 179D(d)(4) for government owners, which do not pay income tax and are thus ineligible to use this deduction, to allocate the deduction to the party primarily responsible for designing the energy efficiency improvements, here JCI. Customer hereby agrees to allocate to JCI such deduction and any similar deduction enacted by Congress to replace IRC 179D. Customer shall cooperate with JCI by executing annually, during the term of this Agreement, and promptly returning to JCI, a written allocation and declaration required by IRC 179D. JCI will prepare and is responsible for the accuracy of any allocation documents and all accompanying documentation provided for Customer's execution. Notwithstanding anything to the contrary herein, Customer makes no representation concerning the availability or applicability of any such tax deduction benefits or of their ability to be allocated to or claimed by JCI. JCI assumes all risk related to such allocation and deduction.
- 21. CONSENTS; APPROVALS; COOPERATION.** Whenever Customer's consent, approval, satisfaction or determination shall be required or permitted under this Agreement, and this Agreement does not expressly state that Customer may act in its sole discretion, such consent, approval, satisfaction or determination shall not be unreasonably withheld, qualified, conditioned or delayed, whether or not such a "reasonableness" standard is expressly stated in this Agreement. Whenever Customer's cooperation is required by JCI in order to carry out JCI's obligations hereunder, Customer agrees that it shall act in good faith and reasonably in so cooperating with JCI and/or JCI's designated representatives or assignees or subcontractors. Customer shall furnish decisions, information, and approvals required by this Agreement in a timely manner so as not to delay the performance of the Work or M&V Services.
- 22. FURTHER ASSURANCES.** The parties shall execute and deliver all documents and perform all further acts that may be reasonably necessary to effectuate the provisions of this Agreement.
- 23. INDEPENDENT CONTRACTOR.** The relationship of the parties hereunder shall be that of independent contractors. Nothing in this Agreement shall be deemed to create a partnership, joint venture, fiduciary, or similar relationship between the parties.
- 24. POWER AND AUTHORITY.** Each party represents and warrants to the other that (i) it has all requisite power and authority to execute and deliver this Agreement and perform its obligations hereunder, (ii) all corporate, board, body politic, or other approvals necessary for its execution, delivery, and performance of this Agreement have been or will be obtained, and (iii) this Agreement constitutes its legal, valid, and binding obligation.
- 25. SEVERABILITY.** In the event that any clause, provision, or portion of this Agreement or any part thereof shall be declared invalid, void, or unenforceable by any court having jurisdiction, such invalidity shall not affect the validity or enforceability of the remaining portions of this Agreement unless the result would be manifestly inequitable or materially impair the benefits intended to inure to either party under this Agreement.
- 26. COMPLETE AGREEMENT.** It is understood and agreed that this Agreement contains the entire agreement between the parties relating to all issues involving the subject matter of this Agreement. No binding understandings, statements, promises or inducements contrary to this Agreement exist. This Agreement supersedes and cancels all previous agreements, negotiations, communications, commitments and understandings with respect to the subject matter hereof, whether made orally or in writing. Each of the parties to this Agreement expressly warrants and represents to the other that no promise or agreement which is not herein expressed has been made to the other, and that neither party is relying upon any statement or representation of the other that is not expressly set forth in this Agreement. Each party hereto is relying

exclusively on the terms of this Agreement, its own judgment, and the advice of its own legal counsel and/or other advisors in entering into this Agreement. Customer acknowledges and agrees that any purchase order issued by Customer associated with this Agreement is intended only to establish payment authority for Customer's internal accounting purposes. No purchase order shall be considered a counteroffer, amendment, modification, or other revision to the terms of this Agreement.

27. **HEADINGS.** The captions and titles in this Agreement are for convenience only and shall not affect the interpretation or meaning of this Agreement.
28. **COUNTERPARTS.** This Agreement may be executed in any number of counterparts, all of which when taken together shall constitute one single agreement between the parties.
29. **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 Johnson Controls, Inc. at the address listed on the first page of this Agreement, ATTN: Regional Solutions Manager, with a copy to Johnson Controls, Inc., ATTN: General Counsel – Building Efficiency Americas, 507 East Michigan Street, Milwaukee, Wisconsin, 53202: and to Customer at the address listed on the first page of this Agreement.
30. **NON-APPROPRIATION.** It is specifically understood and agreed that in the event no funds or insufficient funds are appropriated by Customer under this Agreement, Customer shall notify all necessary parties that this Agreement shall thereafter terminate and be null and void on the last day of the fiscal period for which appropriations were made without penalty, liability or expense to Customer.
31. **CONFIDENTIAL INFORMATION.** JCI expressly acknowledges that Customer is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 et seq., as amended, and notwithstanding any provision in the Agreement to the contrary, Customer will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to Customer by JCI shall not be disclosed to any third-party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed. The terms and conditions of the Agreement are not proprietary or confidential information.
32. **TEXAS-SPECIFIC PROVISIONS.**
 - A. Agreement to Not Boycott Israel Chapter 2271 Texas Government Code: By signature below, JCI verifies that if JCI employs ten (10) or more full-time employees and this Agreement has a value of \$100,000 or more, JCI does not boycott Israel and will not boycott Israel during the term of this Agreement.
 - B. Texas Government Code Section 2251.152 Acknowledgment: By signature below, JCI represents pursuant to Section 2252.152 of the Texas Government Code, that JCI is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.
 - C. Human Trafficking. **BY ACCEPTANCE OF AGREEMENT, JCI ACKNOWLEDGES THAT THE CUSTOMER IS OPPOSED TO HUMAN TRAFFICKING AND THAT NO CUSTOMER FUNDS WILL BE USED IN SUPPORT OF SERVICES OR ACTIVITIES THAT VIOLATE HUMAN TRAFFICKING LAWS.**

FORT BEND COUNTY

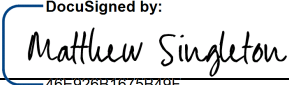
Signature: _____

Printed Name: _____

Title: _____

Date: _____

JOHNSON CONTROLS, INC.

Signature:  _____
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Printed Name: Matthew Singleton

Title: Area General Manager

Date: 8/7/2023

SCOPE OF WORK (Schedule 1)

I. Summary of The Scope of Work

The following information lists and summarizes the Facility Improvement Measures (FIM) to be implemented for this project.

FIM Number	FIM Name
FIM 1.0	LED Lighting Upgrades
FIM 1.1	Lighting Controls
FIM 2.0	BAS Upgrades
FIM 3.0	DX Unit Replacement
FIM 3.5	Cooling Tower Replacement and Pump Upgrades
FIM 3.6	CRAC Replacement
FIM 3.8	Boiler Replacement
FIM 3.9	AHU Damper Replacements

Schedule 1

Building	LED Lighting Upgrades (FIM 1.0)	Lighting Controls (FIM 1.1)	BAS Upgrades (FIM 2.0)	DX Unit Replacement (FIM 3.0)	Cooling Tower Replacement and Pump Upgrades (FIM 3.5)	Replace CRAC Jane Long (FIM 3.6)	Boiler Replacement (FIM 3.8)	AHU Damper Replacements (FIM 3.9)
36 Park & Ride (FBC Fair Grounds)	X							
5th St. Boys & Girls Community Center	X			X				
Animal Services Building	X			X				
Auto Theft	X			X				
Central Appraisal	X		X					
CSCD Fresno	X			X				
Drainage Buildings	X			X				
Facilities Morton St.				X				
Fort Bend Hobby Boys & Girls	X			X				
George Family Development Center	X			X				
IDC Shop (Road & Bridge)				X				
Jail East Tower			X				X	X
Jail West Tower			X		x			
Jake Dove Juvenile	X			X				
Jane Long						X		
Justice Center	X	X						
Juvenile Court	X			X				
Juvenile Detention	X			X				
Juvenile Probation	X			X				
Kitty Hollow Park	X			X				
Medic 1	X			X				
Mustang Community Center	X			X				
Narcotics / Patrol Building	X			X				
Needville Annex JP	X			X				
Recycling Center	X			X				
Roads & Bridge (Beechnut)	X			X				
Roads & Bridge Needville	X			X				
Roads & Bridge Dairy Ashford	X			X				
Roads & Bridge Pane Lane	X			X				
Rosenberg Boot Camp Juvenile	X			X				
Sienna Annex	X		X					
Vehicle Maintenance	X			X				
Vocational Building				X				

II. Description of the Scope of Work

The following information provides a description of the scope of work. For more detail on the Improvement Measures noted immediately below, please refer to the corresponding attachments.

General Scope of Work

JCI will provide the Customer with the scope of work (Work) identified in this section. JCI shall supervise and direct the Work and shall be solely responsible for construction means, methods, techniques, sequences, and procedures and for coordinating the Work. JCI shall be responsible to pay for labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for the execution and completion of the Work, whether temporary or permanent. The completed work will be functional and installed and inspected as in compliance with local governing codes in effect at the time of contract signing.

General Work:

- The JCI safety specifications will be followed at all times. Any safety violations will be addressed immediately. Work will not continue until any unsafe conditions are corrected.
- Customer agrees to sign off, take ownership of and accept JCI's warranty start date for each FIM by building separately as they are completed.
- Final engineering work for each FIM shall be provided as described within this scope of work. Once final engineering work is complete, some modifications to outlined scope of work may be required. No modifications shall be made to the Work without prior approval of the Customer.
- Customer agrees to review and approve all equipment and product submittals within five working days after receipt from JCI.
- One each electronic copy of the Operations and maintenance (O&M) manuals of equipment shall be submitted to Customer at completion of the construction phase of the project.
- One each electronic copy of as-built construction drawings for applicable FIMs will be submitted to the Customer at completion of the construction phase.
- JCI shall provide an as-built lighting table with updated fixture counts to reflect actual lamps/ballasts/fixtures installed.
- Work will be coordinated with Customer personnel to minimize interruptions and delays.
- Materials being installed shall be new unless otherwise specified in this scope of work.
- Necessary protection will be provided to avoid damage to adjacent services in the surrounding work areas.
- JCI shall be given ample notice of security clearance procedures required for access to any facility included in this scope of work.
- County to provide adequate personnel for escort(s) in and access to correctional facilities and County buildings for multiple installation trades so not to impede the construction work and schedule at no cost to JCI.
- Customer retains the right to keep any removed equipment or material, unless specified differently in other areas of this Agreement. The Customer shall notify JCI in writing within 30 calendar days of contract signing of any equipment and materials the Customer shall retain.
- Customer shall indicate and mark any equipment or parts 14 days before scheduled removal. It shall be the Customer's responsibility to remove parts from existing equipment prior to demolition. Additionally, any equipment to be retained by Customer shall be placed by JCI in a designated location on each site for Customer removal.
- Work will be coordinated with Customer personnel to minimize interruptions, delays, or safety issues.
- All work performed during standard 40-hour work week, Monday through Friday; weekends or overtime not included.

Schedule 1

- All existing equipment, infrastructure, materials, circuit breakers, contactors, switches/controls, existing lighting fixtures, and the electrical system not being replaced or repaired under this contract are assumed to be operational, in working order and compliant with current code requirements and standards.

General Exclusions

- Hazardous Materials. Unless specifically noted in this scope of work, 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 or PCBs, in or on the premises.
- Any structural modifications to existing equipment and infrastructure.
- Code upgrades for existing infrastructure and equipment are scheduled to remain.
- Repair, upgrades, or replacement of defective mechanical equipment, electrical or controls equipment, or the electrical distribution system, except the equipment described in the FIM description (JCI will identify the location of defective equipment and notify Customer personnel).
- Testing, adjusting, and balancing of existing systems, unless specified in the scope of work.
- Correction of existing building ventilation conditions and indoor air quality issues.
- Engineering services, studies, and analysis associated with any exclusions or work clearly outside of the scope definition.
- Repairs to existing pneumatic and electronic controls unless specified to be replaced in this scope of work.
- Repairs to existing fire & smoke controls and associated wiring. During construction, if JCI identifies non-functional fire & smoke controls, JCI will provide a deficiency report to Customer.
- Temporary space conditioning unless otherwise identified in a FIM scope of work.
- Resolution of existing design, service, and or distribution conditions known or unknown.
- Correction of any existing applicable building code violations and Federal Americans with Disabilities Act (ADA) violations identified by JCI during the execution of the Work. Such violations will be brought to the attention of the Customer for remedy.

FIM 1.0: LED Lighting Upgrades

General

This FIM shall include retrofits to the existing lighting system with energy-efficient LED lighting technology per Attachment 5. JCI has developed efficiency and technology improvement solutions through conducting site audits in cooperation with site personnel providing valuable support and insights for the project, including a description of which buildings should be excluded from the audits, identification of current lighting deficiencies and initiatives, ongoing energy efficiency initiatives, building access and escort requirements, utility data, operating schedules, and other priorities. The following is a summary scope of work per area (refer to the line-by-line for details of fixtures included in scope).

Interior LED Lighting Retrofit Scope of Work

The majority of the light fixtures are T8 linear fluorescent running at 32 W per lamp, powered by a normal powered ballast; There are also a variety of fixtures with incandescent and compact fluorescent lamps. For fixtures identified in Attachment 5.

- Linear fluorescent fixtures will be retrofitted with Type B TLED direct wire tubes. The existing electronic ballasts will be removed. If spaces have existing linear fluorescent dimmable tubes, then LED Type C dimmable tubes with 0-10V external drivers will be utilized.
- Round recessed can lights will be replaced with LED can kits.
- Screw-in incandescent and compact fluorescent lamps will be relamped with LED replacement lamps.

Exterior LED Lighting Retrofit Scope of Work

The exterior lighting systems in the County include a mixture of incandescent, compact fluorescent, LED, and high intensity discharge (HID) technology fixtures. For fixtures identified in Attachment 5.

- Replace the majority of the HID fixtures with new high efficiency LED fixtures including floods, wall packs, canopy, dusk-to-dawn, pole-mounted spider lights, and pole-mounted shoeboxes.
- Decorative wall-mount fixtures, step lights, and square recessed cans will be retrofitted or relamped with LED lamps.
- Round recessed cans will be retrofitted with a LED can kit.
- Existing LED fixtures will not be replaced.

The table below shows a summary of the quantities and types of retrofits included by facility.

Table 1.0.1: Lighting Retrofit Quantity Summary

Facility	No Retrofit	Retrofit	Relamp	Retrofit with a Kit or Reflector	New/ Replacement Fixture	Total Count
Justice Center Interior	211	3,394	0	733	25	4,363
Justice Center Exterior	10	96	0	7	53	166
Juvenile Detention Interior	5	622	5	10	28	670
Juvenile Detention Exterior	1	0	0	10	36	47
Narcotics / Patrol Building Interior	0	3	0	0	0	3
Narcotics / Patrol Building Exterior	0	0	0	0	4	4
Juvenile Probation Interior	7	125	0	24	0	156
Juvenile Probation Exterior	0	0	4	0	3	7
Vehicle Maintenance Interior	3	152	1	43	32	231
Vehicle Maintenance Exterior	0	0	0	0	26	26
Sienna Annex Interior	29	625	0	52	0	706

Schedule 1

Facility	No Retrofit	Retrofit	Relamp	Retrofit with a Kit or Reflector	New/ Replacement Fixture	Total Count
Sienna Annex Exterior	4	1	0	16	0	21
Kitty Hollow Park Interior	16	107	0	2	4	129
Kitty Hollow Park Exterior	35	0	0	0	30	65
Jake Dove Juvenile Interior	49	111	0	4	9	173
Jake Dove Juvenile Exterior	5	0	0	4	15	24
Mustang Community Center Interior	3	40	2	0	0	45
Mustang Community Center Exterior	0	0	0	8	17	25
Fort Bend Animal Services Building Interior	28	89	0	0	5	122
Fort Bend Animal Services Building Exterior	0	0	0	0	20	20
Recycling Center Interior	13	0	0	0	25	38
Recycling Center Exterior	1	0	0	0	11	12
Fort Bend Hobby Boys & Girls Interior	31	50	0	38	29	148
Fort Bend Hobby Boys & Girls Exterior	0	0	0	0	13	13
Beechnut Roads & Bridge Interior	126	27	2	4	7	166
Beechnut Roads & Bridge Exterior	8	0	0	0	13	21
Medic 1 Interior	6	111	0	13	0	130
Medic 1 Exterior	0	0	0	0	23	23
36 Park & Ride (FBC Fair Grounds) Exterior	0	12	0	0	14	26
Central Appraisal Interior	19	530	0	30	0	579
Central Appraisal Exterior	4	7	0	9	25	45
Rosenberg Boot Camp Juvenile Interior	16	129	2	9	5	161
Rosenberg Boot Camp Juvenile Exterior	1	0	0	0	20	21
George Family Development Center Interior	46	353	0	93	0	492
George Family Development Center Exterior	0	0	0	8	14	22
Drainage Buildings Interior	130	32	0	0	0	162
Roads & Bridge Admin Interior	18	190	0	11	19	238
Roads & Bridge Admin Exterior	2	0	0	0	62	64
5th St. Boys & Girls Community Center Interior	34	97	10	37	25	203
5th St. Boys & Girls Community Center Exterior	3	0	0	12	23	38
Juvenile Court Exterior	0	0	0	5	11	16
Juvenile Court Interior	9	64	0	42	0	115
Roads & Bridge (Pane Lane) Exterior	19	4	1	2	30	56
Roads & Bridge (Pane Lane) Interior	157	47	4	7	2	217
Roads & Bridge (Dairy Ashford) Exterior	5	0	0	0	9	14
Roads & Bridge (Dairy Ashford) Interior	70	5	1	0	0	76

The following definitions expand on the type of solutions proposed:

- **No Retrofit:** No upgrade solution proposed. Existing fixture is already LED or not a candidate for retrofit.
- **Retrofit:** Installation of LED lamps or tubes. Includes removal and disposal of existing lamps and ballasts. LED lamps or tubes will be direct-wired or installed with a LED driver. Existing fixture to remain as-is.

Schedule 1

- **Relamp:** Replacement of non-ballasted lamps with LED replacements (typically screw-in). Includes removal and disposal of existing lamps.
- **Retrofit with Kit or Reflector:** Installation of LED kit designed to fit in existing fixture. Includes removal and disposal of existing lamps and ballasts. LED kits typically alter the appearance of the existing fixture, and after installation fixtures look new. Reflectors allow for installation of LED lamps or tubes.
- **New/Replacement Fixture:** Removal and disposal of existing fixture and installation of new LED fixture.

Final Engineering

- Development of material and equipment submittals.

Demolition and Removal Work

- Existing lamps and ballasts associated with the referenced scope of work will be removed and properly disposed of according to local codes regulations in force at the time of contract signing.

Installation

- JCI will furnish all materials, labor, and necessary equipment to complete the detailed scope of work shown in Attachment 5, room by room description.

Warranty

- Maintenance stock of 1.5% shall be provided LED recessed can kits, LED tubes, and LED screw-in lamps only.
- Customer shall be responsible for installation of warranted lamps beginning at the date of Substantial Completion.
- Workmanship is warranted for one year from date of installation.
- Material Warranties - Manufacturer warranties of retrofit kits, and fixtures installed as part of the project are covered by the individual manufacturer's published documentation. JCI will furnish contact information for each manufacturer. Alleged defective product may be required for return to factory for analysis and shall be the customer's responsibility.

Table 1.0.2: Lighting Equipment Warranty

LED T8 Lamps	Green Creative, Keystone, or equivalent	5 years
LED Can Light Retrofits	Green Creative or equivalent	5 years
LED Interior Fixtures	Cooper Lighting, or equivalent	5 years
LED Exterior Fixtures	Cooper Lighting, ILP, or equivalent	5 years
LED Kits for Interior Uplights	SimplyLED, or equivalent	10 years
Screw-in LED Lamps	Green Creative, Keystone, or equivalent	3 years

Training

- No training for this FIM shall be provided.

Closeout

JCI shall provide the following closeout documents by building:

- Product data for new materials and equipment installed.
- Warranty information for new materials and equipment installed.
- Updated line-by-line document for all work included in this FIM.

Schedule 1**Inclusions**

- JCI acting as an agent for customer will ensure the proper disposal of hazardous waste generated during the installation of this FIM in accordance with the Federal, State, and Local laws and regulations existing at the time of execution of the Agreement.
- Due to ongoing supply chain issues, if specified materials become either temporarily or permanently unavailable for reasons beyond the control of JCI, then the expected time for performance of the work will be extended. JCI reserves the right to provide equivalent substitutions at no price increase. LED fixtures or components specified for the project are based on comparable original lumen outputs of existing equipment rather than depreciated light output values.
- It is assumed that existing fixtures are in a well-maintained condition.
- All work shall be performed in accordance with industry standards and approved safety practices in effect at the time of contract signing.
- Professional performance by licensed, ensured and certified personnel skilled in lighting retrofit services.
- LED fixtures or components specified for the project are based on comparable original lumen outputs of existing equipment rather than depreciated light output values.
- Existing and post-installation illumination levels have been/will be measured in accordance with procedures recommended by IESNA using a calibrated light meter.
- Pricing assumes 100% access will be granted to all facilities during the construction schedule. Escort and security clearance requirements will be provided in a timely manner at customers' expense.
- Lamps and ballasts removed as part of the work shall be recycled and/or disposed of in compliance with applicable regulations.
- All work performed during standard 40-hour work week, Monday through Friday; weekends or overtime not included unless otherwise amended per contract.
- All circuit breakers, contactors, switches/controls, existing fixtures, and the electrical system in general are assumed to be operational working order and compliant with current NEC requirements.
- JCI shall be given ample notice for security clearance procedures required for access to any facility included in Lighting Scope of Work, room by room description of work.
- JCI personnel will be permitted to park and use restroom facilities onsite during construction. JCI and its subcontractors agree to use designated staff bathrooms and customer shall provide necessary access to staff facilities during the duration of the project.
- Where ULB listed tubular LED lamp (TLED) retrofits are proposed, the tubes will be direct-wired, and the existing ballast will be removed.
- Where ULC listed tubular LED lamp (TLED) retrofits are proposed, external drivers will be utilized where noted in the line-by-line scope of work. Existing ballasts will be removed.
- Where retrofits of existing fixtures are proposed, the scope includes wiping down prismatic lenses with dry cloth.
- Existing lighting systems were presumed to be designed based on IESNA recommended practices. In the event current light levels are above IESNA recommendations for the space type (i.e., over-lit), light levels will be reduced. In the event light levels are below IESNA recommendations for the space type, JCI will meet or exceed current light levels. If the space is under-lit due to an inadequate spacing or quantity of fixtures from initial design, which requires adding fixtures, adding circuits, reconfiguration or new construction, this will be brought to the attention of the customer. LED fixtures or components specified for the project are based on comparable original lumen outputs of existing equipment rather than depreciated light output values.
- Existing and post-installation illumination levels have been/will be measured in accordance with procedures recommended by IESNA using a light meter.

Schedule 1**Exclusions**

- Repair or replacement of defective equipment (i.e., electrical, motion sensors, timeclocks) other than the equipment specifically described in the FIM description and Work. JCI will make efforts to notify the customer of the location of defective equipment that is uncovered. However, JCI does is not responsible for identifying or notifying the Customer of all pre-existing issues within the lighting system. No adjustments to the existing settings or calibration or motion sensors, time clocks or energy management systems are included.
- If the space is under-lit or meeting max to min levels due to an inadequate spacing or quantity of fixtures from initial design, which requires adding fixtures, adding circuits, reconfiguration, or new construction, this will be brought to the attention of the customer. LED fixtures or components specified for the project are based on comparable original lumen outputs of existing equipment rather than depreciated light output values.
- Repair or upgrades required due to rectify existing code violations, including egress and emergency lighting, unless specifically described in this Scope of Work.
- Fixtures in areas not addressed on the detailed Scope of Work in Attachment 5.
- Design and installation of emergency and egress lighting systems unless detailed in Attachment 5.
- Fixtures in inaccessible areas.
- Existing task lighting and table-type light fixtures.
- Existing decorative light fixtures unless detailed in Attachment 5.
- Work in or around Asbestos-contaminated areas. If no certifications are available for sites older than 1982, JCI will not proceed with work until customer signed certifications of abatement have been provided.
- Repair or replacement of electric system components e.g., switches, breakers, wiring) unless the failure is a direct result of JCI action.
- Repair or replacement of louvers or other components unless denoted in Attachment 5, room by room description of work.
- Repair or replacement of yellowed, cracked, damaged or missing fixture lenses, louvers or other components unless denoted on the JCI line-by-line scope of work.
- The emergency and egress lighting unless noted to be replaced in Attachment 5 with a packaged LED battery backup unit.
- All electrical wiring is assumed to be in good condition and compliant with current NEC requirements. No re-wiring will be performed unless otherwise noted. It is the assumption that the existing electrical circuit network including but not limited to wire, conduit, fittings, straps or other devices are wired in a way to install controlled switches that wirelessly communicate to sensors or power packs to interrupt switch legs or home runs.
- Existing faulty wiring or raceways providing power to lighting system. (JCI will bring such conditions to the attention of Customer, but it shall be the responsibility of Customer to address the identified deficiencies).
- Painting, plastering or any other type of repair to existing mounting surfaces after the removal or replacement of fixtures, unless otherwise noted.
- Engineered Drawings.
- Existing affected light poles will be reused. Repair of wiring to poles, if required, is not included.
- Customer is responsible for pole maintenance, repair and replacement throughout the term of the guarantee.
- Lighting Poles will be checked for contact voltage. If any hazardous voltage is noted, work on that pole will be stopped and the customer and/or the utility company will be notified.

FIM 1.1: Lighting Control Upgrades

General

The intent of this scope of work is to replace the Wattstopper lighting control system in the original portion of Justice Complex. This does not include the Touché lighting control system located in the newer section of the Justice Complex.

The scope of work will include the following buildings:

- Justice Complex

Final Engineering

Development of equipment submittals.

Demolition and Removal Work

JCI will remove and properly dispose of existing lighting control equipment as shown below. Demolition of existing equipment will include the following (for details refer to each FIM section below):

- Remove existing controllers associated with the panels listed in Table 1.1.1
- Dismantle and remove existing control panels unless there is a compelling reason to leave in service.

Removal and proper disposal of existing equipment in accordance with all local, state, and Federal laws in effect at the time of contract execution, unless the Customer chooses to keep the equipment.

Installation

Overall installation requirements:

- All work to be performed and installed in strict accordance with building codes in effect at the time of contract signing.
- All work is based on labor during normal business hours.
- Provide all necessary low voltage control wiring per local installation code.
- Design, programming, engineering, and verification of computerized automation systems, control modules and end devices, and performance of software modification.
- This proposal is based on Table 1.1.1.
- Existing conduit and/or wiring to be reused if compatible and in acceptable condition.

Table 1.1.1

Existing Panels Building	New Components
(13) Existing 8 Relay Lighting Panels:	New IP DDC Controller and expander(s)
	New Lighting Relays
	Reuse existing panels if possible
(2) Existing 24 Relay Lighting Panels:	New IP DDC Controller and expander(s)
	New Lighting Relays
(1) Existing 48 Relay Lighting Panel:	New IP DDC Controller and expander(s)
	New Lighting Relays
	Reuse existing panels if possible

Schedule 1**Exclusions**

- 16 IP drops at the location of the existing lighting control panels to be provided by customer.
- JCI is not responsible for replacing or upgrading existing occupancy sensors, lighting switches, or photocells.
- Power wiring outside of lighting control panels.

Training

- Provide four hours of onsite customer training.
- Provide 20 hours of onsite third-party assistance.

Warranties

- Provide a one year warranty for the Automated Logic (ALC) furnished material and Building Automation System (BAS) (new material only).
- One year workmanship guarantee beginning upon final acceptance of this FIM.
- The manufacturer's stated warranties on equipment installed as part of this FIM.

Closeout

JCI shall provide the following closeout documents:

- Product data for new equipment installed.
- Warranty information for new equipment installed and O&M manuals.

FIM 2.0: BAS Upgrades

General

The intent of this scope of work is to upgrade and/or replace (like-for-like unless otherwise noted) the HVAC Controls at selected locations. In addition to the buildings with existing systems, more County buildings will be added to the system. Some existing standalone controls will remain unchanged (i.e., standalone unit heaters). Refer to Attachment-5 for savings associated with the FIM. Work to be performed during normal business hours unless otherwise specified.

The scope of work will include the following buildings:

- Central Appraisal
- Sienna Annex
- County Jail East Tower
- County Jail West Tower (Chiller Plant)

Final Engineering

- Development of equipment submittals.
- Quantities and details shown in scopes of work below may be updated based on final engineering to be completed post contract signing.

Demolition and Removal Work

JCI will remove and properly dispose of existing control equipment as shown below. Demolition of existing equipment will include the following:

- Remove existing controllers impacted by this scope of work.
- Remove existing supervisory controllers impacted by this scope of work.
- Remove existing sensors, transmitters, control valves, and dampers impacted by this scope of work.
- Remove existing control panels impacted by this scope of work.
- Remove existing visible pneumatic tubing impacted by this scope of work back to the nearest main and cap. Unexposed pneumatic tubing within walls will remain. Demolish pneumatic sensors and caulk holes that may be left in sheet metal due to demolition of pneumatic sensors.
- Removal and proper disposal of existing equipment in accordance with all local, state, and Federal laws in effect at the time of contract execution, unless the Customer chooses to keep the equipment.

Installation

Overall installation requirements:

- All work to be performed and installed in strict accordance with building codes in effect at the time of contract signing.
- Dismantle and remove applicable non-functioning controls and return or discard as directed by maintenance staff.
- Demolish existing controls, as required, to install new controls.
- Dismantle and remove existing control panels unless there is a compelling reason to leave in service.
- Existing conduit and/or wiring to be reused if compatible and in acceptable condition.
- As applicable, disconnect, seal and leak test pneumatic piping as close to the pneumatic main air line, as is possible and/or applicable.

Schedule 1**Exclusions**

- Repair or replacement of defective mechanical, electrical and/or controls equipment, and the electrical distribution system, other than the equipment specifically described in the FIM description. JCI will identify the location of defective equipment and notify the Customer.
- Resolution of existing design, service, and or distribution conditions known or unknown.
- Engineering services, studies and analysis associated with any exclusions or work clearly outside of the scope definition. Resolution of existing HVAC design, service and or distribution conditions known or unknown.
- Software upgrades for the Customer's front-end unless otherwise noted in the Scope of Work.
- Ongoing annual fees associated with licenses and access fees.
- Correction of any existing applicable building code violations and Federal Americans with Disabilities Act (ADA) violations identified by JCI during the execution of the Work. Such violations will be brought to the attention of the Customer for remedy.
- Engineered drawings.
- Test and balance of any air or water system.
- Repairs or upgrades required due to bring adjacent controls, electrical, and mechanical systems up to code.
- Repair or replacement of defective mechanical, controls, and electrical equipment and electrical distribution system, except the equipment described in the Scope of Work (Defective equipment identified by JCI during implementation of the Scope of Work will be brought to the attention of the Customer).
- Repairs to existing damaged areas, such as retiling and painting of floors, ceilings, and walls, unless specifically identified above.
- Existing building ventilation conditions and indoor air quality issues are excluded from the scope and cost of this project.
- Temporary space conditioning.
- Resolution of existing design, service, and or distribution conditions known or unknown.
- The Customer will provide, free of charge, high-speed Internet connections and the required Virtual Private Network (VPN) services to the Contractor, for monitoring, tuning, and making system changes to the BAS connected to the HVAC systems or equipment.
- Exclude taxes.
- Exclude all fire alarm work.
- Exclude furnishing, installing, wiring, or monitoring fire/smoke/fire smoke dampers.
- Fire alarm system, integration and/or UUKL smoke control.
- Chemical water treatment system work.
- Emergency generator control and/or monitoring.
- Smoke isolation dampers, smoke, fire, combination fire/smoke dampers.
- ATS transfer switch monitoring.
- Exclude Buy American FARs.
- Anything not specifically included in this Work.

Schedule 1**Training**

- Four training sessions, each of which will be two hour sessions and shall occur during the construction/installation period.

Warranties

- One year workmanship guarantee beginning upon final acceptance of this FIM.
- The manufacturer's stated warranties on equipment installed as part of this FIM.

Closeout

JCI shall provide the following closeout documents:

- Product data for new equipment installed.
- Warranty information for new equipment installed and O&M manuals.

BAS Scope of Work

BAS Infrastructure

Use Existing Operator Workstation – Common to impacted Metasys sites

- Existing BAS Workstations – Metasys data server to be accessed via internet browser using existing notebook and desktop computers.
- Lot System Graphics.
 - ◆ Includes floor plan graphics
 - ◆ Includes dynamic system graphics for connected equipment

Central Appraisal

Scope

- The existing Metasys BAS will be used to accommodate improvements in the BAS at Central Appraisal and the Sienna Annex.
- Existing building level controllers at both facilities will be replaced with new Supervisory Network Engines (SNE). The SNE shall communicate to both the existing Metasys System Extended Architecture server and the new and existing field devices in the two facilities.
- Upgrade the existing FX60 by replacing the building level controller with a new Metasys SNE building level controller engine.
- Replace the existing 27 PCG controllers with new Metasys Generation 4 CGM field controllers. Existing wiring is compatible with the new controllers and shall be reused. Replace existing zone sensors with new zone sensors with built-in occupancy sensors to reduce energy consumption whenever the room is unoccupied.
- One Supervisory Network Engine.

Table 2.0.1: Units Included

Building	Tag	Make	Model
Central Appraisal	192	Trane	4TTA3060D4000CA
Central Appraisal	193	Trane	4TTA3042D3000CA
Central Appraisal	194	Trane	4TTA3060D4000CA
Central Appraisal	195	Trane	TTA090D4HRAA
Central Appraisal	197	Trane	TTA090D4HRAA
Central Appraisal	198	Trane	4TTA3030A4000A
Central Appraisal	199	Trane	4TTA3048D4000CA
Central Appraisal	200	Trane	4TTA3060D4000CA
Central Appraisal	201	Trane	4TTA3060D4000CA
Central Appraisal	202	Trane	4TTA3060D4000CA
Central Appraisal	203	Trane	4TTA3060D4000CA
Central Appraisal	204	Trane	TTA090D400AA
Central Appraisal	205	Trane	4TTA3060D4000CA
Central Appraisal	206	Trane	4TTA036B3000AA
Central Appraisal	207	Trane	4TTA3060D4000CA
Central Appraisal	210	Trane	4TTA3060D4000CA
Central Appraisal	212	Trane	4TTA3060D4000CA

Schedule 1

Building	Tag	Make	Model
Central Appraisal	213	Trane	4TTA3060D4000CA
Central Appraisal	214	Trane	4TTA3060D4000CA
Central Appraisal	215	Trane	TTA073D4HRAA
Central Appraisal	216	Trane	4TTA3060D4000CA
Central Appraisal	217	Trane	TTA073D4HRAA
Central Appraisal	218	Trane	4TTA3060D4000CA
Central Appraisal	219	Trane	4TTA4036A4000AA
Central Appraisal	220	Trane	4TTA4048A4000AA
Central Appraisal	221	Trane	4TTA3042A4000AA
Central Appraisal	222	Trane	4TYK1612A10NOA

Sienna Annex**Controls - Observations**

The current BAS is comprised of obsolete Andover controls that are no longer in production. JCI shall replace the existing controls with current BACnet controllers and a server meeting current ASHRAE standards.

Scope

- Replace the existing controllers serving the chilled water system, the hot water system with new CGM controllers. Replace the CHWS-T, CHWR-T, HWS-T, BLR1HWS-T, BLR2HWS-T and HWBP-T temperature sensors with new sensors. Reuse and revalidate two existing differential pressure sensors and three flow meters.
- Replace the existing controllers for three Air-Handling Units (AHUs) and one Computer Room Air-Conditioning (CRAC) unit. Replace the existing Andover bCX1 Series building level controller with a new Metasys SNE building level controller engine. Replace the discharge air temperature sensor and zone humidity sensor for each unit. Validate and recalibrate, if necessary, the existing return air carbon dioxide sensors (CO₂).
- Replace the three lighting control panels with new lighting control panels with BACnet interface.
- Replace the 64 existing Andover VAV controllers with new Metasys CVM controllers. Fifty-six (56) serve fan powered boxes and eight serve VAV boxes. Replace the zone sensor. New zone sensors shall be equipped with built-in occupancy sensors. Reuse existing power and control wiring. Replace the existing Andover controllers serving OAF, EF, and RF with new CGM controllers.
- The three Phoenix Supply Air Valves (SAV) shall be removed and replaced with new conventional VAV boxes. Replace the zone sensor and zone sensor cabling. New zone sensors shall be equipped with built-in occupancy sensors. Reuse existing power that was provided to the SAV. Reuse existing cabling to the heating valve.

County Jail West Tower**Scope**

- Furnish four (two existing and two new) two-way cooling tower isolation valves to be powered with existing 120Vac circuit on existing valves. Size of valves is 8", basis of design is on Belimo F6200 series – new controller I/O for these two new valves are included.
- Install two new BACnet ready Variable Frequency Drive (VFD) – ABB ACH580 provided, installed, and configured by JCI – in same location as existing cooling tower fan drives. Install two new BACnet ready VFD – ABB ACH580 provided, installed, and configured by JCI – in same location as existing primary chilled water pumps. Install two new BACnet ready VFD – ABB ACH580 provided, installed, and configured by JCI – in same location as existing secondary chilled water pumps.

Schedule 1

- Furnish and install items in the following point list.
 - ◆ Chiller kW (Quantity 2) (From kW meters) – Existing in interface to Chiller, will pull out and add to graphical interface.
 - ◆ Tower fans start/stop/status (Quantity 2) – To replace existing via VFD protocol.
 - ◆ Tower fan speed command (Quantity 2) – To replace existing via VFD protocol.
 - ◆ Tower isolation valve command/open (Quantity 4) – Two existing control points per valve to be reused to control isolation of tower (both entering/leaving isolation valves on same point per tower).
 - ◆ Condenser water loop pump start/stop/status (Quantity 2) – This point will be provided by the VFD.
Condenser water loop pump speed command (Quantity 2) – This point will be provided by the VFD.
 - ◆ Chilled water loop pump start/stop/status (Quantity 1) – this would be a quantity of two but will replace existing via VFD protocol.
 - ◆ Chilled water loop pump speed command (Quantity 1) – this would be a quantity of two but will replace one of the existing via existing via VFD protocol.
- At the completion of the project, the customer shall be provided with digital copies of all applicable drawings.
- Trending data shall be limited to the sites and equipment listed in this scope of work. Any other sites, equipment or locations not listed in the scope of work shall not be accessible from the BAS.
- Testing of the system shall be done at the time of installation prior to customer turnover. Any seasonal adjustments that need to be made shall be handled during the warranty period.

Table 2.0.2

Building	Unit
West Tower	Chillers (2)
West Tower	Cooling Towers New (2)
West Tower	PCWP New (2)
West Tower	SCWP New (2)
West Tower	CWP New (2)
West Tower	Plant Control Hardware Existing. Sequence of Operation Revised

County Jail East Tower**Controls – Observations**

- The East Tower operates on an outdated Tridium AX platform.

Scope

- East Tower BAS Upgrades – furnish and install necessary software and or hardware to upgrade the server and JACE-1. Update graphics and programming on existing workstations.

CHWS – New Controls

- New BACnet controls shall be provided and installed to replace the existing controls.
- Furnish one flow meter and well.
- Provide and install:
 - ◆ Two Btu meters
 - ◆ Two kW meters with current transducers

Schedule 1

- ◆ One outdoor air enthalpy station
- Install and provide control wiring and BACnet communications to two new VFDs on the two primary chilled water pumps.
- Remove existing starters or disconnects and utilize existing power wiring for the new VFDs.
- All new and existing devices shall be terminated to the new controller(s). Provide programming, validation, and 24 hours training of new BAS equipment.

AHU – New Controls

- Furnish and install all necessary software and hardware to replace:
 - ◆ 26 fan coil unit controllers.
 - ◆ 19 variable air volume controllers.
 - ◆ 16 AHU controllers serving AHU 4- 19 (this excludes AHU 1-3 in FIM 2.0) and static pressure sensors, if existing require replacement
- Provide electrical labor and materials to replace VFDs for:
 - ◆ AHU-1
 - ◆ Cooling Tower Fan 1
 - ◆ Cooling Tower Fan 2
 - ◆ Chilled Water Pump 1
 - ◆ Chilled Water Pump 2
 - ◆ Hot Water Pump 2
- VFDs shall use existing power.
 - ◆ Disconnect power and control wiring, remove, and replace existing VFD and reconnect power and control wiring. Install a new MS/TP trunk to connect VFD to the BAS network. Include providing grounding rings for motors when installing new VFDs, if needed. Assist VFD supplier with start-up.

Table 2.0.3

Building	Unit
East Tower	CHWS Controls
East Tower	HWS Controls
East Tower	PCWP VSD Controls (2)
East Tower	SCWP VSD Controls (2)
East Tower	CWP VSD Controls (2)
East Tower	Cooling Tower VSD Controls (2)
East Tower	Hot Water Pump VSD Controls (1)
East Tower	Fan Coil Unit Controllers (26)
East Tower	VAV AHU Controllers (19)
East Tower	MZ AHU Controls (16)

FIM 3.0: DX Unit Replacements (Split Systems and Rooftop Units)

General

This FIM addresses older and inefficient HVAC equipment by replacing existing decentralized unitary Direct Expansion (DX) HVAC equipment with new higher-efficiency equipment, as listed in Table 3.0.1 (See following page). The new HVAC equipment will have approximately the same cooling capacity as the existing units. Refer to Attachment 5 for EER of new equipment as well as savings calculations associated with this FIM.

Final Engineering

Provide equipment submittals for all DX units. All quantities, values, and details indicated are approximate and subject to change as a result of final engineering to be completed post contract signing.

Demolition and Removal Work

JCI will remove and properly dispose of specified existing HVAC systems (both indoor and outdoor units, as applicable). Demolition of existing equipment will include the following:

- The refrigerants in existing equipment shall be removed and properly disposed of per codes and regulations in effect at the time of contract signing.
- Disconnection of existing refrigerant lines.
- Remove each existing equipment electrical disconnect, and safely disconnect electrical supply.
- Disconnect equipment from existing ducting, condensate drain piping and natural gas piping as applicable.
- Disconnect existing controls from the unit being replaced.
- Temporarily seal or cap disconnected utilities and exposed ducting.
- Customer shall indicate and mark any equipment or parts to be retained within 30 calendar days of contract signing of any equipment and materials the Customer shall retain. It shall be the Customer's responsibility to remove parts from existing equipment prior to demolition. Additionally, any equipment to be retained by the Customer shall be placed by JCI in a designated location on each site for Customer removal.
- Removal and proper disposal of existing units in accordance with local, state, and Federal laws in effect at the time of contract execution unless the Customer chooses to keep the equipment.
- Visually inspecting existing housekeeping pads for defects and repair or replacement as necessary.
- Disconnect, remove and properly dispose of condenser water piping to nearest isolation valves or as required for new installation.
- Disconnect, remove and properly dispose of make-up water and overflow piping as required.
- Disconnect, remove and properly dispose of all other materials or debris related to this project.
- Disconnect, remove and properly dispose of two existing single cell cooling towers.
- Disconnect and secure BAS connection, including vibration sensors (if required).
- Disconnect and secure electrical connections for cooling tower motor(s).
- Disconnect and secure electrical connections to the basin heater, and any service outlets.

Table 3.0.1

Equipment Audited to be Replaced			Existing		Proposed		Note
Location	Type	Tag	Manufacturer	model	Manufacturer	Model	
5th St. Boys & Girls Community Center	Split Systems (DX)	295	Carrier	38AKS024-510			Replace Equipment
		296	Trane	TTA120A300FA	Johnson Controls	J10YCC00A2AAB6	Remove and replace security rack
							Rebuild AHU platform
							Install new housekeeping pad
		297	Trane	TTA180B300FA	Johnson Controls	J15YDC00A2AAB6	Remove and replace security rack
							Relocate electrical disconnect to left side of unit
Add new housekeeping pad at condenser							
Auto Theft	Split Systems (DX)	164	Trane	2TTA048A4000AA	Johnson Controls	J07YEC00A4AAB5	Electrical disconnect - Replace existing at condenser
		166	Trane	2TTA036A4000AA	Johnson Controls	J07YEC00A4AAB5	Replace Lineset
							Electrical disconnect - Replace existing at condenser
							Change from 2-condensers to 1-dual stage condenser,
		168	Trane	2TTA036A4000AA	Johnson Controls	TCD2B60S31S	Replace lineset
							Change from 2-condensers to 1-dual stage condenser,
Electrical disconnect - Replace Existing at Condenser							
CSCD Fresno	BARD	281	National Coil Company	V436310A1FDS-NB			Replace Equipment
Drainage Buildings	Split Systems (DX)	238	Trane	2A7B2036A1000AA	Johnson Controls	RAC15036B21S	Electrical disconnect - Replace existing at condenser
							Electrical disconnect - Replace existing at ahu
George Family Development Center	RTU (DX)	105	Trane	YCD120C4L0	Johnson Controls	ZYG12E4C3AB1C114A3	Add new gas regulator
							Add new electrical disconnect at condenser
		106	Trane	YCD18B4LOHB	Johnson Controls	AD15N1CP4L1CAB36B2	Add new electrical disconnect at condenser
							Add new gas regulator
		108	Trane	YCD090C4L	Johnson Controls	ZYG08E4B3AB1C114A4	Add new electrical disconnect at condenser
	Add new gas regulator						
	Split Systems (DX)	109	Trane	YSC072A4E	Johnson Controls	ZYGA7E4B1AB1C114A2	Add new gas regulator
							Add new electrical disconnect at condenser
		111	Trane	TTA036C40CA0	Johnson Controls	TCD2B36S41S	Replace Equipment
		113	Trane	TTR025C100A2	Johnson Controls	RAC13424B21S	Replace Equipment
		115	Trane	RAUCC254CM03	Johnson Controls	J25YCC00A4AAB5	Replace line set
		116	Trane	TTA072C400A0	Johnson Controls	J07YEC00A4AAB5	
118		Trane	TTA048C400A0	Johnson Controls	TCD2B48S41S	Replace Equipment	
119	Trane	TTA036C400A0	Johnson Controls	TCD2B36S41S	Replace Equipment		
120	Trane	TTA030C400A0	Johnson Controls	TCD2B36S41S	Replace Equipment		
Hobby Boys and Girls	RTU (DX)	287	Carrier	50TTF014601BA	Johnson Controls	ZJ150E36R4B1BCA2A2	Replace Equipment
IDC Shop (Road & Bridge)	Split System - Mini	294	Mitsubishi	MXZ-3B24NA	Johnson Controls	LS243HLV3	Replace Equipment
	Split Systems (DX)	292	Goodman	CLJ36-1A	Johnson Controls	RAC14330B21S	Add new electrical disconnect at condenser
		293	Trane	4TTB3060D1000AA			Replace Equipment
Jake Dove Juvenile	Split Systems (DX)	269	Lennox		Johnson Controls	TCD2B60S31S	Replace Equipment
		270	Lennox		Johnson Controls	TCD2B60S31S	Replace Equipment

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Equipment Audited to be Replaced			Existing		Proposed		Note
		271	Lennox		Johnson Controls	TCD2B60S31S	Replace Equipment
		272	Lennox		Johnson Controls	RAC15036B21S	Relocate electrical disconnect next to AHU unit Replace condensation water pump
Juvenile Court	Split Systems (DX)	161	Trane	TTA150B400DA	Johnson Controls	J12YDC00A4AAB5	Replace existing electrical disconnect at condenser Install expansion valves (Dual circuit unit)
		162	Trane	TTA060B400A1	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser
		163	Trane	TTA072C400A0	Johnson Controls	J07YEC00A4AAB5	Disconnect - Replace existing at condenser
Juvenile Detention	RTU (DX)	178	Rheem	RSNA-B024JK 000	Johnson Controls	PCG4A240502X4	Replace existing electrical disconnect at condenser
		184	Carrier	48HJD006	Johnson Controls	ZYG06E4C1AB1A114A4	Add new gas regulator
		186	Trane	TSC06004A	Johnson Controls	ZYE06A4B1AB1A114A4	Add New electrical disconnect at AHU
Juvenile Probation	Split Systems (DX)	148	Goodman	GSC130604AC	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser Replace equipment stand at AHU
		149	Goodman	GSC130604AC	Johnson Controls	TCD2B60S31S	Replace equipment stand Replace existing electrical disconnect at condenser
		151	Goodman	CKL60-4L	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser
Kitty Hollow - House	Package Unit (DX)	265	Carrier	50HJ005341	Johnson Controls	ZYE06A2C1AB1A114A4	Add new electrical disconnect at condenser
	Split Systems (DX)	266	Carrier	24ABS336A300	Johnson Controls	RAC15036B21S	Add new electrical disconnect at condenser Reinstall security fence
Kitty Hollow Park	Split Systems (DX)	261	Trane	2A7C0048A\$000AA	Johnson Controls	TCD2B48S41S	Replace existing electrical disconnect at condenser Remove and replace security fence
		263			Johnson Controls	RAC14360B21S	Reinstall security fence Replace existing electrical disconnect at condenser
		264	Trane	2A7A3030A1000AA	Johnson Controls	RAC14330B21S	Replace Equipment
Morton St (Facilities)	Package Unit (DX)	103	Heil	PA5542AKA/PAPA42GA	Johnson Controls	RAC14342B21S	Replace housekeeping pad
	Split Systems (DX)	100	York		Johnson Controls	RAC14360B21S	Replace Equipment
		102	Carrier	24ACB460A310	Johnson Controls	RAC14360B21S	Replace Equipment
Mustang Community Center	Split Systems (DX)	276	Trane	2TTB0060A1000AA	Johnson Controls	RAC13460B21S	Replace Equipment
		277	Trane	2TTB0060A1000AA	Johnson Controls	RAC13460B21S	Replace Equipment
Narcotics / Patrol Building	Split System - Mini	153	FUJITSU	AOU18CL	Johnson Controls	LS181HSV5	Replace line sets
Needville Annex JP	Split Systems (DX)	250	Trane	TTA090A300DA	Johnson Controls	J07YEC00A2AAB5	Raise condenser 12" to avoid electrical coming out of slab Replace electrical disconnect at condenser
		251	Trane	TTA090A300DA	Johnson Controls	J07YEC00A2AAB5	Replace electrical disconnect at condenser Raise condenser 12" to avoid electrical coming out of slab
		252	Trane	TTA090A300DA	Johnson Controls	J07YEC00A2AAB5	Replace electrical disconnect at condenser
Recycling Center	Split Systems (DX)	241	Lennox	12ACB48-5P	Johnson Controls	RAC15048B21S	Add new electrical disconnect to AHU
Road and Bridge - (Needville)	Split Systems (DX)	254	Trane	TTA120B300FA	Johnson Controls	J10YDC00A2AAB5	Relocate t-stat to office Replace existing electrical disconnect at condenser
		255	Trane	2TTA048A3000A	Johnson Controls	TCD2B48S41S	Replace existing electrical disconnect at condenser
		256	Trane	2TTA060A3000A	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser
		257	Trane	2TTA036A3000A	Johnson Controls	TCD2B36S31S	Replace existing electrical disconnect at condenser

Schedule 1

Equipment Audited to be Replaced			Existing		Proposed		Note
Roads & Bridge (Beechnut)	Split Systems (DX)	121	Trane	2A7C0060A4000AA	Johnson Controls	TCD2B60S31S	Relocate disconnect at AHU
		123	Goodman	???03017D	Johnson Controls	RAC14342B21S	Replace existing electrical disconnect at condenser
							Add new electrical disconnect at AHU
							Replace plenum box
Roads & Bridge (Dairy Ashford)	RTU (DX)	288	Trane	2A7A2036A1000AA	Johnson Controls	RAC15036B21S	Add new housekeeping pad
							Add new electrical disconnect at AHU
							Build new plenum box, supply and return
	Split Systems (DX)	291	Trane	2A7A2030A1000AA	TBD	TBD	Disconnect - Replace existing electrical disconnect at condenser
							Relocate disconnect at condenser
							Rebuild plenum
							Install new duct hangers and remove air restrictions
Roads & Bridge (Pane Lane)	BARD	133	Bard		TBD	TBD	Add new electrical disconnect at AHU
	Split Systems (DX)	126	Trane	2A7A206A10	Johnson Controls	RAC13460B21S	Add divider board between units
							Replace return grill
							Add new electrical disconnect at AHU
							Add new pan
		127	Trane	2A7B3024A1000AA	Johnson Controls	RAC14330B21S	Add new electrical disconnect at AHU
							Add new housekeeping pad
							Add new housekeeping pad
		128	York	?IDA060S25A	Johnson Controls	TCD2B60S31S	Add new drain pan
							Abandon platform return and tie into duct on left side of unit
							Add new electrical disconnect at AHU
Rosenberg Boot Camp Juvenile	Split Systems (DX)	246	Trane	2A7A2036A1000AA	Johnson Controls	RAC15036B21S	Add new electrical disconnect at AHU
		247	Trane	2A7A2036A1000AA	Johnson Controls	RAC15036B21S	Add new electrical disconnect at AHU
		248			Johnson Controls	RAC15036B21S	Add new electrical disconnect at AHU
							Demo and rebuild wall
							Replace pan
							Allen to confirm if unit should be replaced
Vehicle Maintenance	Split Systems (DX)	169	Trane	2TTA072A3000AA	Johnson Controls	J07YEC00A2AAB5	Rebuild frame to accept new AHU
		170	Trane	2A7C0072A3000AA	Johnson Controls	J07YEC00A2AAB5	New house keeping pad
							New housekeeping pad
							Add gas regulator
							Use existing line set
Vocational Building	Split Systems (DX)	171	Carrier	24ABB360	Johnson Controls	TCD2B36S31S	Replace Equipment

Schedule 1**Installation**

- JCI will provide and install new HVAC systems as listed in Table 3.0.1.
- Equipment to have the following features:
 - ◆ New electrical disconnects, where noted in scope.
 - ◆ Existing electrical power wiring will be reused.
 - ◆ Charging the new systems with refrigerant.
 - ◆ Reconnecting the existing refrigerant lines and existing ductwork and reusing existing roof penetrations.
 - ◆ Re-insulation of refrigerant lines, as necessary, to replace insulation removed during the demolition of each unit.
 - ◆ Reconnect new equipment to existing condensate drain and natural gas piping.

Training

- No training for this FIM shall be provided.

Warranties

- One year workmanship guarantee begins upon mutual agreement of warranty start date between JCI and Customer.
- The manufacturer's stated warranties on equipment installed as part of this FIM.

Closeout

JCI shall provide the following closeout documents:

- Start-up and testing reports.
- Warranty information for new equipment installed and O&M manuals.

Exclusions

- Temporary space conditioning.
- Duct cleaning and coil cleaning.
- Resolution of existing design, service, and or distribution conditions known or unknown.
- Roof repairs other than those directly associated with this scope of work.
- Roof structural upgrades.
- The warranty on materials installed as part of this FIM does not include labor beyond the 1-year workmanship guarantee.
- Repairs/replacement of insulation, piping, electrical or ductwork found to be corroded or rusted or otherwise unacceptable for installation of components or fittings required for installation other than what is specified in the scope of work.

Schedule 1**FIM 3.5: Cooling Tower Replacements and Pump Upgrades (Mechanical System Upgrades)****General**

This FIM will replace various pumps, motors and variable speed drives (VSD) located in the chiller plants of the East and West Tower. In addition, replace the two existing old cooling towers located at the Fort Bend County Jail West Tower chiller plant, with two new high-performance, open, induced-draft, and counter-flow cooling tower with VSD. The proposed towers have improved performance with lower approach temperatures, and with the VSD will result in cooling tower fan energy savings. Each existing tower is at the end of its service life and is at risk of failure.

Fort Bend County Jail Pumps**Table 3.5.1: East Tower**

General			Existing					Proposed				
Location	Equipment	Tag	Manufacture	HP	Speed	Flow	Head	Manufacture	HP	Speed	Flow	Head
East Jail	PCHWP-1	368	Armstrong	20	1760	565	56	Armstrong	20	1760	565	56'
East Jail	PCHWP-2	369	Armstrong	20	1760	565	56	Armstrong	20	1760	565	56'
East Jail	SCHWP-1	145	Armstrong	25		1050	63	Armstrong	T.B.D.			
East Jail	SCHWP-2	146	Armstrong	25		1050	63	Armstrong				
East Jail	PHW-1	366	Nameplate Data not available					Armstrong	15	1760	450	60'
East Jail	PHW-2	367						Armstrong	15	1760	450	60'
East Jail	PBRC-1	363						Armstrong	1.5	1760	150	20'
East Jail	PBRC-2	364						Armstrong	1.5	1760	150	20'
East Jail	PBRC-3	365						Armstrong	1.5	1760	150	20'

Table 3.5.2: West Tower

General			Existing					Proposed				
Location	Equipment	Tag	Manufacture	HP	Speed	Flow	Head	Manufacture	HP	Speed	Flow	Head
West Jail	PCHWP-1	143	Aurora	15	1760	565	56'	Armstrong	15	1760	600	65'
West Jail	PCHWP-2	144	Aurora	15	1760	565	56'	Armstrong	15	1760	600	65'
West Jail	SCHWP-1	145	Nameplate Data not available					Armstrong	15	1760	600	80'
West Jail	SCHWP-2	146						Armstrong	15	1760	600	80'
West Jail	CWP-1	366	Aurora	15	1800	840	45	Armstrong	20	1760	840	65'
West Jail	CWP -2	367	B&G (new)	15	1800	840	45	Armstrong	20	1760	840	65'

Table 3.5.3: West Tower Cooling Tower

General			Existing						Proposed					
Location	Equipment	Tag	Manufacturer	HP	Tons	Flow	WB	Approach	Manufacture	HP	Tons	Flow	WB	Approach
West Jail	CT-1	351	CT	10					Armstrong	15	349	840	TBD	TDB
West Jail	CT-2	351	CT	10					Armstrong	15	349	600	TBD	TDB

Schedule 1**Table 3.5.4: East & West Towers VSD**

Tags	Item	Manufacturer	Design Info
356	VFD - PCHWP	ABB	15 HP
357	VFD - SCHWP	ABB	15 HP
358	VFD - CWP	ABB	20 HP
359	VFD - Cooling Tower	ABB	10 HP
360	VFD - PCHWP	ABB	15 HP
361	VFD - SCHWP	ABB	15 HP
362	VFD - SCHWP	ABB	15 HP
370	VFD - PCHWP	ABB	15 HP
371	VFD - PCHWP	ABB	15 HP
376	VFD - Cooling Tower	ABB	10 HP
380	VFD - Cooling Tower	ABB	10 HP
381	VFD - SCHWP	ABB	15 HP
382	VFD - SCHWP	ABB	15 HP
700	AHU VFD	ABB	15 HP
701	VFD - Cooling Tower	ABB	7.5 HP
702	VFD - Cooling Tower	ABB	7.5 HP
703	VFD - PCHWP	ABB	15 HP
704	VFD - PCHWP	ABB	15 HP
705	VFD - HW Pump	ABB	15 HP

Final Engineering

- Provide product data sheets for submittals. All quantities, values, and details indicated are approximate and subject to change as a result of final engineering to be completed post contract signing. JCI will provide the final 100% Construction Drawings and Specifications prior to commencement of the Work of this FIM.
- Final engineering to be completed post contract signing. The drawings and specifications may change as a result of final engineering.

Demolition and Removal Work

- Disconnect, remove, and properly dispose of existing pumps as shown in Table 3.5.1 through Table 3.5.4
- Disconnect, remove, and properly dispose of chilled water piping to nearest isolation valves or as required for new installation.
- Disconnect, remove, and properly dispose of other materials or debris related to this project as necessary for installation.
- Disconnect and secure electrical connections to motors and VFDs.
- Disconnect and secure the BAS connection.
- Disconnect, remove and properly dispose of condenser water piping to nearest isolation valves or as required for new installation.
- Disconnect, remove and properly dispose of make-up water and overflow piping as required.
- Disconnect, remove and properly dispose of all other materials or debris related to this project.
- Disconnect, remove and properly dispose of two existing single cell cooling towers.

Schedule 1

- Disconnect and secure BAS connection, including vibration sensors (if required).
- Disconnect and secure electrical connections for cooling tower motor(s).
- Disconnect and secure electrical connections to the basin heater, and any service outlets.

Installation

- Install each new device in the existing location with chilled water piping and other piping extended as required for connection.
- Reconnect chilled water lines to each new pump and cooling tower with flexible connections. Match the existing pipe size. (See Attachment 5)
- Provide and install the new water pumps on the existing pads. Pumps will be mounted with new spring isolation dampers.
- Insulate new piping, valves and fittings. Reinsulate any piping whose insulation was damaged during installation.
- Connect power to new pumps and VFDs.
- Furnish and install VSDs on the chilled water pumps (shown in the pump table above) with hand bypass for pumps. Replace the existing electrical wiring back to the main electrical panel and connect power.

Training

- No training shall be provided for this FIM.

Warranties

- One year workmanship guarantee begins upon equipment start date.
- The manufacturer's stated warranties on equipment installed as part of this FIM.

Closeout

JCI shall provide the following closeout documents:

- Start-up and testing reports.
- Warranty information for new equipment installed and O&M manuals.

Exclusions

- Temporary space conditioning during transition.
- Repair or replacement of defective mechanical, electrical or controls equipment, or the electrical distribution system, except the equipment described in the FIM description. JCI will identify the location of defective equipment and notify Fort Bend County.
- Repair or upgrades required due to bring adjacent electrical and mechanical systems up to code.
- Engineering services, studies and analysis associated with any exclusions or work clearly outside of the scope definition.
- Unknown permits, fees or processes required by local or oversight jurisdiction and/or utilities.
- Resolution of existing design, service, and or distribution conditions known or unknown.
- Repairs/replacement of insulation, piping, electrical or ductwork found to be corroded or rusted or otherwise unacceptable for installation of components or fittings required for installation other than what is specified in the scope of work.
- Customer is responsible for chemical treatment system.

FIM 3.6: CRAC Replacement

General

This FIM addresses the end of life and obsolete CRAC unit. The existing CRAC unit will be replaced with a new higher-efficiency unit. The new CRAC unit will have approximately the same cooling capacity as the existing unit.

Final Engineering

Provide product data sheets and equipment submittals. The drawings and specifications outlined below are the scope of work of this FIM. All quantities, values, and details indicated are approximate and subject to change as a result of final engineering to be completed post contract signing. JCI will provide the final 100% Construction Drawings and Specifications prior to commencement of the Work of this FIM.

Demolition and Removal Work

JCI will remove and properly dispose of specified existing HVAC system, which includes both indoor and outdoor units. Demolition of existing equipment will include the following:

- The refrigerant in existing equipment shall be removed and properly disposed of per codes and regulations in effect at the time of contract signing.
- Disconnection of existing refrigerant lines.
- Remove each existing equipment electrical disconnect, and safely disconnect electrical supply.
- Disconnect equipment from existing ducting and condensate drain piping.
- Disconnect, remove, and properly dispose of the existing unit to be replaced.
- Temporarily seal or cap disconnected utilities and exposed ducting.
- Removal and proper disposal of existing units in accordance with local, state, and Federal laws in effect at the time of contract execution unless the Customer chooses to keep the equipment.
- Visually inspecting existing housekeeping pads for defects and repair and replacement as necessary.

Installation

- JCI will provide and install new HVAC system, which shall include both indoor and outdoor units. Equipment to be installed in the same location as existing and have the following features:
 - ◆ New electrical disconnects as noted in scope field notes.
 - ◆ Existing electrical power wiring will be reused.
 - ◆ Charging the new systems with refrigerant.
 - ◆ Reconnecting the existing refrigerant lines and existing ductwork.
 - ◆ Re-insulation of refrigerant lines, as necessary, to replace insulation removed during the demolition of each unit.
 - ◆ Reconnect new equipment to existing condensate drain.

Training

- No training shall be provided for this FIM.

Warranties

- One year workmanship guarantee begins upon equipment start date.
- The manufacturer's stated warranties on equipment installed as part of this FIM.

Schedule 1**Closeout**

JCI shall provide the following closeout documents:

- Start-up and testing reports.
- Warranty information for new equipment installed and O&M manuals.

Exclusions

- Temporary space conditioning.
- Duct cleaning and coil cleaning.
- Resolution of existing design, service, and or distribution conditions known or unknown.
- The warranty on materials installed as part of this FIM does not include labor beyond the 1-year workmanship guarantee.
- Repairs/replacement of insulation, piping, electrical or ductwork found to be corroded or rusted or otherwise unacceptable for installation of components or fittings required for installation other than what is specified in the scope of work.

FIM 3.8: Boiler Replacements

General

This FIM addresses end of life heating hot water boilers. Three existing boilers in the East Tower shall be replaced with three new boilers. The new boiler units will have approximately the same capacity as the existing units.

Table 3.8.1

General			Existing		Proposed	
Location	Equipment	Tag	Manufacture	MMBtu	Manufacture	MMBtu
East Jail	B-1	372	Camus	1.52	Aerco	1.5
East Jail	B-2	373	Camus	1.52	Aerco	1.5
East Jail	B-3	374	Camus	1.52	Aerco	1.5

Final Engineering

Provide product data sheets for submittals. All quantities, values, and details indicated are approximate and subject to change as a result of final engineering to be completed post contract signing. JCI will provide the final 100% Construction Drawings and Specifications prior to commencement of the Work of this FIM.

Demolition and Removal Work

- Disconnect, remove, and properly dispose of existing boilers as shown in Table 3.8.1
- Disconnect, remove, and properly dispose of piping to nearest isolation valves or as required for new installation.
- Disconnect, remove, and properly dispose of other materials or debris related to this project as necessary for installation.
- Disconnect and secure the BAS connection.

Installation

- Install each new device in the existing location with hot water piping and other piping extended as required for connection.
- Insulate new piping, valves, and fittings. Reinsulate any piping whose insulation was damaged during installation.

Training

- Two hours of onsite training shall be performed during start-up of the boilers.
- No other training shall be provided.

Warranties

- One year workmanship guarantee begins upon equipment start date.
- The manufacturer's stated warranties on equipment installed as part of this FIM.

Closeout

JCI shall provide the following closeout documents:

- Start-up and testing reports.
- Warranty information for new equipment installed and O&M manuals.

Schedule 1**Exclusions**

- Repair or replacement of defective mechanical, electrical or controls equipment, or the electrical distribution system, except the equipment described in the FIM description. JCI will identify the location of defective equipment and notify Fort Bend County.
- Repair or upgrades required due to bring adjacent electrical and mechanical systems up to code.
- Engineering services, studies and analysis associated with any exclusions or work clearly outside of the scope definition.
- Unknown permits, fees or processes required by local or oversight jurisdiction and/or utilities.
- Resolution of existing design, service, and or distribution conditions known or unknown.
- Repairs/replacement of insulation, piping, electrical or ductwork found to be corroded or rusted or otherwise unacceptable for installation of components or fittings required for installation other than what is specified in the scope of work.

FIM 3.9: AHU Damper Replacements

General

This FIM addresses the end of life and broken multizone AHU zone dampers and actuators in the East Tower.

Demolition and Removal Work

- Remove existing zone dampers and actuators. Per Attachment 5 - FIM 3.9 MZ Dampers Details.
- Safely disconnect equipment from existing ducting.
- Temporarily seal or cap disconnected utilities.

Installation

- JCI will provide and install new zone dampers and actuators. The new dampers and actuators will be the same air flow, as the existing units.
- Connect zone dampers to existing ducting, installing transition ductwork as required.
- Provide insulation and labeling for new ductwork transitions and new piping in accordance with existing building standards.
- Connect equipment to existing electrical power wiring, reusing equipment starter.
- Reconnect equipment to existing BAS.

Training

- No training shall be provided for this FIM.

Warranties

- One year workmanship guarantee begins upon equipment start date.
- The manufacturer's stated warranties on equipment installed as part of this FIM.

Closeout

JCI shall provide the following closeout documents:

- Product data for new equipment installed.

Exclusions

- Temporary space conditioning.
- Repair or replacement of defective equipment, other than the equipment specifically described above. JCI will identify the location of defective equipment and notify Fort Bend County.
- Repairs or upgrades required due to bring adjacent controls, electrical, and mechanical systems up to code.
- Repairs to existing damaged areas, such as retiling and painting of floors, ceilings, and walls, unless specifically identified above.
- Repairs/replacement of insulation, piping or ductwork found to be corroded or rusted and unacceptable for installation of components or fittings required for installation other than what is specified in the scope of work.
- Existing building ventilation conditions and indoor air quality issues are excluded from the scope and cost of this project.
- Engineering services, studies or analysis associated with any exclusions or work clearly outside of the scope definition.

Schedule 1

- Duct cleaning and coil cleaning.
- Resolution of existing design, service, and or distribution conditions known or unknown.

ASSURED PERFORMANCE GUARANTEE (Schedule 2)

I. PROJECT BENEFITS

- A. Certain Definitions.** For purposes of this Agreement, the following terms have the meanings set forth below:

Annual Project Benefits are the portion of the projected Total Project Benefits to be achieved in any one year of the Guarantee Term.

Annual Project Benefits Realized are the Project Benefits actually realized for any one year of the Guarantee Term.

Annual Project Benefits Shortfall is the amount by which the Annual Project Benefits exceed the Annual Project Benefits Realized in any one year of the Guarantee Term.

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

Baseline is the mutually agreed upon data and/or usage amounts that reflect conditions prior to the installation of the Improvement Measures as set forth in Section IV of Schedule 2.

Guarantee Term will commence on the first day of the month next following the Substantial Completion date and will continue through the duration of the M&V Services, subject to earlier termination as provided in this Agreement.

Installation Period is the period beginning on JCI's receipt of Customer's Notice to Proceed and ending on the commencement of the Guarantee Term.

Measured Project Benefits are the utility savings and cost avoidance calculated in accordance with the methodologies set forth in Section III of Schedule 2.

Non-Measured Project Benefits are identified in Section II of Schedule 2. The Non-Measured Project Benefits have been agreed to by the Customer and will be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below. Customer and JCI agree that: (i) the Non-Measured Project Benefits may include, but are not limited to, future capital and operational costs avoided as a result of the Work and implementation of the Improvement Measures, (ii) achievement of the Non-Measured Project Benefits is outside of JCI's control, and (iii) Customer has evaluated sufficient information to conclude that the Non-Measured Project Benefits will occur and bears sole responsibility for ensuring that the Non-Measured Project Benefits will be realized. Accordingly, the Non-Measured Project Benefits shall not be measured or monitored by JCI at any time during the Guarantee Term, but rather shall be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below.

Project Benefits are the Measured Project Benefits plus the Non-Measured Project Benefits to be achieved for a particular period during the term of this Agreement.

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

- B. Project Benefits Summary.** Subject to the terms and conditions of this Agreement, JCI and Customer agree that Customer will be deemed to achieve a total of \$14,555,423 in Non-Measured Project Benefits and \$149,384 in non-guaranteed utility rebates, and JCI guarantees that Customer will achieve a total of \$3,836,838 in Measured Project Benefits during the term of this Agreement, for Total Project Benefits of \$18,541,645, as set forth in the Total Project Benefits table below.

Schedule 2**Total Project Benefits**

Year	Measured Benefits	Non-Measured Benefits			Utility Rebates****	Annual Project Benefits
	Utility Cost Avoidance*	Utility Cost Avoidance*	Operational Cost Avoidance**	Capital Cost Avoidance***		
1	\$156,113	\$39,960	\$85,359	\$564,000	\$149,384	\$994,816
2	\$157,514	\$40,315	\$87,920	\$564,000	\$0	\$849,749
3	\$158,956	\$40,682	\$90,558	\$564,000	\$0	\$854,196
4	\$160,442	\$41,059	\$93,274	\$564,000	\$0	\$858,776
5	\$161,973	\$41,448	\$96,073	\$564,000	\$0	\$863,493
6	\$163,549	\$41,848	\$98,955	\$564,000	\$0	\$868,352
7	\$168,456	\$43,103	\$101,923	\$564,000	\$0	\$877,482
8	\$173,509	\$44,396	\$104,981	\$564,000	\$0	\$886,887
9	\$178,715	\$45,728	\$108,131	\$564,000	\$0	\$896,574
10	\$184,076	\$47,100	\$111,375	\$564,000	\$0	\$906,551
11	\$189,598	\$48,513	\$114,716	\$564,000	\$0	\$916,827
12	\$195,286	\$49,968	\$118,157	\$564,000	\$0	\$927,412
13	\$201,145	\$51,468	\$121,702	\$564,000	\$0	\$938,314
14	\$207,179	\$53,012	\$125,353	\$564,000	\$0	\$949,544
15	\$213,395	\$54,602	\$129,114	\$564,000	\$0	\$961,110
16	\$219,797	\$56,240	\$132,987	\$564,000	\$0	\$973,024
17	\$226,390	\$57,927	\$136,977	\$564,000	\$0	\$985,294
18	\$233,182	\$59,665	\$141,086	\$564,000	\$0	\$997,933
19	\$240,178	\$61,455	\$145,318	\$564,000	\$0	\$1,010,951
20	\$247,383	\$63,299	\$149,678	\$564,000	\$0	\$1,024,360
Total	\$3,836,838	\$981,787	\$2,293,636	\$11,280,000	\$149,384	\$18,541,645

* The electrical consumption rate structure (\$/kWh) for Fort Bend County is fixed through Performance Year 6 and will not escalate during that period. A detailed annual kWh rate for each building for each performance year can be found in Section IV of Schedule 2. Electrical Demand (\$/kW) and natural gas (\$/therm) rates shall be escalated annually by the actual cost escalation, but such escalation shall be no less than the mutually agreed "floor" escalation rate of 3%.

** Non-Measured Operational Cost Avoidance Benefits are a combination of material and repair costs avoidances. The figures in the table escalate by the annual rate of 3% during the duration of the Project Term.

*** Non-Measured Capital Cost Avoidance Benefits figures in the table do not escalate during the duration of the Project Term.

**** Utility Rebates shown in the table above are not guaranteed. Fort Bend County must apply for these rebates. JCI shall assist Fort Bend County in the rebate application process.

***** Values are rounded to the nearest dollar.

Within 60 days of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved during the installation period plus any Non-Measured Project Benefits applicable to such period and advise Customer of same. Any Project Benefits achieved during the installation period may, at JCI's discretion, be allocated to the Annual Project Benefits for the first year of the Guarantee Term. Within 60 days of each anniversary of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved for the applicable year plus any Non-Measured Project Benefits applicable to such period and advise Customer of same.

Schedule 2

Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails to fulfill any of its responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, the Assured Performance Guarantee shall automatically terminate and JCI shall have no liability hereunder.

C. Project Benefits Shortfalls or Surpluses.

- (i) Project Benefits Shortfalls. If an Annual Project Benefits Shortfall occurs for any one year of the Guarantee Term, JCI shall, at its discretion and in any combination, (a) set off the amount of such shortfall against any unpaid balance Customer then owes to JCI, (b) where permitted by applicable law, increase the next year's amount of Annual Project Benefits by the amount of such shortfall, (c) pay to Customer the amount of such shortfall, or (d) subject to Customer's agreement, provide to Customer additional products or services, in the value of such shortfall, at no additional cost to Customer.
- (ii) Project Benefits Surpluses. If an Annual Project Benefits Surplus occurs for any one year of the Guarantee Term, JCI may, at its discretion and in any combination, (a) apply the amount of such surplus to set off any subsequent Annual Project Benefit Shortfall during the Guarantee Term, or (b) bill Customer for the amount of payments made pursuant to Section C(i)(c) above and/or the value of the products or services provided pursuant to clause C(i)(d) above, in an amount not to exceed the amount of such surplus.
- (iii) Additional Improvements. Where an Annual Project Benefits Shortfall has occurred, JCI may, subject to Customer's approval (which approval shall not be unreasonably withheld, conditioned, or delayed), implement additional Improvement Measures, at no cost to Customer, which may generate additional Project Benefits in future years of the Guarantee Term.

II. NON-MEASURED PROJECT BENEFITS

The size of this project is dependent upon the financial criteria established by the customer. Savings can be obtained not only through a reduction in utility and water service consumption, but also through reduced (avoided) amounts of purchased materials and service contracts due to the implementation of this project. By allowing stipulated savings for O&M savings to benefit this project, the customer will be able to achieve even more significant improvements and upgrades to their municipality.

The Non-Measured Project Benefits identified in the table below were derived using engineering calculations based on industry standards and data provided by the Customer. These Project Benefits shall be Non-Measured Project Benefits. 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.

Schedule 2**Total Project Non-Measured Benefits**

Year	Non-Measured Benefits				
	Utility Cost Avoidance*	Operational Cost Avoidance**	Capital Cost Avoidance***	Utility Rebates****	Annual Project Benefits
1	\$39,960	\$85,359	\$564,000	\$149,384	\$838,703
2	\$40,315	\$87,920	\$564,000	\$0	\$692,235
3	\$40,682	\$90,558	\$564,000	\$0	\$695,239
4	\$41,059	\$93,274	\$564,000	\$0	\$698,333
5	\$41,448	\$96,073	\$564,000	\$0	\$701,520
6	\$41,848	\$98,955	\$564,000	\$0	\$704,803
7	\$43,103	\$101,923	\$564,000	\$0	\$709,027
8	\$44,396	\$104,981	\$564,000	\$0	\$713,377
9	\$45,728	\$108,131	\$564,000	\$0	\$717,859
10	\$47,100	\$111,375	\$564,000	\$0	\$722,475
11	\$48,513	\$114,716	\$564,000	\$0	\$727,229
12	\$49,968	\$118,157	\$564,000	\$0	\$732,126
13	\$51,468	\$121,702	\$564,000	\$0	\$737,169
14	\$53,012	\$125,353	\$564,000	\$0	\$742,365
15	\$54,602	\$129,114	\$564,000	\$0	\$747,715
16	\$56,240	\$132,987	\$564,000	\$0	\$753,227
17	\$57,927	\$136,977	\$564,000	\$0	\$758,904
18	\$59,665	\$141,086	\$564,000	\$0	\$764,751
19	\$61,455	\$145,318	\$564,000	\$0	\$770,773
20	\$63,299	\$149,678	\$564,000	\$0	\$776,977
Total	\$981,787	\$2,293,636	\$11,280,000	\$149,384	\$14,704,807

* The electrical consumption rate structure (\$/kWh) for Fort Bend County is fixed for through Performance Year 6 and will not escalate during that period. A detailed annual kWh rate for each building for each performance year can be found in Section IV of Schedule 2. Electrical demand (\$/kW) and natural gas (\$/therm) rates shall be escalated annually by the actual cost escalation, but such escalation shall be no less than the mutually agreed "floor" escalation rate of 3%.

** Non-Measured Operational Cost Avoidance Benefits figures in the table escalate by the annual rate of 3% during the duration of the Project Term.

*** Non-Measured Capital Cost Avoidance Benefits figures in the table do not escalate during the duration of the Project Term.

**** Utility Rebates shown in the table above are not guaranteed. Fort Bend County must apply for these rebates. JCI shall assist Fort Bend County in the rebate application process.

***** Values are rounded to the nearest dollar.

Non-Measured Project Benefits from the following Improvement Measures are detailed below:

FIM No.	Description	Utility Savings	Material Savings	Repair Savings
1.0	LED Lighting Upgrades		X	
2.0	BAS Upgrades	X		
3.0	DX Unit Replacements			X

Schedule 2**FIM 1.0: LED Lighting Upgrades (Non-Measured Material Cost Avoidance)**

Non-measured savings associated with LED Lighting Upgrades include material savings for replacement bulbs and ballasts. The new lamps and ballasts will fail at a lesser rate than the existing lamps and ballasts, as the rated life of the new lamps and ballast (in most cases) is greater than the rated life of the existing equipment. Material warranties for the proposed equipment are also factored into the savings calculations.

Below are the equations used to calculate the annual material savings for each type of fixture.

Lamp Unit Cost per Hour = Average Lamp Cost ÷ Average Lamp Life.

Ballast Unit Cost per Hour = Average Ballast Cost ÷ Average Ballast Life.

Existing Annual Lamp Material Cost = Existing Burn Hours × Quantity of Lamps × Lamp Unit Cost per Hour.

Existing Annual Ballast Material Cost = Existing Burn Hours × Quantity of Ballasts × Ballast Unit Cost per Hour.

Proposed Annual Lamp Material Cost = Existing Burn Hours × Quantity of Lamps × Lamp Unit Cost per Hour.

Proposed Annual Ballast Material Cost = Existing Burn Hours × Quantity of Ballasts × Ballast Unit Cost per Hour.

Proposed Annual Material Cost = Proposed Burn Hours × ((Quantity of Lamps × Lamp Unit Cost per Hour) + (Quantity of Ballasts × Ballast Unit Cost per Hour)).

Annualized Project Term Material Savings = ((Project Term × (Existing Annual Lamp Material Cost + Existing Annual Ballast Material Cost)) - ((Project Term - Proposed Lamp Warranty Period) × Proposed Annual Lamp Material Cost) + ((Project Term - Proposed Ballast Warranty Period) × Proposed Annual Ballast Material Cost)) ÷ Project Term.

The non-measured project benefits as associated with lighting materials are based on lighting component expenditures as calculated and shown in the table below. These savings escalate annually by 3%.

Performance Years										Total
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
\$21,332	\$21,972	\$22,631	\$23,310	\$24,009	\$24,730	\$25,471	\$26,236	\$27,023	\$27,833	
Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	\$573,196
\$28,668	\$29,528	\$30,414	\$31,327	\$32,266	\$33,234	\$34,231	\$35,258	\$36,316	\$37,406	

FIM 2.0: BAS Upgrades (Non-Measured Utility Cost Avoidance)

The savings for this FIM will be verified through operational verification. The savings for this FIM are generated through the implementation of controls strategies that will improve the central plant efficiencies at both the East and West Towers of the County Jail; therefore, the boundary is the central plant itself.

Estimated Parameters	Assumed Value	Justification, Source and Description
Cooling load profiles	See Attachment 5	The pre-retrofit cooling load profiles for each plant were modeled in an Excel workbook using TMY3 weather data for Houston, TX, and nameplate equipment data for each component of the central plants attached electronically as Attachment 5. The models were tuned to age and operating conditions of existing equipment, as observed onsite, operational strategies for each plant obtained during interviews with the staff, and engineering judgment. The models were then calibrated to the utility bills for each tower. The values are detailed in the calculation in Attachment 5 and are agreed to by the Customer and JCI for the term of the contract. The post-retrofit cooling load profiles for each plant are modeled based on the control strategies being implemented, which will be verified post-installation. If the control strategies are found to have been implemented correctly, and the plants are functioning properly, then the savings will be deemed to have been achieved and will not be measured. However, JCI is not responsible for the loss of savings resulting from customer-directed changes in operation, system overrides, or lack of maintenance. The savings will be updated based on the post-retrofit efficiencies for the installed units.

Savings Methodology for the BAS Controls Upgrades

The pre-retrofit cooling load profiles for each plant were modeled in an Excel workbook using TMY3 weather data for Houston, TX, and nameplate equipment data for each component of the central plants. The models were tuned to age and operating conditions of existing equipment, as observed onsite, operational strategies for each plant obtained during interviews with the staff, and engineering judgment. The models were then calibrated to the utility bills for each tower. The values are detailed in the calculation in Attachment 5.

The post-retrofit cooling loads were derived by creating a second model run with the proposed strategies in place. Shown in Attachment 5.

The model calculated 8760 hourly load requirements and energy consumption, which were then summed to determine the annual energy savings.

See Attachment 5 for Detailed Calculations.

Installation Period M&V Activities

During installation period, the post-retrofit M&V activities will consist of verification that the control strategies are implemented, and that the equipment is operating as intended. Models will be updated, one-time, post-installation, to reflect any changes in the proposed strategies as compared to the as-built conditions. However, JCI shall not be responsible for any loss of savings that occur due to customer-driven changes to the control strategies.

Customer's Responsibilities

Customer assumes all operational and maintenance responsibilities for this FIM. Customer is responsible for ensuring all strategies implemented in this FIM are maintained. Customer understands it is their responsibility to operate under these parameters and maintain the system. JCI is not responsible for the loss of savings resulting from customer-directed changes in schedules, system overrides, or lack of maintenance that results in operation beyond the contract agreed upon amounts.

BAS Upgrades Utility Savings

Schedule 2

Performance Years										Total
Year 1	Year 2	Year 3	Year 4	Year5	Year 6	Year 7	Year 8	Year 9	Year 10	
\$39,214	\$39,569	\$39,933	\$40,309	\$40,697	\$41,095	\$42,328	\$43,598	\$44,906	\$46,253	
Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	\$964,051
\$47,641	\$49,070	\$50,542	\$52,058	\$53,620	\$55,229	\$56,886	\$58,592	\$60,350	\$62,160	

FIM 3.0: DX Unit Replacements (Non-Measured Repair Cost Avoidance)

Non-measured savings associated with DX unit replacements include cost savings for repairs to existing equipment that should no longer be necessary due to the improvements included in this FIM. Based on data provided by Fort Bend County during development, the County spent \$63,426 between April 2022 and March 2023 for repairs to the existing DX units. It is expected that the life cycle costs of maintaining the new equipment versus the existing equipment, combined with manufacturer's warranties of the new equipment, should result in the repair savings included in this project.

DX unit replacement repair savings are shown in the table below and were based on the repair invoices provided by Fort Bend County, as described above. These savings escalate annually by 3% and are rounded to the nearest dollar.

DX Unit Repair Savings

Performance Years										Total
Year 1	Year 2	Year 3	Year 4	Year5	Year 6	Year 7	Year 8	Year 9	Year 10	
\$65,329	\$67,289	\$69,307	\$71,387	\$73,528	\$75,734	\$78,006	\$80,346	\$82,757	\$85,239	
Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	\$1,755,409
\$87,796	\$90,430	\$93,143	\$95,938	\$98,816	\$101,780	\$104,834	\$107,979	\$111,218	\$114,554	

Schedule 2**Total Non-Measured Capital Cost Avoidance**

Fort Bend County and JCI agree that the equipment installed as part of this project alleviates the burden on the County to commit future capital dollars to those repairs and equipment replacements. As a result, Fort Bend County has agreed to contribute those future avoided capital costs to this project, in addition to the measured and non-measured savings included within the project. The table below is a summary of average annual capital costs avoided by the implementation of this project. The sum total of the annual capital cost avoidance, that Fort Bend has agreed to contribute to this project, is \$564,000. This value will not be escalated, annually, as it is an annual average over the life cycle of this project.

FIM No.	Description	Average Annual Capital Cost Avoidance
1.1	Lighting Controls	\$20,326
2.0	BAS Upgrades	\$91,069
3.0	DX Unit Replacements	\$182,822
3.5	Cooling Tower Replacement and Pump Upgrades	\$167,486
3.6	CRAC Replacement	\$9,993
3.8	Boiler Replacement	\$46,381
3.9	AHU Damper Replacement	\$45,923
	Total	\$564,000

Customer agrees that the Non-Measured Project Benefits are reasonable, and that the installation of the Improvement Measures will enable Customer to take actions that will result in the achievement of such Non-Measured Project Benefits.

III. MEASUREMENT AND VERIFICATION METHODOLOGIES

The following is a brief overview of the M&V methodologies applicable to the Improvement Measures set forth below.

Guaranteed Measured Savings Summary

		\$	kWh	kW	therms
1.0	LED Lighting Upgrades	\$107,822	1,980,286	4,336	-2,010
3.0	DX Unit Replacement	\$19,427	136,804	92	0
Total Annual Guarantee (Baseline)					\$127,249
Year 1 (with applicable escalation)					\$128,398

Option A: Retrofit Isolation: Key Parameter(s) Measurement

Measured 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.

Partial measurement means that some but not all parameters will be measured. Careful review of the design and installation of Improvement Measures is intended to demonstrate that the stipulated values fairly represent the probable actual values. Agreed upon values will be shown in the M&V plan. Engineering calculations using measurements and stipulations are used to calculate Measured Project Benefits for the duration of the Guarantee Term.

Schedule 2

Measured Project Benefits from the following Improvement Measures will be calculated using Option A:

FIM No.	Description	M&V Protocol	Frequency
1.0	LED Lighting Upgrades	Option A	One-time
3.0	DX Unit Replacement	Option A	Annual

Changes in Use or Condition; Adjustment to Baseline and/or Annual Project Benefits

Customer agrees to notify JCI, within 14 days, of (i) any actual or intended change, whether before or during the Guarantee Term, in the use of any facility, equipment, or Improvement Measure to which this Schedule applies; (ii) any proposed or actual expansions or additions to the premises or any building or facility at the premises; (iii) a change to utility services to all or any portion of the premises; or (iv) any other change or condition arising before or during the Guarantee Term that reasonably could be expected to change the amount of Project Benefits realized under this Agreement.

Such a change, expansion, addition, or condition would include, but is not limited to: (a) changes in the primary use of any facility, Improvement Measure, or portion of the premises; (b) changes to the hours of operation of any facility, Improvement Measure, or portion of the premises; (c) changes or modifications to the Improvement Measures or any related equipment; (d) changes to the M&V Services provided under this Agreement; (e) failure of any portion of the premises to meet building codes; (f) changes in utility suppliers, utility rates, method of utility billing, or method of utility purchasing; (g) insufficient or improper maintenance or unsound usage of the Improvement Measures or any related equipment at any facility or portion of the premises (other than by JCI); (h) changes to the Improvement Measures or any related equipment or to any facility or portion of the premises required by building codes or any governmental or quasi-governmental entity; or (i) additions or deletions of Improvement Measures or any related equipment at any facility or portion of the premises.

Such a change or condition need not be identified in the Baseline in order to permit JCI to make an adjustment to the Baseline and/or the Annual Project Benefits. If JCI does not receive the notice within the time period specified above or travels to either Customer's location or the project site to determine the nature and scope of such changes, Customer agrees to pay JCI, in addition to any other amounts due under this Agreement, the applicable hourly consulting rate for the time it took to determine the changes and to make any adjustments and/or corrections to the project as a result of the changes, plus all reasonable and documented out-of-pocket expenses, including travel costs. Upon receipt of such notice, or if JCI independently learns of any such change or condition, JCI shall calculate and send to Customer a notice of adjustment to the Baseline and/or Annual Project Benefits to reflect the impact of such change or condition, and the adjustment shall become effective as of the date the change or condition first arose. Should Customer fail to promptly 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.

Schedule 2**FIM 1.0: LED Lighting Upgrades**

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement, for the installation period only. The savings for this FIM are generated through a reduction in energy used by the lighting system; therefore, the measurement boundary is the lighting system itself.

Key Parameter	Measurement Frequency	Measurement Description
Pre- and Post-Retrofit Fixture Power Draw (kW)	One-time Pre-; One-time Post-Retrofit	The pre-retrofit power draws on a sample of fixtures and meeting the 80/20 sampling plan – assuming a coefficient of variance of 0.5 – have been measured using a true RMS meter during the development period. Fixtures with similar lamps and ballasts, counts and types were grouped with a lamp/ballast code. In some situations, such as when a certain type of lighting fixture was not available by itself on a switch, typical wattages as published by American National Standards Institute (ANSI) or manufacturer's specifications were used. The post-retrofit wattage of the impacted fixtures will be measured one-time on a sample of fixtures meeting the same sampling criteria and methodology. The savings will be updated, one-time, based on post measurements.

Estimated Parameters	Assumed Value	Justification, Source and Description
Burn Hours	See Tables Below	The lighting system annual run hours by space type are agreed to be as shown in the table below. These run hours are based on logged data, operating hours for the facilities, and interviews conducted during development. These values will not be measured again. The post-installation burn hours are the same as the pre-installation burn hours.
Coincidence Factor	0.1 – 1.0 (see table below)	The coincidence factor is estimated based on the number of fixtures in a space type expected to be operating at the same time during the on-peak period and is agreed to remain at the same value after the retrofit. The factor is based on its respective usage group type and can be found in Attachment 5. This factor is agreed upon and will only be lowered in the post-retrofit with sensor application. This estimate is based on overall operation and studies from similar area types. This value will not be measured.

Schedule 2**Lighting Usage Groups, Burn Hours, and Coincidence Factors for Beechnut Roads & Bridge, Justice Center, Juvenile Detention, Medic 1, and Sienna Annex (High Use Buildings)**

Usage Group Code	Description	Pre-Installation Burn Hours*	Coincidence Factor
BR	Break room	3,823	0.9
BRAS	Break Room Already Sensored	2,677	0.9
CELL	Holding Cells	8,760	1
CF	Cafeteria	4,187	0.9
CL	Classroom	2,632	0.9
CR	Conference Room	2,562	0.9
CRAS	Conference Room Already Sensored	1,793	0.9
CRAS-DIM	Conference Room Already Sensored Dimmer added no hour reduction	1,793	0.9
CT	Court Room/Trial Areas	3,276	0.9
GYM	Gymnasium	3,808	0.9
HW	Hallway	5,085	0.9
HWAS	Hallway Already Sensored	3,559	0.9
KT	Kitchen	2,520	0.9
KTAS	Kitchen Already Sensored	1,764	0.9
LI	Library	6,749	0.9
LIAS	Library Already Sensored	4,725	0.9
LO	Lobby/Entry Vestibule	4,761	0.9
LQ	Living Quarters/Bunk Rooms	1,680	0.9
LQAS	Living Quarters/Bunk Rooms Already Sensored	1,176	0.5
LR	Locker Room	4,480	0.9
LRAS	Locker Room Already Sensored	3,136	0.9
ME	Mechanical/Electrical Rooms	560	0.5
MEAS	Mechanical/Electrical Rooms Already Sensored	392	0.5
MP	Multipurpose	2,961	0.9
OO	Open Office	4,187	0.9
OOAS	Open Office Already Sensored	2,932	0.9
OO-DIM	Open Office Dimmer added no hour reduction	4,187	0.9
OS	Office Support (copy room, coffee room, etc.)	2,856	0.9
OSAS	Office Support (copy room, coffee room, etc.) Already Sensored	1,999	0.9
PO	Private Office	3,599	0.9
POAS	Private Office Already Sensored	2,520	0.9
RR	Restroom	5,306	0.9
RRAS	Restroom Already Sensored	3,714	0.9
ST	Storage	1,680	0.9
STAS	Storage Already Sensored	1,176	0.9
SW	Stairwell	8,760	1
WS	Workshop	1,821	0.9
X	Exit Signs	8,760	1

Schedule 2**Lighting Usage Groups, Burn Hours, and Coincidence Factors for Rosenberg Boot Camp Juvenile, Jake Dove Juvenile, and Mustang Community Center (Low Use Buildings)**

Usage Group Code	Description	Pre-Installation Burn Hours*	Coincidence Factor
BR	Break room	1,639	0.9
CL	Classroom	1,128	0.9
CLAS	Classroom Already Sensored	790	0.5
CR	Conference Room	1,098	0.9
GYM	Gymnasium	1,632	0.9
HW	Hallway	2,179	0.9
KT	Kitchen	1,080	0.9
ME	Mechanical/Electrical Rooms	240	0.5
MP	Multipurpose	1,269	0.9
MPAS	Multipurpose Already Sensored	889	0.5
OO	Open Office	1,795	0.9
OS	Office Support (copy room, coffee room, etc.)	1,224	0.9
PO	Private Office	1,543	0.9
RR	Restroom	2,274	0.9
ST	Storage	720	0.5
X	Exit Signs	8,760	1

Lighting Usage Groups, Burn Hours, and Coincidence Factors for all other Buildings

Usage Group Code	Description	Pre-Installation Burn Hours*	Coincidence Factor
BR	Break room	2,731	0.9
BRAS	Break Room Already Sensored	1,912	0.9
CF	Cafeteria	2,991	0.9
CL	Classroom	1,880	0.9
CLAS	Classroom Already Sensored	1,316	0.9
CR	Conference Room	1,830	0.9
CRAS	Conference Room Already Sensored	1,281	0.9
CR-DIM	Conference Room Dimmer added no hour reduction	1,830	0.9
CT	Court Room/Trial Areas	2,340	1
E	Exterior	4,380	0.1
GYM	Gymnasium	2,720	0.9
HW	Hallway	3,632	0.9
HWAS	Hallway Already Sensored	2,542	0.9
KT	Kitchen	1,800	0.9
LO	Lobby/Entry Vestibule	3,401	0.9
LQ	Living Quarters/Bunk Rooms	1,200	0.9
LR	Locker Room	3,200	0.9
ME	Mechanical/Electrical Rooms	400	0.5
MEAS	Mechanical/Electrical Rooms Already Sensored	280	0.5
MP	Multipurpose	2,115	0.9

Schedule 2

Usage Group Code	Description	Pre-Installation Burn Hours*	Coincidence Factor
OO	Open Office	2,991	0.9
OOAS	Open Office Already Sensored	2,094	0.9
OS	Office Support (copy room, coffee room, etc.)	2,040	0.9
OSAS	Office Support (copy room, coffee room, etc.) Already Sensored	1,428	0.9
PO	Private Office	2,571	0.9
POAS	Private Office Already Sensored	1,800	0.9
RR	Restroom	3,790	0.9
RRAS	Restroom Already Sensored	2,653	0.9
ST	Storage	1,200	0.9
STAS	Storage Already Sensored	840	0.5
WS	Workshop	1,301	0.9
X	Exit Signs	8,760	1

Note:

* Post Burn hour are the same as pre-burn hours.

Equations for Calculating Lighting Retrofit Savings

Demand (kW)

$$\text{kW Savings} = \sum_u [(\text{kW/Fixture}_{\text{pre}} \times \text{Quantity}_{\text{pre}} \times \text{Coincidence Factor}_{\text{pre}} - \text{kW/Fixture}_{\text{post}} \times \text{Quantity}_{\text{post}} \times \text{Coincidence Factor}_{\text{post}})]_u$$

Where:

$\text{kW/fixture}_{\text{pre}}$ = lighting baseline demand per fixture for usage group u

$\text{kW/fixture}_{\text{post}}$ = lighting demand per fixture during post-retrofit period for usage group

$\text{Quantity}_{\text{pre}}$ = quantity of affected fixtures before the lighting retrofit for usage group u

$\text{Quantity}_{\text{post}}$ = quantity of affected fixtures after the lighting retrofit for usage group u

$\text{Coincidence Factor}_u$ = Coincidence Factor is a multiplier to account for peak demand of each specific usage group u

Energy (kWh)

$$\text{kWh}_{\text{pre}} = \sum_u [(\text{kW/Fixture}_{\text{pre}} \times \text{Quantity}_{\text{pre}} \times \text{Coincidence Factor}_{\text{pre}} \times \text{Burn Hours}_{\text{pre}})]_u$$

$$\text{kWh}_{\text{post}} = \sum_u [(\text{kW/Fixture}_{\text{post}} \times \text{Quantity}_{\text{post}} \times \text{Coincidence Factor}_{\text{post}} \times \text{Burn Hours}_{\text{post}})]_u$$

$$\text{kWhSavings}_{\text{Lighting}} = \text{kWh}_{\text{pre}} - \text{kWh}_{\text{post}}$$

Where:

$\text{Burn Hours}_{\text{pre}}$ = number of baseline operating hours during the time period t for the usage group u

$\text{Burn Hours}_{\text{post}}$ = number of proposed operating hours during the time period t for the usage group u

Refer to Attachment 5 for savings.

Schedule 2**JCI Responsibilities**

Measurements for this FIM consist of pre and post-retrofit fixture wattages of a sample of impacted lighting fixtures, based on an 80% level of confidence with a 20% level of precision (80/20) and an assumed coefficient of variation of 0.5. Sample populations will be chosen by fixture type. Pre-retrofit measurements have been conducted and are presented in the table above. Post-retrofit measurements will be conducted after installation of the fixtures is complete. A visual inspection of the occupancy sensors will be conducted to verify installation. Once the post-retrofit measurements have been conducted, JCI will update the savings tables with the actual measured data to calculate the actual energy savings for this FIM. No annual measurements will be conducted for this FIM. The pre-retrofit and post-retrofit burn hours for this FIM have been determined based on logged data, building occupancy, interviews with Customer staff, and observations made during the lighting audits. It is agreed upon that these burn hours are reasonable and accurately reflect each facility's lighting system operation. The coincident factor is estimated based on the number of fixtures in a given space type assumed to be operating at the same time during the on-peak period and is agreed to remain at the same value after the retrofit.

Customer's Responsibilities

The Customer assumes all operational and maintenance requirements for this FIM. Customer will maintain the new fixtures as per manufacturer's guidelines. Customer will also ensure that all replacement ballasts and bulbs are like-for-like replacements.

Schedule 2**FIM 3.0: DX Unit Upgrades**

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. The savings for this FIM are generated through an increase in efficiencies of the new DX equipment as compared to the existing equipment; therefore, the measurement boundary is surrounding the DX equipment itself.

Key Parameter	Measurement Frequency	Measurement Description
Pre and Post HVAC Occupancy Schedules	One-time Pre, Annually Post	The pre-retrofit HVAC occupancy schedules are based on staff interviews, schedules in the BAS, and an energy balance with the utility bills. These values are detailed in Section V of Schedule 2 of this Agreement. The post-retrofit HVAC occupancy schedules will be verified using instantaneous observations and short-term trending reports from the BAS. JCI will review and identify variances in the setpoints as compared with the setpoints listed in Section V of Schedule 2 of this Agreement. However, JCI is not responsible for loss of savings resulting from customer-directed changes in schedules, setpoints, system overrides, or lack of maintenance that result in run times beyond contract agreed upon values. The savings will be updated to reflect post-retrofit measurements only if non-conformance in HVAC schedules is JCI responsibility.

Estimated Parameters	Assumed Value	Justification, Source and Description
Pre and Post Cooling Efficiency (EER)	See Attachment 5	The baseline cooling efficiencies of each unit are based on product data, observed conditions, and engineering judgment. This value was not measured due to the measurement cost associated with taking accurate field measurements, and its cost would not be feasible for the savings related to this FIM. Therefore, the pre-retrofit cooling efficiency was based on the EER efficiency ratings of the existing equipment, de-rated based on the age of the existing equipment. The values are detailed in this calculation in Attachment 5 and are agreed to by the Customer and JCI for the term of the contract. The post-retrofit cooling efficiencies for each unit will be verified by using the manufacturer's EER rating for each new unit. The calculations will be updated based on post-retrofit cooling efficiency, which has been determined through manufacturer's factory testing of the new equipment, prior to the new equipment being installed. JCI is not responsible for the loss of savings resulting from customer-directed changes in schedules, system overrides, or lack of maintenance.
Cooling Equivalent Full-Load Hours	See Table Below	The cooling equivalent full-load hours are determined by building based on the HVAC schedules for each building. A spreadsheet model, using TMY3 weather data for Houston, was used to calculate the load profile at each hour of occupancy. The load profile was based on an energy balance with the utility bills, conducting staff interviews, site observations, and engineering judgment. The values are shown in the table below and are agreed to by the Customer and JCI for the term of the Agreement.
Design Capacity	See Attachment 5	Total cooling capacity, in tons, of each unit is based on product data. The values are detailed in this calculation in Attachment 5 and are agreed to by the Customer and JCI for the term of the contract. These values will not be measured during the term of the contract.
Demand Diversity Factor	See Attachment 5	The demand diversity factor accounts for instantaneous loads being less than the peak capacity of the equipment. The diversity factor is based on engineering judgment and is used to ensure baseline demand is not greater than utility bills. These values are agreed to by the Customer and JCI, and will not be measured.

Schedule 2

Estimated Parameters	Assumed Value	Justification, Source and Description
Cooling Diversity Factor	See Attachment 5	The cooling diversity factor accounts for loads being less than the installed capacity on an annual basis. The diversity factor is based on engineering judgment and is used to ensure baseline energy is not greater than utility bills. These values vary by equipment type. These values are agreed to by the Customer and JCI and will not be measured.
Degradation Factor	See Attachment 5	The degradation factor for each unit is calculated using the methodology described in National Renewable Energy Laboratory (NREL) publication entitled <i>Building America Performance Analysis Procedures for Existing Homes</i> (BAPA). The methodology accounts for the age and general condition (maintenance factor) of the existing equipment and is calculated by the following equation: $(1 - M)^{Age}$ Where M is the maintenance factor and Age is the equipment age in years. The maintenance factor is defined as: • 0.01 for “good” condition • 0.02 for “fair” condition • 0.03 for “poor” condition

Equations for Calculating DX Unit Replacement Savings

DX unit replacement savings were calculated using a spreadsheet model of the baseline and post-installation conditions. Savings were calculated based on the DX unit system size (cooling capacity in tons), system efficiency, and equipment run hours.

The pre and post-run hours for this FIM are the same. Below are the cooling equivalent full-load hours (EFLH) for each facility included in this FIM.

Facility	Cooling EFLH
5th St. Boys & Girls Community Center	1,794
Animal Services Building	1,478
Auto Theft	1,111
CSCD Fresno	1,170
Drainage Buildings	1,111
Facilities Morton St.	1,111
IDC Shop (Road & Bridge)	1,111
Jake Dove Juvenile	2,124
Juvenile Court	2,027
Juvenile Detention	2,078
Juvenile Probation	1,390
Kitty Hollow Park	1,111
Medic 1	2,078
Mustang Community	563
Narcotics / Patrol Building	1,105
Needville Annex JP	1,097
Recycling Center	1,176
Roads & Bridge (Beechnut)	1,097
Roads & Bridge Dairy Ashford	1,097
Roads & Bridge Pane Lane	1,097

Schedule 2

Facility	Cooling EFLH
Rosenburg Boot Camp Juvenile	1,309
Vehicle Maintenance	1,111
Vocational Building	2,078

Demand (kW)

Pre-retrofit kW = Design Capacity x Diversity Factor x 12 / (Exist. EER x Degradation Factor)

Post-retrofit kW = Design Capacity x Diversity Factor x 12 / Future EER

Total kW Saved = Pre-retrofit kW – Post-retrofit kW

where:

Design Capacity = Cooling Design Capacity, described in table above

Diversity Factor = Demand Diversity Factor, described in table above

Degradation Factor = Degradation Factor, as described above

Exist. EER = Pre-Retrofit Cooling Efficiency base on existing product data shown in Attachment 5

Future EER = Post-Retrofit Cooling Efficiency base on verified product data

Energy (kWh)

Pre-retrofit kWh = Design Capacity x Diversity Factor x 12 / (Exist. EER x Degradation Factor) x Existing Cooling EFLH

Post-retrofit kWh = Design Capacity x Diversity Factor x 12 / Future EER x Existing Cooling EFLH

Total kWh Saved = Pre-retrofit kWh – Post-retrofit kWh

where:

Design Capacity = Cooling Design Capacity, described in table above

Diversity Factor = Cooling Diversity Factor, described in table above

Degradation Factor = Degradation Factor, as described above

Exist. EER = Pre-Retrofit Cooling Efficiency base on existing product data shown in Attachment 5

Future EER = Post-Retrofit Cooling Efficiency base on verified product data

Cooling EFLH = Cooling equivalent full-load hours as described above

Refer to Attachment 5 for the detailed calculations.

Installation Period M&V Activities

Following the installation of this FIM, JCI will verify the manufacturer's rated efficiency of the new equipment based on the equipment nameplate data. Additionally, HVAC schedules will be verified by reviewing information within the BAS through instantaneous observations of contractual schedules. Contractual setpoints and schedules are detailed in Section V of Schedule 2.

Any deviation from the proposed control strategies will be documented and reported in the post-installation report. However, JCI is not responsible for the loss of savings resulting from customer-directed changes in schedules, system overrides, or lack of maintenance that results in schedules run hours beyond contract agreed upon values. JCI will update the savings calculations for equipment scheduling based on actual schedules only if non-conformance in HVAC schedules is JCI responsibility.

Schedule 2

Performance Period M&V Activities

JCI will conduct periodic instantaneous reviews (remotely) of contractual schedules. Annually, JCI will review HVAC occupancy schedule data to verify the proper operation of the FIM. Any performance deficiencies in the HVAC occupancy schedules observed during the performance period will be reported to the Customer.

Customer Responsibilities

Customer is responsible for all operational and maintenance responsibilities for this FIM. Customer is responsible for performing preventative maintenance on the equipment as per the manufacturer's guidelines. In the event that the equipment fails or needs repairs; Customer is responsible for repairing/replacing the equipment, either by use of its own maintenance staff, through a separate contract with either JCI or a third-party mechanical repair contractor.

IV. BASELINE CALCULATIONS AND UTILITY RATES

The unit utility costs for the baseline period are set forth below as “baseline” rate for each type of utility and shall be used for all calculations made under this Schedule. The Base Utility Cost for each type of utility represents the 17-month average utility costs from November 2020 through October 2022.

Fort Bend County has a fixed electrical consumption rate (\$0.038/kWh) rate through Performance Year 6 of this Contract. During this period, the cost per kWh will remain constant every year. Starting in Performance Year 7, when the current kWh rate contract expires, the kWh rate is expected to increase to the “market rate”, which is the current rate following the historical 3% annual escalation each year. The Year 7 kWh rate represents what the current rate would be in Year 7 if it were escalated 3% each performance year.

The demand rates (\$/kW) and natural gas rates (\$/therm) will escalate annually by 3%, based on historical escalations.

The tables below lay out the annual rates for each utility type by facility that will be used for each year’s annual savings calculations. Given that the kWh rate is not linear, it is easier to show each year’s rates to ensure that the proper rates are being applied each performance year. The kWh rate shown below applies to each facility included in this project. Additionally, natural gas rates are only depicted for facilities with gas heating.

Electrical Consumption Rates (\$/kWh)

kWh Rates (all Facilities)	Performance Years									
	Year 1	Year 2	Year 3	Year 4	Year5	Year 6	Year 7	Year 8	Year 9	Year 10
	\$0.0380	\$0.0380	\$0.0380	\$0.0380	\$0.0380	\$0.0380	\$0.0454	\$0.0467	\$0.0481	\$0.0496
	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
	\$0.0511	\$0.0526	\$0.0542	\$0.0558	\$0.0575	\$0.0592	\$0.0610	\$0.0628	\$0.0647	\$0.0667

Schedule 2

Electrical Demand Rates (\$/KVA)																						
Facility	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	
36th St. Park & Ride	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
5th St. Boys & Girls Community Center	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Animal Services Buildings	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Central Appraisal District	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Drainage Buildings	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Jake Dove Juvenile	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Justice Center	\$7.78	\$7.78	\$8.01	\$8.25	\$8.50	\$8.75	\$9.02	\$9.29	\$9.56	\$9.85	\$10.15	\$10.45	\$10.76	\$11.09	\$11.42	\$11.76	\$12.12	\$12.48	\$12.85	\$13.24	\$13.64	
Juvenile Court	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Juvenile Detention	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Juvenile Probation	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Kitty Hollow Park	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Medic 1	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Mustang Community Center	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Narcotics / Patrol Building	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Recycling Center	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Roads & Bridge Admin	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Roads & Bridge (Beechnut)	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Roads & Bridge (Dairy Ashford)	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Roads & Bridge (Pane Lane)	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Rosenberg Boot Camp Juvenile	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Sienna Annex	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Vehicle Maintenance	\$8.59	\$8.59	\$8.85	\$9.11	\$9.39	\$9.67	\$9.96	\$10.26	\$10.56	\$10.88	\$11.21	\$11.54	\$11.89	\$12.25	\$12.61	\$12.99	\$13.38	\$13.78	\$14.20	\$14.62	\$15.06	
Jail East Tower	\$13.31	\$13.31	\$13.71	\$14.12	\$14.54	\$14.98	\$15.43	\$15.89	\$16.37	\$16.86	\$17.36	\$17.88	\$18.42	\$18.97	\$19.54	\$20.13	\$20.73	\$21.35	\$22.00	\$22.66	\$23.33	
Jail West Tower	\$12.31	\$12.31	\$12.67	\$13.06	\$13.45	\$13.85	\$14.27	\$14.69	\$15.13	\$15.59	\$16.06	\$16.54	\$17.03	\$17.55	\$18.07	\$18.61	\$19.17	\$19.75	\$20.34	\$20.95	\$21.58	

Schedule 2**V. PRIMARY OPERATIONS SCHEDULE PRE & POST-RETROFIT****Pre- and Post-Retrofit HVAC Occupied Hours**

Building	Mon	Tue	Wed	Thu	Fri	Sat	Sun
5th St. Boys & Girls Community Center	7 AM – 6 PM	7 AM – 6 PM	7 AM – 6 PM	7 AM – 6 PM	7 AM – 6 PM	7 AM – 6 PM	7 AM – 6 PM
Animal Services Building	8 AM – 5 PM	8 AM – 5 PM	8 AM – 7 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 3 PM	8 AM – 3 PM
Auto Theft	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	Unocc	Unocc
CSCD Frenso	7 AM – 5 PM	7 AM – 5 PM	7 AM – 5 PM	7 AM – 5 PM	7 AM – 5 PM	Unocc	Unocc
Drainage Buildings	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	Unocc	Unocc
Facilities Morton St.	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	Unocc	Unocc
IDC Shop (Road & Bridge)	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	Unocc	Unocc
Jake Dove Juvenile	7 AM – 10 PM	7 AM – 10 PM	7 AM – 10 PM	7 AM – 10 PM	7 AM – 10 PM	7 AM – 10 PM	7 AM – 10 PM
Juvenile Court	7 AM – 9 PM	7 AM – 9 PM	7 AM – 9 PM	7 AM – 9 PM	7 AM – 9 PM	7 AM – 9 PM	7 AM – 9 PM
Juvenile Detention	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours
Juvenile Probation	7 AM – 8 PM	7 AM – 8 PM	7 AM – 8 PM	7 AM – 8 PM	7 AM – 8 PM	7 AM – 8 PM	Unocc
Kitty Hollow Park	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	Unocc	Unocc
Medic 1	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours
Mustang Community Community	3 PM – 7 PM	3 PM – 7 PM	3 PM – 7 PM	3 PM – 7 PM	3 PM – 7 PM	3 PM – 7 PM	3 PM – 7 PM
Narcotics / Patrol Building	9 AM – 3 PM	9 AM – 3 PM	9 AM – 3 PM	9 AM – 3 PM	9 AM – 3 PM	9 AM – 3 PM	9 AM – 3 PM
Needville Annex JP	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	Unocc	Unocc
Recycling Center	8 AM – 4 PM	8 AM – 4 PM	8 AM – 4 PM	8 AM – 4 PM	8 AM – 4 PM	8 AM – 4 PM	Unocc
Roads & Bridge (Beechnut)	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	Unocc	Unocc
Roads & Bridge Dairy Ashford	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	Unocc	Unocc
Roads & Bridge Pane Lane	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	6 AM – 4 PM	Unocc	Unocc
Rosenburg Boot Camp Juvenile	7 AM – 7 PM	7 AM – 7 PM	7 AM – 7 PM	7 AM – 7 PM	7 AM – 7 PM	Unocc	Unocc
Vehicle Maintenance	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	Unocc	Unocc
Vocational Building	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours	24 Hours

Pre and Post-Installation HVAC Operations Temperatures**Heating Season**

Occupied Room Temperature: 68°F or less

Unoccupied Room Low Temperature Limit: 60°F or less

Cooling Season

Occupied Room Temperature: 72°F or greater

Unoccupied Room High Temperature Limit: 80°F or greater

VI. MEASUREMENT AND 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 Specialist 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 Specialist will monitor the ongoing 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 Specialist will periodically assist Customer, onsite 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.
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 BAS employs the control strategies and setpoints specified in this Agreement;
 - 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); and
 - d. trend data records maintained in the ordinary course of system operation may be used and relied upon by JCI in connection with Project Benefit calculations, as well as in other commercial uses relating to building system performance. JCI will use commercially reasonable efforts to ensure the integrity of the data collected to calculate the required metrics. In the event data is lost due to equipment failure, power failure or other interruption in data collection, transmission or storage, JCI will use reasonable engineering methods to estimate the impact of or replace the lost data.

CUSTOMER RESPONSIBILITIES (Schedule 3)

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. Providing JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties that are subject to the Work and/or M&V Services;
2. Providing for shut down and scheduling of affected locations during installation, as needed to accomplish the Work and/or M&V Services;
3. Providing timely reviews and approvals of design submissions, proposed change orders, and other project documents;
4. Providing the following information with respect to the project and project site as soon as practicable following JCI's request:
 - a. surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;
 - b. geotechnical studies describing subsurface conditions, and other surveys describing other latent or concealed physical conditions at the project site;
 - c. temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and construction of the project and enable JCI to perform the Work;
 - d. a legal description of the project site;
 - e. as-built and record drawings of any existing structures at the project site; and
 - f. environmental studies, reports and impact statement describing the environmental conditions, including hazardous conditions or materials, in existence at the project site.
5. Securing and executing all necessary agreements with adjacent land or property Customers that are necessary to enable JCI to perform the Work;
6. Providing assistance to JCI in obtaining any permits, approvals, and licenses that are JCI's responsibility to obtain as set forth in Schedule 1;
7. Obtaining any permits, approvals, and licenses that are necessary for the performance of the Work and are not JCI's responsibility to obtain as set forth in Schedule 1;
8. 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;
9. Providing the utility bills, reports, and similar information reasonably necessary for administering JCI's obligations under the Assured Performance Guarantee within five days of Customer receipt and/or generation or JCI's request therefor;
10. Providing all records relating to energy and/or water usage and related maintenance of the premises and relevant equipment requested by JCI;
11. 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. In the event the Customer provides and installs the sub-meters, JCI shall provide an estimated number of sub-meters required for the project.
12. Providing and maintaining a dedicated TCP/IP remote connection to facilitate remote monitoring of relevant equipment.

Schedule 3

13. Promptly notifying JCI of any change in use or condition described in Section III of Schedule 2 or any other matter that may impact the Assured Performance Guarantee.
14. Taking all actions reasonably necessary to achieve the Non-Measured Project Benefits.
15. If any equipment under control is changed out, it is the customer's responsibility to move the controls and the control programming to the new equipment.
16. Properly maintaining setpoints and schedules for control sequences detailed in Schedule 2 that may impact the achievement of Project Benefits and shall be responsible for customer-driven changes to schedules and setpoints, overrides, or lack of maintenance affecting controls performance.
17. Coordinate required laydown areas, trailer locations, and other required project management spaces with JCI.
18. Approve annual M&V report within 60 days of report delivery.
19. Customer shall provide escorts where required for secured areas at no additional cost.
20. Customer shall be responsible for all maintenance responsibilities on equipment installed as part of this contract once the warranty period begins for the individual pieces of equipment installed.

PRICE AND PAYMENT TERMS (Schedule 4)

Customer shall make payments to JCI pursuant to this Schedule 4.

1. Work. The price to be paid by Customer for the Work shall be \$11,380,840. Payments (including payment for materials delivered to JCI and work performed on and off-site) shall be made to JCI as follows:

Payment from Customer to JCI shall include a mobilization down payment of \$300,000 billed and due upon receipt of Notice to Proceed and Project Funding. Additional payments shall be made by Customer through the Construction Period as billed by JCI. JCI shall bill Customer for the purchase of equipment as equipment arrives, as well as monthly for percentage of work completed. Customer agrees to pay JCI within 30 days from receipt of JCI invoice.

2. Retainage. 5%.
3. M&V Services. The total price for JCI's M&V Services, as detailed on Schedule 2 of this Agreement, is \$306,995. This amount will be paid to JCI in quarterly installments as shown in the table below. These payments will be due and payable when Customer receives JCI's invoice and in advance of the services JCI is to provide and shall be made throughout the Guarantee Term.

Performance Year	Annual Payment	Quarterly Payment
Year 1	\$34,116	\$8,528.90
Year 2	\$10,864	\$2,716.10
Year 3	\$11,190	\$2,797.58
Year 4	\$11,526	\$2,881.51
Year 5	\$11,872	\$2,967.96
Year 6	\$12,228	\$3,056.99
Year 7	\$12,595	\$3,148.70
Year 8	\$12,973	\$3,243.17
Year 9	\$13,362	\$3,340.46
Year 10	\$13,763	\$3,440.67
Year 11	\$14,176	\$3,543.89
Year 12	\$14,601	\$3,650.21
Year 13	\$15,039	\$3,759.72
Year 14	\$15,490	\$3,872.51
Year 15	\$15,955	\$3,988.68
Year 16	\$16,433	\$4,108.34
Year 17	\$16,926	\$4,231.60
Year 18	\$17,434	\$4,358.54
Year 19	\$17,957	\$4,489.30
Year 20	\$18,496	\$4,623.98
Total	\$306,995	

4. Cooperative Purchasing Agreement. Sourcewell Contract. No. 070121-JHN

NOTICE TO PROCEED

Johnson Controls, Inc.
8323 N. Eldridge Pkwy.
Houston, TX 77041
ATTN: Mr. Alim Adatia & Mr. Tony Cloud

Re: Notice to Proceed for FORT BEND COUNTY (Phase 2)

Dear Mr. Alim Adatia & Mr. Tony Cloud:

This Notice to Proceed is being issued by Fort Bend County (“Customer”) to Johnson Controls, Inc. (“JCI”) pursuant to that certain Performance Contract entered into between Customer and JCI for the purpose of notifying JCI to commence work under such contract.

In the event that this Notice to Proceed is delivered by Customer prior to the execution of the Performance Contract by Customer and JCI, Customer understands and expects JCI will incur significant costs and expenses in complying with this Notice to Proceed. In the event the Performance Contract is not executed by the parties, for any reason, Customer agrees to pay JCI for its costs and fees incurred in complying with this Notice to Proceed on a time and material basis. Customer also agrees JCI shall be entitled to a reasonable markup thereon for profit and overhead. Customer agrees to pay amounts billed by JCI no later than five (5) days after Customer receives JCI's payment application. JCI will continue to submit payment applications to Customer until the Performance Contract is executed. Once the Performance Contract is executed, JCI will begin submitting its payment applications to Customer in accordance with the terms and conditions set forth therein. Any amounts already paid by Customer will be credited towards the Performance Contract price.

By signing and dating this Notice to Proceed, the parties hereto agree to these terms and represent and warrant they have the authority to execute this Notice to Proceed on behalf of their respective organizations.

FORT BEND COUNTY

Signature:_____

Printed Name:_____

Title:_____

Date:_____

ACKNOWLEDGED & AGREED TO:
Johnson Controls, Inc.

Signature:_____

Printed Name:_____

Title:_____

Date:_____

CHANGE ORDER

Performance Contract dated , 20 between Johnson Controls, Inc. and Customer	Change Order No.	Date (mo/day/yr)
Customer FORT BEND COUNTY		
The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.		
Scope of Work changed as follows:		
Total amount of this Change Order	\$	
Total Performance Contract amount as revised by this Change Order	\$	
The time for completion is: ☐ increased, ☐ decreased, ☐ unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr)	
[check if applicable] Assured Performance Guarantee changed as follows:		
Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.		
JOHNSON CONTROLS, INC.	FORT BEND COUNTY	
Signature:	Signature:	
Printed Name:	Printed Name:	
Title:	Title:	

CERTIFICATE OF SUBSTANTIAL COMPLETION

PARTIES: JOHNSON CONTROLS, INC. ("JCI")
 8323 N. Eldridge Pkwy., Houston, TX 77041

 Fort Bend County ("Customer")
 301 Jackson Street, Suite 301, Richmond, TX 77469

PROJECT: Fort Bend County (Phase 2); Performance Contract dated _____, 20__ between JCI and Customer

By executing this Certificate of Substantial Completion, Customer acknowledges the following:

- a. The work set forth in the Performance Contract is substantially complete.
- b. Customer has received the manuals, warranty information, and training required under the Performance Contract.
- c. The following punch list items must be completed by JCI (check as applicable):
 - ☐ punch list attached
 - ☐ punch list complete
- d. Upon completion of the punch list items, or if such punch list items are complete, JCI and Customer shall sign the Certificate of Final Completion attached hereto.

Dated _____, 20__ .

FORT BEND COUNTY:	JOHNSON CONTROLS, INC.
Signature: _____	Signature: _____
Printed Name: _____	Printed Name: _____
Title: _____	Title: _____

CERTIFICATE OF FINAL COMPLETION

PARTIES: JOHNSON CONTROLS, INC. ("JCI")
 8323 N. Eldridge Pkwy., Houston, TX 77041

 Fort Bend County ("Customer")
 301 Jackson Street, Suite 301, Richmond, TX 77469

PROJECT: Fort Bend County (Phase 2); Performance Contract dated _____, 20__ between JCI and Customer

By executing this Certificate of Final Completion, Customer acknowledges the following:

- a. The work set forth in the Performance Contract has been reviewed and determined by Customer to be fully complete.
- b. Customer accepts the work as complete and hereby releases JCI's obligations under any performance and payment bonds posted for the project as of the date set forth below.

Dated _____, 20__.

FORT BEND COUNTY:	JOHNSON CONTROLS, INC.
Signature: _____	Signature: _____
Printed Name: _____	Printed Name: _____
Title: _____	Title: _____



Attachment 5 - All Equipment Details

Attachment 5 - FIM 1 Lighting Scope and Savings

Attachment 5 - FIM 2 Chiller Plant Savings

Attachment 5 - FIM 2 Chiller_ Sequence

Attachment 5 - FIM 3.0 DX Details

Attachment 5 - FIM 3.0 DX Savings

Attachment 5 - FIM 3.5 West Tower Cooling Tower 30% Construction Details

Attachment 5 - FIM 3.9 MZ Dampers Details

Attachment 5 - All Equipment Details

Johnson Controls		Field Notes by Location for FBC-2			Existing				Proposed					
Location	Type	Tag	ECM	Category	Manufacturer	model	tons	age	Manufacturer	Model	Tons	EER	Note	
1A-Project Wide	Bonds	99.	0.00 - Bonds	Mechanical										
36 Park & Ride (FBC Fair Grounds)	Lighting - Exterior	500.	1.00 - Lighting	Lighting									Lighting upgrade	
5th St. Boys & Girls Community Center	Lighting - Exterior	502.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	503.	1.00 - Lighting	Lighting									Lighting upgrade	
	Split Systems (DX)	295.	3.00 - HVAC - 14 to 20 years	Mechanical	Carrier	38AKS024-510	20	20					Replace Equipment	
		296.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA120A300FA	10	16	Johnson Controls	J10YCC00A2AAB6		11.2	Remove and replace security rack	
													Rebuild AHU platform	
													Install new housekeeping pad	
		297.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA180B300FA	15	16	Johnson Controls	J15YDC00A2AAB6		11.2	Remove and replace security rack	
Animal Services Building	Lighting - Exterior	504.	1.00 - Lighting	Lighting									Relocate electrical disconnect to left side of unit	
	Lighting - Interior	505.	1.00 - Lighting	Lighting									Add new housekeeping pad at condenser	
													Lighting upgrade	
Auto Theft	Lighting - Exterior	506.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	507.	1.00 - Lighting	Lighting									Lighting upgrade	
	Split Systems (DX)	164.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTA048A4000AA	4	21	Johnson Controls	J07YEC00A4AAB5		11.2	Electrical disconnect - Replace existing at condenser	
													Replace Lineset	
		166.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTA036A4000AA	3	20	Johnson Controls	J07YEC00A4AAB5		11.2	Electrical disconnect - Replace existing at condenser	
													Change from 2-condensers to 1-dual stage condenser,	
		168.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTA036A4000AA	3	20	Johnson Controls	TCD2B60S31S		12	Replace lineset	
Central Appraisal District	Controls - Building Wide	401.	2.00 - BAS	Controls									Change from 2-condensers to 1-dual stage condenser,	
	Lighting - Exterior	508.	1.00 - Lighting	Lighting									Electrical disconnect - Replace Existing at Condenser	
	Lighting - Interior	509.	1.00 - Lighting	Lighting									Controls upgrade	
CSCD Fresno	BARD	281.	3.00 - HVAC - 14 to 20 years	Mechanical	National Com Company	V436310A1FDS-NB	0						Lighting upgrade	
	Lighting - Exterior	510.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	511.	1.00 - Lighting	Lighting									Lighting upgrade	
Drainage Buildings	Lighting - Interior	513.	1.00 - Lighting	Lighting									Lighting upgrade	
	Split Systems (DX)	238.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7B2036A1000AA	3	20	Johnson Controls	RAC15036B21S		12.5	Electrical disconnect - Replace existing at condenser	
George Family Development Center	Lighting - Exterior	516.	1.00 - Lighting	Lighting									Electrical disconnect - Replace existing at ahu	
	Lighting - Interior	517.	1.00 - Lighting	Lighting									Lighting upgrade	
	RTU (DX)	105.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	YCD120C4L0	10	27	Johnson Controls	ZYG12E4C3AB1C114A3		11.5	Add new gas regulator	
													Add new electrical disconnect at condenser	
		106.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	YCD18B4LOHB	15	19	Johnson Controls	AD15N1CP4L1CAB36B2		10.9	Add new electrical disconnect at condenser	
													Add new gas regulator	
		108.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	YCD090C4L	7.5	27	Johnson Controls	ZYG08E4B3AB1C114A4		12	Add new electrical disconnect at condenser	
													Add new gas regulator	
		109.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	YSC072A4E	6	18	Johnson Controls	ZYGA7E4B1AB1C114A2		12	Add new gas regulator	
													Add new electrical disconnect at condenser	
	Split Systems (DX)	111.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA036C40CA0	3	27	Johnson Controls	TCD2B36S41S		12.25	Replace Equipment	
		113.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTR025C100A2	2.08	27	Johnson Controls	RAC13424B21S		12.5	Replace Equipment	
		115.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	RAUCC254CM03	2.08	27	Johnson Controls	J25YCC00A4AAB5		10.1	Replace line set	
		116.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA072C400A0	6	27	Johnson Controls	J07YEC00A4AAB5		11.2		
		118.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA048C400A0	6	27	Johnson Controls	TCD2B48S41S		11.75	Replace Equipment	
		119.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA036C400A0	3	27	Johnson Controls	TCD2B36S41S		12.25	Replace Equipment	
		120.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA030C400A0	2.5	27	Johnson Controls	TCD2B36S41S		12.25	Replace Equipment	

Attachment 5 - All Equipment Details



Field Notes by Location for FBC-2
Equipment Audited to be Replaced

					Existing				Proposed					
Location	Type	Tag	ECM	Category	Manufacturer	model	tons	age	Manufacturer	Model	Tons	EER	Note	
Hobby Boys and Girls	Lighting - Exterior	514.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	515.	1.00 - Lighting	Lighting									Lighting upgrade	
	RTU (DX)	287.	3.00 - HVAC - 14 to 20 years	Mechanical	Carrier	50TTF014601BA	15	22	Johnson Controls	ZJ150E36R4B1BCA2A2		12.1	Replace Equipment	
IDC Shop (Road & Bridge)	Split System - Mini	294.	3.00 - HVAC - 14 to 20 years	Mechanical	Mitsubishi	MXZ-3B24NA	2		Johnson Controls	LS243HLV3		13	Replace Equipment	
	Split Systems (DX)	292.	3.00 - HVAC - 14 to 20 years	Mechanical	Goodman	CLJ36-1A	3	12	Johnson Controls	RAC14330B21S		12.75	Add new electrical disconnect at condenser	
		293.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	4TTB3060D1000AA	5	12					Replace Equipment	
Jail - East Tower	Boiler	372.	3.80 - Boilers	Mechanical									Replace Equipment	
		373.	3.80 - Boilers	Mechanical									Replace Equipment	
		374.	3.80 - Boilers	Mechanical									Replace Equipment	
	Chiller (Water Cooled)	139.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Add additional insulation to chiller barrels	
		140.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Add additional insulation to chiller barrels	
	Controls - Building Wide	572.	2.00 - BAS	Controls									Chiller Plant Controls	
		581.	2.00 - BAS	Controls									BMS Upgrades	
		582.	2.00 - BAS	Controls									Mechanical Upgrades	
	Damper Actuator	600.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		601.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		602.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		603.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		604.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		605.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		606.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		607.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		608.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		609.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		610.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		611.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		612.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		613.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		614.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
		615.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators	
	FCU (Chilled Water)	579.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Add new FCU to chiller plant	
	Hot Taps (Controls)	574.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Add additional hot taps	
	Pump (Circulating HW)	363.	3.80 - Boilers	Mechanical									Pump and motor replacement	
		364.	3.80 - Boilers	Mechanical									Pump and motor replacement	
		365.	3.80 - Boilers	Mechanical									Pump and motor replacement	
		367.	3.80 - Boilers	Mechanical									Pump and motor replacement	
	Pump (Primary Chilled Water)	145.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Equipment										
		146.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Equipment										
		366.	3.80 - Boilers	Mechanical									Pump and motor	
		368.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Pump and Motor to be replacement	
		369.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Pump and Motor to be replacement	
	Test and Balance	800.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Water only in plant	
	Valve Replacement (Controls)	575.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									New valve replacements	

Attachment 5 - All Equipment Details



Field Notes by Location for FBC-2
Equipment Audited to be Replaced

Equipment Audited to be Replaced					Existing				Proposed					
Location	Type	Tag	ECM	Category	Manufacturer	model	tons	age	Manufacturer	Model	Tons	EER	Note	
	VFD - AHU Motor	700.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
	VFD (Cooling Tower Fan Motor)	701.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
		702.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
	VFD (Main HW Pump)	705.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
	VFD (Primary Chilled Water Pump)	370.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										VFD - Replacement
		371.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										VFD - Replacement
		703.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										VFD - Replacement
		704.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										VFD - Replacement
	VFD (Secondary Chilled Water Pump)	381.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										VFD - Replacement
		382.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										VFD - Replacement
Jail - West Tower	Controls - Building Wide	573.	2.00 - BAS	Controls									Controls upgrade	
	Cooling Tower	351.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Replace towers, frame and catwalk	
	FCU (Chilled Water)	580.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Equipment									Add new FCU to chiller plant	
	Hot Taps (Controls)	576.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Add new hot taps	
	Pump (Condenser Water)	349.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Pump and motor replacement
		350.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Pump and motor replacement
	Pump (Primary Chilled Water)	354.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Pump and motor replacement
		355.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Pump and motor replacement
		356.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Pump and motor replacement
	Pump (Secondary Chilled Water)	352.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Pump and motor replacement
		353.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Pump and motor replacement
	Test and Balance	801.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Water side only in Plant
	Valve Replacement (Controls)	577.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical										Replace Isolation valves

Attachment 5 - All Equipment Details



Field Notes by Location for FBC-2
Equipment Audited to be Replaced

					Existing				Proposed					
Location	Type	Tag	ECM	Category	Manufacturer	model	tons	age	Manufacturer	Model	Tons	EER	Note	
	VFD (Condenser Water Pump)	358.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Pump and motor replacement	
		360.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
	VFD (Cooling Tower Fan Motor)	359.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
		380.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
	VFD (Secondary Chilled Water Pump)	357.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									Pump and motor replacement	
		361.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
		362.	3.50 - HVAC-Pumps, Motors, VFDs, Cooling Tower	Mechanical									VFD - Replacement	
Jake Dove Juvenile	Lighting - Exterior	520.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	521.	1.00 - Lighting	Lighting									Lighting upgrade	
	Split Systems (DX)	269.	3.00 - HVAC - 14 to 20 years	Mechanical	Lennox		0		Johnson Controls	TCD2B60S31S		12	Replace Equipment	
		270.	3.00 - HVAC - 14 to 20 years	Mechanical	Lennox		0		Johnson Controls	TCD2B60S31S		12	Replace Equipment	
		271.	3.00 - HVAC - 14 to 20 years	Mechanical	Lennox		0		Johnson Controls	TCD2B60S31S		12	Replace Equipment	
		272.	3.00 - HVAC - 14 to 20 years	Mechanical	Lennox		0		Johnson Controls	RAC15036B21S		12.75	Relocate electrical disconnect next to AHU unit Replace condensation water pump	
Jane Long	CRAC Unit	348.	3.60 - CRAC Unit	Controls									Replace CRAC	
				Mechanical									Replace CRAC	
Justice Center	Lighting - Controls (Occ Sensors)	578.	1.10 - Lighting Controls	Lighting									Lighting Controls	
	Lighting - Exterior	522.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	523.	1.00 - Lighting	Lighting									Lighting upgrade	
Juvenile Court	Lighting - Exterior	524.	1.00 - Lighting	Lighting										
	Lighting - Interior	525.	1.00 - Lighting	Lighting									Lighting upgrade	
	Split Systems (DX)	161.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA150B400DA	12.5	21	Johnson Controls	J12YDC00A4AAB5		11.1	Replace existing electrical disconnect at condenser Install expansion valves (Dual circuit unit)	
		162.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA060B400A1	5	21	Johnson Controls	TCD2B60S31S		12	Replace existing electrical disconnect at condenser	
		163.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA072C400A0	6	27	Johnson Controls	J07YEC00A4AAB5		11.2	Disconnect - Replace existing at condenser	
Juvenile Detention	Lighting - Exterior	526.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	527.	1.00 - Lighting	Lighting									Lighting Upgrade	
	RTU (DX)	178.	3.00 - HVAC - 14 to 20 years	Mechanical	Rheem	RSNA-B024JK 000	2	16	Johnson Controls	PCG4A240502X4		11	Replace existing electrical disconnect at condenser	
		184.	3.00 - HVAC - 14 to 20 years	Mechanical	Carrier	48HJD006	5	15	Johnson Controls	ZYG06E4C1AB1A114A4		12	Add new gas regulator	
		186.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TSC06004A	5	21	Johnson Controls	ZYE06A4B1AB1A114A4		12	Add New electrical disconnect at AHU	
Juvenile Probation	Lighting - Exterior	528.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	529.	1.00 - Lighting	Lighting									Lighting upgrade	
	Split Systems (DX)	148.	3.00 - HVAC - 14 to 20 years	Mechanical	Goodman	GSC130604AC	5	15	Johnson Controls	TCD2B60S31S		12	Replace existing electrical disconnect at condenser Replace equipment stand at AHU	
		149.	3.00 - HVAC - 14 to 20 years	Mechanical	Goodman	GSC130604AC	5	16	Johnson Controls	TCD2B60S31S		12	Replace equipment stand Replace existing electrical disconnect at condenser	
		151.	3.00 - HVAC - 14 to 20 years	Mechanical	Goodman	CKL60-4L	5	18	Johnson Controls	TCD2B60S31S		12	Replace existing electrical disconnect at condenser	
Kitty Hollow - House	Package Unit (DX)	265.	3.00 - HVAC - 14 to 20 years	Mechanical	Carrier	50HJ005341	4	14	Johnson Controls	ZYE06A2C1AB1A114A4		12	Add new electrical disconnect at condenser	
	Split Systems (DX)	266.	3.00 - HVAC - 14 to 20 years	Mechanical	Carrier	24ABS336A300	3	14	Johnson Controls	RAC15036B21S		12.5	Add new electrical disconnect at condenser Reinstall security fence	
Kitty Hollow Park	Lighting - Exterior	530.	1.00 - Lighting	Lighting									Lighting upgrade	
	Lighting - Interior	531.	1.00 - Lighting	Lighting									Lighting upgrade	
	Split Systems (DX)	261.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7C0048A\$000AA	4	17	Johnson Controls	TCD2B48S41S		11.75	Replace existing electrical disconnect at condenser Remove and replace security fence	
		263.	3.00 - HVAC - 14 to 20 years	Mechanical			0		Johnson Controls	RAC14360B21S		11.75	Reinstall security fence Replace existing electrical disconnect at condenser	
		264.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7A3030A1000AA	2.5	17	Johnson Controls	RAC14330B21S		12.75	Replace Equipment	

Attachment 5 - All Equipment Details

Field Notes by Location for FBC-2													
Equipment Audited to be Replaced					Existing				Proposed				
Location	Type	Tag	ECM	Category	Manufacturer	model	tons	age	Manufacturer	Model	Tons	EER	Note
Medic 1	Lighting - Exterior	532.	1.00 - Lighting	Lighting									Lighting upgrade
	Lighting - Interior	533.	1.00 - Lighting	Lighting									Lighting upgrade
Morton St. (Facilities)	Package Unit (DX)	103.	3.00 - HVAC - 14 to 20 years	Mechanical	Heil	PA5542AKA/PAPA42GA	3.5	28	Johnson Controls	RAC14342B21S		12.5	Replace housekeeping pad
	Split Systems (DX)	100.	3.00 - HVAC - 14 to 20 years	Mechanical	York		0		Johnson Controls	RAC14360B21S		11.75	Replace Equipment
		102.	3.00 - HVAC - 14 to 20 years	Mechanical	Carrier	24ACB460A310	5	14	Johnson Controls	RAC14360B21S		11.75	Replace Equipment
Mustang Community Center	Lighting - Exterior	536.	1.00 - Lighting	Lighting									Lighting upgrade
	Lighting - Interior	537.	1.00 - Lighting	Lighting									Lighting upgrade
	Split Systems (DX)	276.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTB0060A1000AA	5	19	Johnson Controls	RAC13460B21S		11.75	Replace Equipment
		277.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTB0060A1000AA	5	19	Johnson Controls	RAC13460B21S		11.75	Replace Equipment
Narcotics / Patrol Building	Lighting - Exterior	538.	1.00 - Lighting	Lighting									Lighting upgrade
	Lighting - Interior	539.	1.00 - Lighting	Lighting									Lighting upgrade
	Split System - Mini	153.	3.00 - HVAC - 14 to 20 years	Mechanical	FUJITSU	AOU18CL	1.5		Johnson Controls	LS181HSV5		12.58	Replace line sets
Needville Annex JP	Lighting - Interior	541.	1.00 - Lighting	Lighting									Lighting upgrade
	Split Systems (DX)	250.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA090A300DA	7.5	22	Johnson Controls	J07YEC00A2AAB5		11.2	Raise condenser 12” to avoid electrical coming out of slab Replace electrical disconnect at condenser
		251.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA090A300DA	7.5	22	Johnson Controls	J07YEC00A2AAB5		11.2	Replace electrical disconnect at condenser Raise condenser 12” to avoid electrical coming out of slab
		252.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA090A300DA	7.5	22	Johnson Controls	J07YEC00A2AAB5		11.2	Replace electrical disconnect at condenser
Outside yard bldg	Split Systems (DX)	571.											Increase size from 5 to 7.5 ton
													Replace line set
													Add new disconnect at AHU
													Replace duct heater - 12 KW
Recycling Center	Lighting - Exterior	542.	1.00 - Lighting	Lighting									Lighting upgrade
	Lighting - Interior	543.	1.00 - Lighting	Lighting									Lighting upgrade
	Split Systems (DX)	241.	3.00 - HVAC - 14 to 20 years	Mechanical	Lennox	12ACB48-5P	4	22	Johnson Controls	RAC15048B21S		12	Add new electrical disconnect to AHU
Road and Bridge - (Needville)	Lighting - Exterior	550.	1.00 - Lighting	Lighting									Lighting upgrade
	Lighting - Interior	551.	1.00 - Lighting	Lighting									Lighting upgrade
	Split Systems (DX)	254.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	TTA120B300FA	10	15	Johnson Controls	J10YDC00A2AAB5		11.2	Relocate t-stat to office Replace existing electrical disconnect at condenser
		255.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTA048A3000A	4	15	Johnson Controls	TCD2B48S41S		11.75	Replace existing electrical disconnect at condenser
		256.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTA060A3000A	5	15	Johnson Controls	TCD2B60S31S		12	Replace existing electrical disconnect at condenser
		257.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTA036A3000A	3	15	Johnson Controls	TCD2B36S31S		12.25	Replace existing electrical disconnect at condenser
Roads & Bridge (Beechnut)	Lighting - Exterior	544.	1.00 - Lighting	Lighting									Lighting upgrade
	Lighting - Interior	545.	1.00 - Lighting	Lighting									Lighting upgrade
	Split Systems (DX)	121.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7C0060A4000AA	5	20	Johnson Controls	TCD2B60S31S		12	Relocate disconnect at AHU Replace existing electrical disconnect at condenser
		123.	3.00 - HVAC - 14 to 20 years	Mechanical	Goodman	???03017D	2.5	16	Johnson Controls	RAC14342B21S		12.75	Add new electrical disconnect at AHU Replace plenum box
Roads & Bridge (Dairy Ashford)	Lighting - Exterior	546.	1.00 - Lighting	Lighting									No Lighting Scope
	Lighting - Interior	547.	1.00 - Lighting	Lighting									No Lighting Scope
	RTU (DX)	288.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7A2036A1000AA	3	21	Johnson Controls	RAC15036B21S		12.5	Add new housekeeping pad
													Add new electrical disconnect at AHU
													Build new plenum box, supply and return
	Split Systems (DX)	291.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7A2030A1000AA	2.5	17					Disconnect - Replace existing electrical disconnect at condenser
													Relocate disconnect at condenser
													Rebuild plenum
Install new duct hangers and remove air restrictions													
	BARD	133.	3.00 - HVAC - 14 to 20 years	Mechanical	Bard		0						Add new electrical disconnect at AHU
	Lighting - Exterior	548.	1.00 - Lighting	Lighting									No Lighting Scope
	Lighting - Interior	549.	1.00 - Lighting	Lighting									No Lighting Scope

Attachment 5 - All Equipment Details

Johnson Controls Field Notes by Location for FBC-2		Equipment Audited to be Replaced			Existing				Proposed				Note
Location	Type	Tag	ECM	Category	Manufacturer	model	tons	age	Manufacturer	Model	Tons	EER	
Roads & Bridge (Pane Lane)	Split Systems (DX)	126.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7A206A10	5	21	Johnson Controls	RAC13460B21S		11.75	Add divider board between units
													Replace return grill
		127.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7B3024A1000AA	2	17	Johnson Controls	RAC14330B21S		13	Add new electrical disconnect at AHU
													Add new pan
		128.	3.00 - HVAC - 14 to 20 years	Mechanical	York	?IDA060S25A	5	30	Johnson Controls	TCD2B60S31S		12	Add new electrical disconnect at AHU
													Add new housekeeping pad
		131.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7B3036A1000AA	3	14	Johnson Controls	RAC15036B21S		12.75	Add new housekeeping pad
Rosenberg Boot Camp Juvenile	Lighting - Exterior	552.	1.00 - Lighting	Lighting									Add new drain pan
	Lighting - Interior	553.	1.00 - Lighting	Lighting									Abandon platform return and tie into duct on left side of unit
	Split Systems (DX)	246.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7A2036A1000AA	3	20	Johnson Controls	RAC15036B21S		12.5	Add new electrical disconnect at AHU
		247.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7A2036A1000AA	3	20	Johnson Controls	RAC15036B21S		12.5	Add new electrical disconnect at AHU
		248.	3.00 - HVAC - 14 to 20 years	Mechanical			0		Johnson Controls	RAC15036B21S		12.5	Add new electrical disconnect at AHU
													Demo and rebuild wall
													Replace pan
Sienna Annex	Controls - Building Wide	400.	2.00 - BAS	Controls									Allen to confirm if unit should be replaced
	Lighting - Exterior	554.	1.00 - Lighting	Lighting									Controls upgrade
	Lighting - Interior	555.	1.00 - Lighting	Lighting									Lighting upgrade
	VAV Box	802.	2.00 - BAS	Mechanical									Lighting upgrade
		803.	2.00 - BAS	Mechanical									Replace existing
		804.	2.00 - BAS	Mechanical									Replace existing
													Replace existing
Vehicle Maintenance	Lighting - Exterior	556.	1.00 - Lighting	Lighting									Lighting upgrade
	Lighting - Interior	557.	1.00 - Lighting	Lighting									Lighting upgrade
	Split Systems (DX)	169.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2TTA072A3000AA	6	15	Johnson Controls	J07YEC00A2AAB5		11.2	Rebuild frame to accept new AHU
		170.	3.00 - HVAC - 14 to 20 years	Mechanical	Trane	2A7C0072A3000AA	6	17	Johnson Controls	J07YEC00A2AAB5		11.2	New house keeping pad
													New housekeeping pad
Vocational Building	Split Systems (DX)	171.	3.00 - HVAC - 14 to 20 years	Mechanical	Carrier	24AB8360	3	18	Johnson Controls	TCD2B36S31S		12.25	Add gas regulator
		570.											Use existing line set
													Replace Equipment
													Replace Equipment

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1	TRUE	Justice Center Interior	3	HIGHER	LO	Lobby/Entry Vestibule	20	8RC	2X42CFL4P	20	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	1.86	90%	0.38	1.33	4,761	4,761			8,856.20	1,809.33	7,046.87	0.00	7,046.87	81%	19%	1,897.23	11.57	\$2.90	\$2.38	\$0.80	\$0.26	5.0	5.0	\$84.27
2	TRUE	Justice Center Interior	3	HIGHER	LO	Lobby/Entry Vestibule	18	WM-DEC	1X54TSHOEBHP5	18	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (.95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	1.15	90%	0.45	0.63	4,761	4,761			5,485.13	2,142.63	3,342.50	0.00	3,342.50	81%	19%	899.90	5.49	\$0.79	\$3.43	\$0.16	\$0.00	10.0	0.0	\$73.14
3	TRUE	Justice Center Interior	3	HIGHER	LO	Lobby/Entry Vestibule	8	TH	1X50MH	8	IN	TH	1XLEDF-TRACK	CMH	64	1	New/ Replacement Fixture - Track Head Fixture, Metal Halide, (1) 50W lamp, Magnetic ballast, w/ Track Head Fixture, 20W LED TRACKHEAD, 20LEDFCMH	20	2	90%	0.51	90%	0.16	0.32	4,761	4,761			2,437.84	761.82	1,676.01	0.00	1,676.01	81%	19%	451.23	2.75	\$8.09	\$3.81	\$0.44	\$0.29	5.0	5.0	\$89.33
4	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	108	WM-DEC	1X54TSHOEBHP5	108	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (.95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	6.91	90%	2.70	3.79	5,085	5,085			35,146.14	13,728.96	21,417.18	0.00	21,417.18	81%	19%	5,766.16	35.15	\$0.85	\$3.66	\$0.17	\$0.00	10.0	0.0	\$468.62
5	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	4	WM-DEC	1X54TSHOEBHP5	4	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (.95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	0.26	90%	0.10	0.14	5,085	5,085			1,301.71	508.48	793.23	0.00	793.23	81%	19%	213.56	1.30	\$0.85	\$3.66	\$0.17	\$0.00	10.0	0.0	\$17.36
6	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	5	EXIT	1X4LEDEXIT	5	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	90%	0.02	90%	0.02	0.00	5,306	5,306			106.12	106.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.51	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
7	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	98	8RC	2X42CFL4P	98	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	9.11	90%	1.86	6.53	5,085	5,085			46,342.87	9,467.90	36,874.97	0.00	36,874.97	81%	19%	9,927.88	60.52	\$3.09	\$2.54	\$0.85	\$0.28	5.0	5.0	\$440.98
8	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	66	4S	2X32T8EBN	66	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	3.83	90%	1.39	2.20	5,085	5,085			19,464.61	7,047.53	12,417.08	0.00	12,417.08	81%	19%	3,343.06	20.38	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$140.95
9	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	10	4S	2X32T8EBN	10	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.58	90%	0.21	0.33	5,085	5,085			2,949.18	1,067.81	1,881.38	0.00	1,881.38	81%	19%	506.52	3.09	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$21.36
10	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	5	8RC	1X26CFL4P	5	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.15	90%	0.10	0.05	3,714	3,714			538.56	352.85	185.71	0.00	185.71	81%	19%	50.00	0.30	\$1.21	\$1.86	\$0.62	\$0.21	5.0	5.0	\$11.17
11	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	5	C	1X54TSHOEBHP5	5	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - 1x Layin Prismatic Fixture, Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (.95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	0.32	90%	0.13	0.18	3,714	3,714			1,188.54	464.28	724.27	0.00	724.27	81%	19%	195.00	1.19	\$0.62	\$2.67	\$0.12	\$0.00	10.0	0.0	\$15.85
12	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	5	8RC	1X26CFL4P	5	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.15	90%	0.10	0.05	3,714	3,714			538.56	352.85	185.71	0.00	185.71	81%	19%	50.00	0.30	\$1.21	\$1.86	\$0.62	\$0.21	5.0	5.0	\$11.17
13	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	5	C	1X54TSHOEBHP5	5	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - 1x Layin Prismatic Fixture, Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (.95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	0.32	90%	0.13	0.18	3,714	3,714			1,188.54	464.28	724.27	0.00	724.27	81%	19%	195.00	1.19	\$0.62	\$2.67	\$0.12	\$0.00	10.0	0.0	\$15.85
14	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEB HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
15	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEB HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,599	3,599			320.35	113.38	206.97	0.00	206.97	81%	19%	55.72	0.34	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$1.69
16	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
17	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	1	8RC	2X42CFL4P	1	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.09	90%	0.02	0.07	3,276	3,276			304.67	62.24	242.42	0.00	242.42	81%	19%	65.27	0.40	\$1.99	\$1.64	\$0.55	\$0.18	5.0	5.0	\$2.90
18	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
19	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	11	8RC	1X26CFL4P	11	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.32	90%	0.21	0.10	3,276	3,276			1,045.04	684.68	360.36	0.00	360.36	81%	19%	97.02	0.59	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$21.68
20	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	20	B	3X12T8EBN	20	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.94	90%	0.51	0.39	3,276	3,276			3,079.44	1,670.76	1,408.68	0.00	1,408.68	81%	19%	379.26	2.31	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$32.27
21	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
22	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEB HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
23	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEB HYBRID	31.5	2	100%	0.18	100%	0.06	0.12	8,760	8,760			1,559.28	551.88	1,007.40	0.00	1,007.40	81%	19%	271.22	1.65	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$8.23
24	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEB HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	8,760	8,760			779.64	275.94	503.70	0.00	503.70	81%	19%	135.61	0.83	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$4.12
25	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEB HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	8,760	8,760			779.64	275.94	503.70	0.00	503.70	81%	19%	135.61	0.83	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$4.12
26	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	1	B	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	100%	0.03	100%	0.02	0.02	8,760	8,760			289.08	148.92	140.16	0.00	140.16	81%	19%	37.74	0.23	\$1.83	\$2.45	\$0.58	\$0.00	10.0	0.0	\$3.69
27	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEB HYBRID	31.5	2	90%	0.09	90%	0.03	0.0																				

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
42	TRUE	Justice Center Interior		HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
43	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,599	3,599			320.35	113.38	206.97	0.00	206.97	81%	19%	55.72	0.34	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$1.69
44	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,562	2,562			456.04	161.41	294.63	0.00	294.63	81%	19%	79.32	0.48	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.41
45	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.05	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
46	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
47	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
48	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
49	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	10	APB	2X32T8EBN	10	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.58	90%	0.21	0.33	5,085	5,085			2,949.18	1,067.81	1,881.38	0.00	1,881.38	81%	19%	506.52	3.09	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$21.36
50	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	3	EXIT	1X4LEEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
51	TRUE	Justice Center Interior	3	HIGHER	ST	Storage	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,680	1,680			78.96	42.84	36.12	0.00	36.12	81%	19%	9.72	0.06	\$0.53	\$0.47	\$0.17	\$0.00	10.0	0.0	\$0.83
52	TRUE	Justice Center Interior	3	HIGHER	ME	Mechanical/Electrical Rooms	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	560	560			26.32	14.28	12.04	0.00	12.04	81%	19%	3.24	0.02	\$0.18	\$0.16	\$0.06	\$0.00	10.0	0.0	\$0.28
53	TRUE	Justice Center Interior	3	HIGHER	ME	Mechanical/Electrical Rooms	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	560	560			26.32	14.28	12.04	0.00	12.04	81%	19%	3.24	0.02	\$0.18	\$0.16	\$0.06	\$0.00	10.0	0.0	\$0.28
54	TRUE	Justice Center Interior	3	HIGHER	ST	Storage	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,680	1,680			78.96	42.84	36.12	0.00	36.12	81%	19%	9.72	0.06	\$0.53	\$0.47	\$0.17	\$0.00	10.0	0.0	\$0.83
55	TRUE	Justice Center Interior	3	HIGHER	OO	Open Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	4,187	4,187			2,236.07	791.42	1,444.65	0.00	1,444.65	81%	19%	388.95	2.37	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$11.81
56	TRUE	Justice Center Interior	3	HIGHER	BR	Break room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,823	3,823			680.57	240.87	439.69	0.00	439.69	81%	19%	118.38	0.72	\$0.96	\$1.22	\$0.38	\$0.00	10.0	0.0	\$3.59
57	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	5	APB	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	3,599	3,599			1,601.73	566.91	1,034.83	0.00	1,034.83	81%	19%	278.61	1.70	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$8.46
58	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
59	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
60	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
61	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
62	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
63	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,562	2,562			922.32	322.81	599.51	0.00	599.51	81%	19%	161.41	0.98	\$0.64	\$1.64	\$0.26	\$0.00	10.0	0.0	\$8.10
64	TRUE	Justice Center Interior	3	HIGHER	OO	Open Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	4,187	4,187			2,236.07	791.42	1,444.65	0.00	1,444.65	81%	19%	388.95	2.37	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$11.81
65	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
66	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	5	APB	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	3,599	3,599			1,601.73	566.91	1,034.83	0.00	1,034.83	81%	19%	278.61	1.70	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$8.46
67	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
68	TRUE	Justice Center Interior	3	HIGHER	BR	Break room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,823	3,823			680.57	240.87	439.69	0.00	439.69											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
82	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
83	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,085	5,085			238.99	129.66	109.32	0.00	109.32	81%	19%	29.43	0.18	\$1.59	\$1.42	\$0.51	\$0.00	10.0	0.0	\$2.50
84	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
85	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
86	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,562	2,562			922.32	322.81	599.51	0.00	599.51	81%	19%	161.41	0.98	\$0.64	\$1.64	\$0.26	\$0.00	10.0	0.0	\$8.10
87	TRUE	Justice Center Interior	3	HIGHER	OO	Open Office	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,507.46	527.61	979.85	0.00	979.85	81%	19%	263.81	1.61	\$1.05	\$2.68	\$0.42	\$0.00	10.0	0.0	\$13.23
88	TRUE	Justice Center Interior	3	HIGHER	BR	Break room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,823	3,823			680.57	240.87	439.69	0.00	439.69	81%	19%	118.38	0.72	\$0.96	\$1.22	\$0.38	\$0.00	10.0	0.0	\$3.59
89	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	3,599	3,599			1,922.08	680.29	1,241.79	0.00	1,241.79	81%	19%	334.33	2.04	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$10.15
90	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
91	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
92	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
93	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
94	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	5	APB	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	3,599	3,599			1,601.73	566.91	1,034.83	0.00	1,034.83	81%	19%	278.61	1.70	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$8.46
95	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
96	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
97	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
98	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,562	2,562			922.32	322.81	599.51	0.00	599.51	81%	19%	161.41	0.98	\$0.64	\$1.64	\$0.26	\$0.00	10.0	0.0	\$8.10
99	TRUE	Justice Center Interior	3	HIGHER	OO	Open Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	4,187	4,187			2,236.07	791.42	1,444.65	0.00	1,444.65	81%	19%	388.95	2.37	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$11.81
100	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
101	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	5	APB	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	3,599	3,599			1,601.73	566.91	1,034.83	0.00	1,034.83	81%	19%	278.61	1.70	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$8.46
102	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
103	TRUE	Justice Center Interior	3	HIGHER	BR	Break room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,823	3,823			680.57	240.87	439.69	0.00	439.69	81%	19%	118.38	0.72	\$0.96	\$1.22	\$0.38	\$0.00	10.0	0.0	\$3.59
104	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,176	1,176			68.21	24.70	43.51	0.00	43.51	81%	19%	11.71	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.49
105	TRUE	Justice Center Interior	3	HIGHER	OO	Open Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	4,187	4,187			2,236.07	791.42	1,444.65	0.00	1,444.65	81%	19%	388.95	2.37	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$11.81
106	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
107	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	5	APB	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	3,599	3,599			1,601.73	566.91	1,034.83	0.00	1,034.83	81%	19%	278.61	1.70	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$8.46
108	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47																													

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
121	TRUE	Justice Center Interior	3	HIGHER	BRAS	Break Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.06	0.10	2,677	2,677			476.47	168.64	307.83	0.00	307.83	81%	19%	82.88	0.51	\$0.67	\$0.86	\$0.27	\$0.00	10.0	0.0	\$2.52	
122	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	5,085	5,085			238.99	129.66	109.32	0.00	109.32	81%	19%	29.43	0.18	\$1.59	\$1.42	\$0.51	\$0.00	10.0	0.0	\$2.50	
123	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61	
124	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61	
125	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.13	0.21	2,562	2,562			922.32	322.81	599.51	0.00	599.51	81%	19%	161.41	0.98	\$0.64	\$1.64	\$0.26	\$0.00	10.0	0.0	\$8.10	
126	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58	
127	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19	
128	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19	
129	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58	
130	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41	
131	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14	
132	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	1	APB	3X32T8EBN2	1	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.03	0.05	3,599	3,599			323.95	113.38	210.56	0.00	210.56	81%	19%	56.69	0.35	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$2.84	
133	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19	
134	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58	
135	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58	
136	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19	
137	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41	
138	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14	
139	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
140	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	1	APB	3X32T8EBN2	1	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.03	0.05	3,599	3,599			323.95	113.38	210.56	0.00	210.56	81%	19%	56.69	0.35	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$2.84	
141	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58	
142	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19	
143	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19	
144	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58	
145	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	4	8RC	2X42CFL4P	4	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	90%	0.08	0.27	5,085	5,085			1,891.55	386.44	1,505.10	0.00	1,505.10	81%	19%	405.22	2.47	\$3.09	\$2.54	\$0.85	\$0.28	5.0	5.0	\$18.00	
146	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	-0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
147	TRUE	Justice Center Interior	3	HIGHER	SW	Stairwell	6	4W	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.35	100%	0.13	0.22	8,760	8,760			3,048.48	1,103.76	1,944.72	0.00	1,944.72	81%	19%	523.58	3.19	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$22.08
148	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	8RC	2X42CFL4P	1	KIT	8RC</																																

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Source Quality	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
162	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	1	B	2X1778EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	100%	0.03	100%	0.02	0.02	8,760	8,760			289.08	148.92	140.16	0.00	140.16	81%	19%	37.74	0.23	\$1.83	\$2.45	\$0.58	\$0.00	10.0	0.0	\$3.69
163	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X3278EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
164	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X3278EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
165	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	1	B	3X1778EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,793	1,793			84.29	45.73	38.56	0.00	38.56	81%	19%	10.38	0.06	\$0.56	\$0.50	\$0.18	\$0.00	10.0	0.0	\$0.88
166	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	8RC	2X26CFL4P	1	KIT	8RC	1XLEDF-8RC		51	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.05	90%	0.02	0.03	5,085	5,085			259.32	96.61	162.71	0.00	162.71	81%	19%	43.81	0.27	\$3.31	\$2.54	\$0.85	\$0.28	5.0	5.0	\$4.71
167	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
168	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X3278EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
169	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	1	APB	3X3278EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
170	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
171	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
172	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	11	8RC	1X26CFL4P	11	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.32	90%	0.21	0.10	3,276	3,276			1,045.04	684.68	360.36	0.00	360.36	81%	19%	97.02	0.59	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$21.68
173	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	18	B	3X1778EBN	18	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.85	90%	0.46	0.35	3,276	3,276			2,771.50	1,503.68	1,267.81	0.00	1,267.81	81%	19%	341.33	2.08	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$29.04
174	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	17	4S	2X3278EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
175	TRUE	Justice Center Interior	4	HIGHER	ME	Mechanical/Electrical Rooms	9	4W	2X3278EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.52	50%	0.19	0.17	560	560			292.32	105.84	186.48	0.00	186.48	81%	19%	50.21	0.31	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$2.12
176	TRUE	Justice Center Interior	4	HIGHER	ME	Mechanical/Electrical Rooms	1	4S	2X3278EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	560	560			32.48	11.76	20.72	0.00	20.72	81%	19%	5.58	0.03	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.24
177	TRUE	Justice Center Interior	4	HIGHER	ME	Mechanical/Electrical Rooms	1	4S	2X3278EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	560	560			32.48	11.76	20.72	0.00	20.72	81%	19%	5.58	0.03	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.24
178	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	8RC	2X42CFL4P	1	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.09	90%	0.02	0.07	5,085	5,085			472.89	96.61	376.28	0.00	376.28	81%	19%	101.30	0.62	\$3.09	\$2.54	\$0.85	\$0.28	5.0	5.0	\$4.50
179	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
180	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	1	APB	3X3278EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
181	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
182	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
183	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	10	8RC	1X26CFL4P	10	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.29	90%	0.19	0.09	3,276	3,276			950.04	622.44	327.60	0.00	327.60	81%	19%	88.20	0.54	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$19.71
184	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	15	B	3X1778EBN	15	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.71	90%	0.38	0.29	3,276	3,276			2,309.58	1,253.07	1,056.51	0.00	1,056.51	81%	19%	284.45	1.73	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$24.20
185	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	17	4S	2X3278EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
186	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X3278EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
187	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X3278EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
188	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	1	B	3X1778EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,793	1,793			84.29	45.73	38.56	0.00	38.56	81%	19%	10.38	0.06	\$0.56	\$0.50	\$0.18	\$0.00	10.0	0.0	\$0.88
189	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	8RC	2X42CFL4P	1</																																		

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
204	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
205	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
206	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
207	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
208	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, Swatt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
209	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
210	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	13	B	3X17T8EBN	13	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.61	90%	0.33	0.25	3,276	3,276			2,001.64	1,085.99	915.64	0.00	915.64	81%	19%	246.52	1.50	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$20.97
211	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	7	B	3X17T8EBN	7	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.33	90%	0.18	0.14	3,276	3,276			1,077.80	584.77	493.04	0.00	493.04	81%	19%	132.74	0.81	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$11.29
212	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
213	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
214	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
215	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,793	1,793			84.29	45.73	38.56	0.00	38.56	81%	19%	10.38	0.06	\$0.56	\$0.50	\$0.18	\$0.00	10.0	0.0	\$0.88
216	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	8RC	2X42CFL4P	1	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.09	90%	0.02	0.07	5,085	5,085			472.89	96.61	376.28	0.00	376.28	81%	19%	101.30	0.62	\$3.09	\$2.54	\$0.85	\$0.28	5.0	5.0	\$4.50
217	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
218	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
219	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
220	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
221	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, Swatt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276		Sensor: No Additional Description.	950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
222	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
223	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	20	B	3X17T8EBN	20	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.94	90%	0.51	0.39	3,276	3,276			3,079.44	1,670.76	1,408.68	0.00	1,408.68	81%	19%	379.26	2.31	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$32.27
224	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
225	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
226	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.18	100%	0.06	0.12	8,760	8,760			1,559.28	551.88	1,007.40	0.00	1,007.40	81%	19%	271.22	1.65	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$8.23
227	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	8,760	8,760			779.64	275.94	503.70	0.00	503.70	81%	19%	135.61	0.83	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$4.12
228	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	8,760	8,760			779.64	275.94	503.70	0.00	503.70	81%	19%	135.61	0.83	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$4.12
229	TRUE	Justice Center Interior	3	HIGHER	CELL	Holding Cells	1	B	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	100%	0.03	100%	0.02	0.02	8,760	8,760			289.08	148.92	140.16	0.00	140.16	81%	19%	37.74	0.23	\$1.83	\$2.45	\$0.58	\$0.00	10.0	0.0	\$3.69
230	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	4	8RC	2X42CFL4P	4	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.37	90%	0.08	0.27	5,085	5,085			1,891.55	386.44	1,505.10	0.00	1,505.10	81%	19%	405.22	2.47	\$3.09	\$2.54	\$0.85	\$0.28	5.0	5.0	\$18.00
231	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2</																																					

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
245	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,562	2,562			922.32	322.81	599.51	0.00	599.51	81%	19%	161.41	0.98	\$0.64	\$1.64	\$0.26	\$0.00	10.0	0.0	\$8.10
246	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	8	APB	2X32T8EBN	8	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.46	90%	0.17	0.27	5,085	5,085			2,359.35	854.25	1,505.10	0.00	1,505.10	81%	19%	405.22	2.47	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$17.08
247	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
248	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
249	TRUE	Justice Center Interior	3	HIGHER	OO	Open Office	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,507.46	527.61	979.85	0.00	979.85	81%	19%	263.81	1.61	\$1.05	\$2.68	\$0.42	\$0.00	10.0	0.0	\$13.23
250	TRUE	Justice Center Interior	3	HIGHER	BR	Break room	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,823	3,823			688.21	240.87	447.34	0.00	447.34	81%	19%	120.44	0.73	\$0.96	\$2.45	\$0.38	\$0.00	10.0	0.0	\$6.04
251	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	6	APB	3X32T8EBN2	6	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.54	90%	0.19	0.32	3,599	3,599			1,943.68	680.29	1,263.39	0.00	1,263.39	81%	19%	340.14	2.07	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$17.06
252	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
253	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,599	3,599			647.89	226.76	421.13	0.00	421.13	81%	19%	113.38	0.69	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$5.69
254	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,599	3,599			647.89	226.76	421.13	0.00	421.13	81%	19%	113.38	0.69	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$5.69
255	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,085	5,085			238.99	129.66	109.32	0.00	109.32	81%	19%	29.43	0.18	\$1.59	\$1.42	\$0.51	\$0.00	10.0	0.0	\$2.50
256	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
257	TRUE	Justice Center Interior	3	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
258	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	1,793	1,793			645.62	225.97	419.66	0.00	419.66	81%	19%	112.98	0.69	\$0.45	\$1.15	\$0.18	\$0.00	10.0	0.0	\$5.67
259	TRUE	Justice Center Interior	3	HIGHER	OO	Open Office	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,507.46	527.61	979.85	0.00	979.85	81%	19%	263.81	1.61	\$1.05	\$2.68	\$0.42	\$0.00	10.0	0.0	\$13.23
260	TRUE	Justice Center Interior	3	HIGHER	BR	Break room	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,823	3,823			688.21	240.87	447.34	0.00	447.34	81%	19%	120.44	0.73	\$0.96	\$2.45	\$0.38	\$0.00	10.0	0.0	\$6.04
261	TRUE	Justice Center Interior	3	HIGHER	PO	Private Office	6	APB	3X32T8EBN2	6	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.54	90%	0.19	0.32	3,599	3,599			1,943.68	680.29	1,263.39	0.00	1,263.39	81%	19%	340.14	2.07	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$17.06
262	TRUE	Justice Center Interior	3	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
263	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	2,520	2,520			453.60	158.76	294.84	0.00	294.84	81%	19%	79.38	0.48	\$0.63	\$1.61	\$0.25	\$0.00	10.0	0.0	\$3.98
264	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	2,520	2,520			453.60	158.76	294.84	0.00	294.84	81%	19%	79.38	0.48	\$0.63	\$1.61	\$0.25	\$0.00	10.0	0.0	\$3.98
265	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
266	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19
267	TRUE	Justice Center Interior	3	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19
268	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
269	TRUE	Justice Center Interior	3	HIGHER	ST	Storage	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,680	1,680			78.96	42.84	36.12	0.00	36.12	81%	19%	9.72	0.06	\$0.53	\$0.47	\$0.17	\$0.00	10.0	0.0	\$0.83
270	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	-0.00	0.00	8,760	8,760			-35.04	35.04	0.00	0.00	0.00	81%	-19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
271	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	8RC	1X26CF14P	1	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit BIN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.03	90%	0.02	0.01																				

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
286	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,562	2,562			456.04	161.41	294.63	0.00	294.63	81%	19%	79.32	0.48	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.41
287	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
288	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
289	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
290	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	20	B	3X17T8EBN	20	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.94	90%	0.51	0.39	3,276	3,276			3,079.44	1,670.76	1,408.68	0.00	1,408.68	81%	19%	379.26	2.31	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$32.27
291	TRUE	Justice Center Interior	3	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
292	TRUE	Justice Center Interior	3	HIGHER	HWAS	Hallway Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	3,559	3,559			1,266.93	448.41	818.52	0.00	818.52	81%	19%	220.37	1.34	\$0.89	\$1.14	\$0.36	\$0.00	10.0	0.0	\$6.69
293	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
294	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
295	TRUE	Justice Center Interior	3	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
296	TRUE	Justice Center Interior	3	HIGHER	CRAS	Conference Room Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	1,793	1,793			638.45	225.97	412.48	0.00	412.48	81%	19%	111.05	0.68	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$3.37
297	TRUE	Justice Center Interior	3	HIGHER	CR	Conference Room	12	APB	3X32T8EBN2	12	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.08	90%	0.38	0.63	2,562	2,562			2,766.96	968.44	1,798.52	0.00	1,798.52	81%	19%	484.22	2.95	\$0.64	\$1.64	\$0.26	\$0.00	10.0	0.0	\$24.29
298	TRUE	Justice Center Interior	3	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
299	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	1	8RC	2X26CFL4P	1	KIT	8RC	1XLEDF-8RC		51	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.05	90%	0.02	0.03	5,085	5,085			259.32	96.61	162.71	0.00	162.71	81%	19%	43.81	0.27	\$3.31	\$2.54	\$0.85	\$0.28	5.0	5.0	\$4.71
300	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
301	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
302	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
303	TRUE	Justice Center Interior	3	HIGHER	HW	Hallway	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	5,085	5,085			915.26	320.34	594.92	0.00	594.92	81%	19%	160.17	0.98	\$1.27	\$3.25	\$0.51	\$0.00	10.0	0.0	\$8.03
304	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	2,520	2,520			453.60	158.76	294.84	0.00	294.84	81%	19%	79.38	0.48	\$0.63	\$1.61	\$0.25	\$0.00	10.0	0.0	\$3.98
305	TRUE	Justice Center Interior	3	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	2,520	2,520			453.60	158.76	294.84	0.00	294.84	81%	19%	79.38	0.48	\$0.63	\$1.61	\$0.25	\$0.00	10.0	0.0	\$3.98
306	TRUE	Justice Center Exterior	2	0	E	Exterior	4	FL	1X175MH	4	IN	FL	1X51LEDF		215	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 51W, with Separate or Integrated Driver Component, 51LEDF	51	1	10%	0.86	10%	0.20	0.07	4,380	4,380			3,766.80	893.52	2,873.28	0.00	2,873.28	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.83	\$0.55	7.0	7.0	\$29.50
307	TRUE	Justice Center Interior	2	HIGHER	LO	Lobby/Entry Vestibule	22	8RC	2X42CFL4P	22	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	2.05	90%	0.42	1.47	4,761	4,761			9,741.82	1,990.27	7,751.56	0.00	7,751.56	81%	19%	2,086.96	12.72	\$2.90	\$2.38	\$0.80	\$0.26	5.0	5.0	\$92.70
308	TRUE	Justice Center Interior	2	HIGHER	LO	Lobby/Entry Vestibule	18	C	2X54T5HOEBHPS	18	RET		2X4FTLEDTYPEB-TSHO		117	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent (2) 45.8" T-5 HO lamps, (1) PRS Electronic Ballast, HLO (95 < BF < 1.1), w/ LED Tube, (2) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	50	2	90%	2.11	90%	0.90	1.09	4,761	4,761			10,027.51	4,285.26	5,742.25	0.00	5,742.25	81%	19%	1,545.99	9.43	\$1.59	\$3.43	\$0.32	\$0.00	10.0	0.0	\$84.56
309	TRUE	Justice Center Interior	2	HIGHER	LO	Lobby/Entry Vestibule	8	TH	1X50MH	8	IN	TH	1XLEDF-TRACK	CMH	64	1	New/ Replacement Fixture - Track Head Fixture, Metal Halide, (1) 50W lamp, Magnetic ballast, w/ Track Head Fixture, 20W LED TRACKHEAD, 20LEDPCM	20	2	90%	0.51	90%	0.16	0.32	4,761	4,761			2,437.84	761.82	1,676.01	0.00	1,676.01	81%	19%	451.23	2.75	\$8.09	\$3.81	\$0.44	\$0.29	5.0	5.0	\$89.33
310	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	108	WM-DEC	1X54T5HOEBHPS	108	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	6.91	90%	2.70	3.79	5,085	5,085			35,146.14	13,728.96	21,417.18	0.00	21,417.18	81%	19%	5,766.16	35.15	\$0.85	\$3.66	\$0.17	\$0.00	10.0	0.0	\$468.62
311	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	4	WM-DEC	1X54T5HOEBHPS	4	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	0.26	90%	0.10	0.14	5,085	5,085			1,301.71	508.48	793.23	0.00	793.23	81%	19%	213.56	1.30	\$0.85	\$3.66	\$0.17	\$0.00	10.0	0.0	\$17.36
312	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	5	EXIT	1X4LEDEXIT	5	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.02	100%	0.02	0.00	8,760	8,760			175.20	175.20	0.00	0.00	0.00											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
328	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	13	B	3X17T8EBN	13	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.61	90%	0.33	0.25	3,276	3,276			2,001.64	1,085.99	915.64	0.00	915.64	81%	19%	246.52	1.50	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$20.97
329	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
330	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
331	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
332	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,793	1,793			84.29	45.73	38.56	0.00	38.56	81%	19%	10.38	0.06	\$0.56	\$0.50	\$0.18	\$0.00	10.0	0.0	\$0.88
333	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	0.0	0.0	\$0.00	
334	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	8RC	1X26CFL4P	1	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.03	90%	0.02	0.01	5,085	5,085			147.46	96.61	50.85	0.00	50.85	81%	19%	13.69	0.08	\$1.65	\$2.54	\$0.85	\$0.28	5.0	5.0	\$3.06
335	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
336	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
337	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
338	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
339	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
340	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	6	B	3X17T8EBN	6	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.28	90%	0.15	0.12	3,276	3,276			923.83	501.23	422.60	0.00	422.60	81%	19%	113.78	0.69	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$9.68
341	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	14	B	3X17T8EBN	14	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.66	90%	0.36	0.27	3,276	3,276			2,155.61	1,169.53	986.08	0.00	986.08	81%	19%	265.48	1.62	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$22.59
342	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
343	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	4	8RC	2X26CFL4P	4	KIT	8RC	1XLEDF-8RC		51	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.20	90%	0.08	0.12	5,085	5,085			1,037.30	386.44	650.85	0.00	650.85	81%	19%	175.23	1.07	\$3.31	\$2.54	\$0.85	\$0.28	5.0	5.0	\$18.85
344	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
345	TRUE	Justice Center Interior	2	HIGHER	SW	Stairwell	4	4W	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.23	100%	0.08	0.15	8,760	8,760			2,032.32	735.84	1,296.48	0.00	1,296.48	81%	19%	349.05	2.13	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$14.72
346	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
347	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.05	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
348	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
349	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
350	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
351	TRUE	Justice Center Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
352	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,085	5,085			238.99	129.66	109.32	0.00	109.32	81%	19%	29.43	0.18	\$1.59	\$1.42	\$0.51	\$0.00	10.0	0.0	\$2.50
353	TRUE	Justice Center Interior	2	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
354	TRUE	Justice Center Interior	2	HIGHER	RR	Restroom	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,306	5,306			249.38	135.30	114.08	0.00	114.08	81%	19%	30.71	0.19	\$1.66	\$1.49	\$0.53	\$0.00	10.0	0.0	\$2.61
355	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
369	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,599	3,599			647.89	226.76	421.13	0.00	421.13	81%	19%	113.38	0.69	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$5.69
370	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,599	3,599			647.89	226.76	421.13	0.00	421.13	81%	19%	113.38	0.69	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$5.69
371	TRUE	Justice Center Interior	2	HIGHER	OO	Open Office	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,507.46	527.61	979.85	0.00	979.85	81%	19%	263.81	1.61	\$1.05	\$2.68	\$0.42	\$0.00	10.0	0.0	\$13.23
372	TRUE	Justice Center Interior	2	HIGHER	BR	Break room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,823	3,823			680.57	240.87	439.69	0.00	439.69	81%	19%	118.38	0.72	\$0.96	\$1.22	\$0.38	\$0.00	10.0	0.0	\$3.59
373	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	3,599	3,599			1,922.08	680.29	1,241.79	0.00	1,241.79	81%	19%	334.33	2.04	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$10.15
374	TRUE	Justice Center Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
375	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
376	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
377	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	4	APB	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	5,085	5,085			1,179.67	427.12	752.55	0.00	752.55	81%	19%	202.61	1.24	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$8.54
378	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
379	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	3	EXIT	1X4LEEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
380	TRUE	Justice Center Interior	2	HIGHER	ST	Storage	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,680	1,680			149.52	52.92	96.60	0.00	96.60	81%	19%	26.01	0.16	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$0.79
381	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
382	TRUE	Justice Center Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
383	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	5,085	5,085			238.99	129.66	109.32	0.00	109.32	81%	19%	29.43	0.18	\$1.59	\$1.42	\$0.51	\$0.00	10.0	0.0	\$2.50
384	TRUE	Justice Center Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
385	TRUE	Justice Center Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
386	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	1,793	1,793			645.62	225.97	419.66	0.00	419.66	81%	19%	112.98	0.69	\$0.45	\$1.15	\$0.18	\$0.00	10.0	0.0	\$5.67
387	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	23	APB	2X32T8EBN	23	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	1.33	90%	0.48	0.77	5,085	5,085			6,783.12	2,455.96	4,327.16	0.00	4,327.16	81%	19%	1,165.01	7.10	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$49.12
388	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	4	EXIT	1X4LEEXIT	4	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.02	100%	0.02	0.00	8,760	8,760			140.16	140.16	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
389	TRUE	Justice Center Interior	2	HIGHER	OO	Open Office	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,507.46	527.61	979.85	0.00	979.85	81%	19%	263.81	1.61	\$1.05	\$2.68	\$0.42	\$0.00	10.0	0.0	\$13.23
390	TRUE	Justice Center Interior	2	HIGHER	BR	Break room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,823	3,823			680.57	240.87	439.69	0.00	439.69	81%	19%	118.38	0.72	\$0.96	\$1.22	\$0.38	\$0.00	10.0	0.0	\$3.59
391	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	3,599	3,599			1,922.08	680.29	1,241.79	0.00	1,241.79	81%	19%	334.33	2.04	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$10.15
392	TRUE	Justice Center Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
393	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
394	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
395	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.																					

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
409	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,520	2,520			897.12	317.52	579.60	0.00	579.60	81%	19%	156.05	0.95	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$4.74
410	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
411	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
412	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
413	TRUE	Justice Center Interior	2	HIGHER	OOAS	Open Office Already Sensored	4	APB	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,932	2,932			1,055.38	369.38	685.99	0.00	685.99	81%	19%	184.69	1.13	\$0.73	\$1.88	\$0.29	\$0.00	10.0	0.0	\$9.26
414	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	3,599	3,599			961.04	340.14	620.90	0.00	620.90	81%	19%	167.16	1.02	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$5.08
415	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	6	APB	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	5,085	5,085			1,769.51	640.68	1,128.83	0.00	1,128.83	81%	19%	303.91	1.85	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$12.81
416	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
417	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	5	EXIT	1X4LEDEXIT	5	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.02	100%	0.02	0.00	8,760	8,760			175.20	175.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
418	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
419	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
420	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
421	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
422	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
423	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
424	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
425	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
426	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,520	2,520			897.12	317.52	579.60	0.00	579.60	81%	19%	156.05	0.95	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$4.74
427	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
428	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
429	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	3	APB	3X32T8EBN2	3	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	5,085	5,085			1,372.90	480.51	892.38	0.00	892.38	81%	19%	240.26	1.46	\$1.27	\$3.25	\$0.51	\$0.00	10.0	0.0	\$12.05
430	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
431	TRUE	Justice Center Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
432	TRUE	Justice Center Interior	2	HIGHER	OO	Open Office	15	APB	3X32T8EBN	15	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.34	90%	0.47	0.78	4,187	4,187			5,590.18	1,978.55	3,611.63	0.00	3,611.63	81%	19%	972.36	5.93	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$29.52
433	TRUE	Justice Center Interior	2	HIGHER	OO	Open Office	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	4,187	4,187			196.81	106.78	90.03	0.00	90.03	81%	19%	24.24	0.15	\$1.31	\$1.17	\$0.42	\$0.00	10.0	0.0	\$2.06
434	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
435	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.1																							

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
449	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
450	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
451	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
452	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
453	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
454	TRUE	Justice Center Interior	2	HIGHER	ST	Storage	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,680	1,680			149.52	52.92	96.60	0.00	96.60	81%	19%	26.01	0.16	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$0.79
455	TRUE	Justice Center Interior	2	HIGHER	CR	Conference Room	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,562	2,562			684.05	242.11	441.95	0.00	441.95	81%	19%	118.99	0.73	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$3.61
456	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
457	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,176	1,176			104.66	37.04	67.62	0.00	67.62	81%	19%	18.21	0.11	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.55
458	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19
459	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
460	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
461	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19
462	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
463	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
464	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
465	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	1	APB	3X32T8EBN2	1	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,599	3,599			323.95	113.38	210.56	0.00	210.56	81%	19%	56.69	0.35	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$2.84
466	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
467	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19
468	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.05	50%	0.03	0.01	392	392			18.42	10.00	8.43	0.00	8.43	81%	19%	2.27	0.01	\$0.12	\$0.11	\$0.04	\$0.00	10.0	0.0	\$0.19
469	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
470	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
471	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	8RC	1X26CFL4P	1	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit BIN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LED-8RC	19	2	90%	0.03	90%	0.02	0.01	5,085	5,085			147.46	96.61	50.85	0.00	50.85	81%	19%	13.69	0.08	\$1.65	\$2.54	\$0.85	\$0.28	5.0	5.0	\$3.06
472	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,599	3,599			320.35	113.38	206.97	0.00	206.97	81%	19%	55.72	0.34	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$1.69
473	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
474	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
475	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
476	TRUE																																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
490	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	7	B	3X17T8EBN	7	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.18	0.14	3,276	3,276			1,077.80	584.77	493.04	0.00	493.04	81%	19%	132.74	0.81	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$11.29	
491	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	13	B	3X17T8EBN	13	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.33	0.25	3,276	3,276			2,001.64	1,085.99	915.64	0.00	915.64	81%	19%	246.52	1.50	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$20.97	
492	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39	
493	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00	
494	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	8RC	1X26CFL4P	1	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit B1N. SET WATTAGE TO 19W. HIGH SETTING, 1X19LED-8RC	19	2	90%	90%	0.02	0.01	5,085	5,085			147.46	96.61	50.85	0.00	50.85	81%	19%	13.69	0.08	\$1.65	\$2.54	\$0.85	\$0.28	5.0	5.0	\$3.06	
495	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18	
496	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00	
497	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10	
498	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	14	8RC	1X26CFL4P	14	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit B1N. SET WATTAGE TO 19W. HIGH SETTING, 1X19LED-8RC	19	2	90%	90%	0.41	0.27	0.13	3,276	3,276			1,330.06	871.42	458.64	0.00	458.64	81%	19%	123.48	0.75	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$27.59
499	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	6	B	3X17T8EBN	6	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.28	0.15	0.12	3,276	3,276			923.83	501.23	422.60	0.00	422.60	81%	19%	113.78	0.69	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$9.68
500	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	9	B	3X17T8EBN	9	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.42	0.23	0.17	3,276	3,276			1,385.75	751.84	633.91	0.00	633.91	81%	19%	170.67	1.04	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$14.52
501	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39	
502	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33	
503	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33	
504	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.05	0.02	1,793	1,793			84.29	45.73	38.56	0.00	38.56	81%	19%	10.38	0.06	\$0.56	\$0.50	\$0.18	\$0.00	10.0	0.0	\$0.88	
505	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00	
506	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	8RC	1X26CFL4P	1	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit B1N. SET WATTAGE TO 19W. HIGH SETTING, 1X19LED-8RC	19	2	90%	90%	0.02	0.01	5,085	5,085			147.46	96.61	50.85	0.00	50.85	81%	19%	13.69	0.08	\$1.65	\$2.54	\$0.85	\$0.28	5.0	5.0	\$3.06	
507	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.09	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18	
508	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00	
509	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10	
510	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit B1N. SET WATTAGE TO 19W. HIGH SETTING, 1X19LED-8RC	19	2	90%	90%	0.38	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
511	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	6	B	3X17T8EBN	6	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.15	0.12	3,276	3,276			923.83	501.23	422.60	0.00	422.60	81%	19%	113.78	0.69	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$9.68	
512	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	9	B	3X17T8EBN	9	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	90%	0.42	0.23	0.17	3,276	3,276			1,385.75	751.84	633.91	0.00	633.91	81%	19%	170.67	1.04	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$14.52
513	TRUE	Justice Center Interior	2	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39	
514	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.09	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39	
515	TRUE	Justice Center Interior	2	HIGHER	ST	Storage	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.09	0.03	0.05	1,680	1,680			149.52	52.92	96.60	0.00	96.60	81%	19%	26.01	0.16	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$0.79
516	TRUE	Justice Center Interior	2	HIGHER	OOAS	Open Office Already Sensored	6	APB	3X32T8EBN2	6	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	90%	0.54	0.19	0.32	2,932	2,932			1,583.06	554.07	1,028.99	0.00	1,028.99	81%	19%	277.04	1.69	\$0.73	\$1.88	\$0.29	\$0.00	10.0	0.0	\$13.90
517	TRUE	Justice Center Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	50%	0.																						

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	EOM Definition	Proposed System Wattage	Proposed Source Quality	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
531	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
532	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,520	2,520			672.84	238.14	434.70	0.00	434.70	81%	19%	117.03	0.71	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$3.55
533	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
534	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
535	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
536	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
537	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
538	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
539	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
540	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
541	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
542	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
543	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
544	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
545	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
546	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
547	TRUE	Justice Center Interior	2	HIGHER	OO	Open Office	6	APB	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	4,187	4,187			1,457.22	527.61	929.60	0.00	929.60	81%	19%	250.28	1.53	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$10.55
548	TRUE	Justice Center Interior	2	HIGHER	ST	Storage	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,680	1,680			194.88	70.56	124.32	0.00	124.32	81%	19%	33.47	0.20	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$1.41
549	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
550	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
551	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
552	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
553	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
554	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
555	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
556	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
557	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube,																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
570	TRUE	Justice Center Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
571	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	4	APB	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	5,085	5,085			1,179.67	427.12	752.55	0.00	752.55	81%	19%	202.61	1.24	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$8.54
572	TRUE	Justice Center Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
573	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
574	TRUE	Justice Center Interior	2	HIGHER	OOAS	Open Office Already Sensored	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	2,932	2,932			1,565.47	554.07	1,011.40	0.00	1,011.40	81%	19%	272.30	1.66	\$0.73	\$0.94	\$0.29	\$0.00	10.0	0.0	\$8.27
575	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	1,793	1,793			957.68	338.95	618.72	0.00	618.72	81%	19%	166.58	1.02	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$5.06
576	TRUE	Justice Center Interior	2	HIGHER	LIAS	Library Already Sensored	34	APB	3X32T8EBN	34	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	3.03	90%	1.07	1.76	4,725	4,725			14,297.85	5,060.48	9,237.38	0.00	9,237.38	81%	19%	2,486.99	15.16	\$1.18	\$1.51	\$0.47	\$0.00	10.0	0.0	\$75.51
577	TRUE	Justice Center Interior	2	HIGHER	LI	Library	5	BRC	2X42CFL4P	5	KIT	8RC	1XLEDF-8RC		93	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 42W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.47	90%	0.10	0.33	6,749	6,749			3,138.47	641.19	2,497.28	0.00	2,497.28	81%	19%	672.34	4.10	\$4.11	\$3.37	\$1.13	\$0.37	5.0	5.0	\$29.86
578	TRUE	Justice Center Interior	2	HIGHER	LI	Library	3	B	3X40CFLBX	3	RET		3X17LEDPL-BYP		133	1	Retrofit - 2x2 Layin Prismatic Fixture, Compact Fluorescent, long twin, (3) 40 W lamps, w/ (3) LED plug-in lamps PL4-pin, 17W, Direct wire, 27LEDPL-BYP	51	2	90%	0.40	90%	0.15	0.22	6,749	6,749			2,693.01	1,032.66	1,660.35	0.00	1,660.35	81%	19%	447.02	2.73	\$24.30	\$6.75	\$2.43	\$0.00	5.0	0.0	\$85.85
579	TRUE	Justice Center Interior	2	HIGHER	LI	Library	3	B	3X17T8EBN	3	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.14	90%	0.08	0.06	6,749	6,749			951.67	516.33	435.34	0.00	435.34	81%	19%	117.21	0.71	\$2.11	\$1.89	\$0.67	\$0.00	10.0	0.0	\$9.97
580	TRUE	Justice Center Interior	2	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
581	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
582	TRUE	Justice Center Interior	2	HIGHER	OOAS	Open Office Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,932	2,932			1,043.65	369.38	674.27	0.00	674.27	81%	19%	181.53	1.11	\$0.73	\$0.94	\$0.29	\$0.00	10.0	0.0	\$5.51
583	TRUE	Justice Center Interior	2	HIGHER	CRAS-DIM	Conference Room Already Sensored Dimmer added no hour reduction	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEC	FCJS	89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 15W LED Tube, Type C with External Driver, 4FTLEDTYPECFJS	45	2	90%	0.18	90%	0.09	0.08	1,793	1,793	LED WIRELESS DIMMER	Sensor: No Additional Description.	319.23	161.41	157.82	0.00	157.82	81%	19%	42.49	0.26	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
584	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,793	1,793			159.61	56.49	103.12	0.00	103.12	81%	19%	27.76	0.17	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$0.84
585	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,793	1,793			159.61	56.49	103.12	0.00	103.12	81%	19%	27.76	0.17	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$0.84
586	TRUE	Justice Center Interior	2	HIGHER	CRAS	Conference Room Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,793	1,793			159.61	56.49	103.12	0.00	103.12	81%	19%	27.76	0.17	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$0.84
587	TRUE	Justice Center Interior	2	HIGHER	OSAS	Office Support (copy room, coffee room, etc) Already Sensored	3	APB	3X32T8EBN2	3	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,999	1,999			539.78	188.92	350.86	0.00	350.86	81%	19%	94.46	0.58	\$0.50	\$1.28	\$0.20	\$0.00	10.0	0.0	\$4.74
588	TRUE	Justice Center Interior	2	HIGHER	PO	Private Office	2	APB	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,599	3,599			647.89	226.76	421.13	0.00	421.13	81%	19%	113.38	0.69	\$0.90	\$2.30	\$0.36	\$0.00	10.0	0.0	\$5.69
589	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
590	TRUE	Justice Center Interior	2	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
591	TRUE	Justice Center Interior	1	HIGHER	LO	Lobby/Entry Vestibule	28	B	3X17T8EBN	28	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	1.32	90%	0.71	0.54	4,761	4,761			6,266.00	3,399.64	2,866.36	0.00	2,866.36	81%	19%	771.71	4.70	\$1.49	\$1.33	\$0.48	\$0.00	10.0	0.0	\$65.66
592	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	5	EXIT	1X4LEDEXIT	5	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.02	100%	0.02	0.00	8,760	8,760			175.20	175.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
593	TRUE	Justice Center Interior	1	HIGHER	LO	Lobby/Entry Vestibule	28	BRC	2X32CFL4P	28	KIT	8RC	1XLEDF-8RC		70	2	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 32W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	1.96	90%	0.53	1.29	4,761	4,761			9,332.34	2,533.06	6,799.28	0.00	6,799.28	81%	19%	1,830.58	11.16	\$3.57	\$2.38	\$0.80	\$0.26	5.0	5.0	\$136.87
594	TRUE	Justice Center Interior	1	HIGHER	LO	Lobby/Entry Vestibule	18	C	2X54TSHOEBHPS	18	RET		2X4FTLEDTYPEB-TSHO		117	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent (2) 45.8" T-5 HO lamps, (1) PRS Electronic Ballast, HLO (95 < BF < 1.1), w/ LED Tube, (2) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	50	2	90%	2.11	90%	0.90	1.09	4,761	4,761			10,027.51	4,285.26	5,742.25	0.00	5,742.25	81%	19%	1,545.99	9.43	\$1.59	\$3.43	\$0.32	\$0.00	10.0	0.0	\$84.56
595	TRUE	Justice Center Interior	1	HIGHER	LO	Lobby/Entry Vestibule	8	TH	1X50MH	8	IN	TH	1XLEDF-TRACK	CMH	64	1	New Replacement Fixture - Track Head Fixture, Metal Halide, (1) 50W lamp, Magnetic ballast, w/ Track Head Fixture, 20W LED TRACKHEAD, 20LEDPCMH	20	2	90%	0.51	90%	0.16	0.32	4,761	4,761			2,437.84	761.82	1,676.01	0.00	1,676.01	81%	19%	451.23	2.75	\$8.09	\$3.81	\$0.44	\$0.29	5.0	5.0	\$89.33
596	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	108	WM-DEC	1X54TSHOEBHPS	108	RET		1X4FTLEDTYPEB-TSHO		64	1	Retrofit - Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, HLO (95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	6.91	90%	2.70	3.79	5,085	5,085																		

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
611	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
612	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, Swatt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
613	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
614	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	7	B	3X17T8EBN	7	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.33	90%	0.18	0.14	3,276	3,276			1,077.80	584.77	493.04	0.00	493.04	81%	19%	132.74	0.81	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$11.29
615	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	13	B	3X17T8EBN	13	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.61	90%	0.33	0.25	3,276	3,276			2,001.64	1,085.99	915.64	0.00	915.64	81%	19%	246.52	1.50	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$20.97
616	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
617	TRUE	Justice Center Interior	1	HIGHER	CELL	Holding Cells	5	A	1X30LEDF	5	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	100%	0.15	100%	0.15	0.00	8,760	8,760			1,314.00	1,314.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.84	\$1.21	\$0.00	\$0.00	0.0	0.0	\$0.00
618	TRUE	Justice Center Interior	1	HIGHER	CELL	Holding Cells	1	B	1X20LEDF	1	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.02	100%	0.02	0.00	8,760	8,760			175.20	175.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.23	\$0.81	\$0.00	\$0.00	0.0	0.0	\$0.00
619	TRUE	Justice Center Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
620	TRUE	Justice Center Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
621	TRUE	Justice Center Interior	1	HIGHER	CRAS	Conference Room Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,793	1,793			84.29	45.73	38.56	0.00	38.56	81%	19%	10.38	0.06	\$0.56	\$0.50	\$0.18	\$0.00	10.0	0.0	\$0.88
622	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	18	A	1X30LEDF	18	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.54	90%	0.54	0.00	3,276	3,276			1,769.04	1,769.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.69	\$0.45	\$0.00	\$0.00	0.0	0.0	\$0.00
623	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
624	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
625	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
626	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
627	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	10	APB	2X32T8EBN	10	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.58	90%	0.21	0.33	5,085	5,085			2,949.18	1,067.81	1,881.38	0.00	1,881.38	81%	19%	506.52	3.09	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$21.36
628	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
629	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
630	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
631	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	4	4S	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	1,176	1,176			272.83	98.78	174.05	0.00	174.05	81%	19%	46.86	0.29	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$1.98
632	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,490.71	527.61	963.10	0.00	963.10	81%	19%	259.30	1.58	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$7.87
633	TRUE	Justice Center Interior	1	HIGHER	BRAS	Break Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,677	2,677			476.47	168.64	307.83	0.00	307.83	81%	19%	82.88	0.51	\$0.67	\$0.86	\$0.27	\$0.00	10.0	0.0	\$2.52
634	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	2,520	2,520			1,345.68	476.28	869.40	0.00	869.40	81%	19%	234.07	1.43	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$7.11
635	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X40CFLBX	1	RET		3X17LEDPL-BYP		133	1	Retrofit - 2x2 Layin Prismatic Fixture, Compact Fluorescent, long twin, (3) 40 W lamps, w/ (3) LED plug in Lamp PLL 4-pin, 17W, Direct wire, 17LEDPLL-BYP	51	2	90%	0.13	90%	0.05	0.07	3,714	3,714			493.99	189.42	304.56	0.00	304.56	81%	19%	82.00	0.50	\$13.37	\$3.71	\$1.34	\$0.00	5.0	0.0	\$15.75
636	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
637	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
638	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	BPB	3X40CFLBX	1	RET		3X17LEDPL-BYP		133																													

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
654	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
655	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
656	TRUE	Justice Center Interior	1	HIGHER	CRAS	Conference Room Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	1,793	1,793			638.45	225.97	412.48	0.00	412.48	81%	19%	111.05	0.68	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$3.37
657	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	12	APB	2X32T8EBN	12	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.70	90%	0.25	0.40	5,085	5,085			3,539.02	1,281.37	2,257.65	0.00	2,257.65	81%	19%	607.83	3.71	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$25.63
658	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
659	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	A	1X30LEDF	1	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.03	90%	0.03	0.00	5,085	5,085			152.54	152.54	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.07	\$0.70	\$0.00	\$0.00	0.0	0.0	\$0.00
660	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	3	EXIT	1X4LEEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
661	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,490.71	527.61	963.10	0.00	963.10	81%	19%	259.30	1.58	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$7.87
662	TRUE	Justice Center Interior	1	HIGHER	BRAS	Break Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,677	2,677			476.47	168.64	307.83	0.00	307.83	81%	19%	82.88	0.51	\$0.67	\$0.86	\$0.27	\$0.00	10.0	0.0	\$2.52
663	TRUE	Justice Center Interior	1	HIGHER	PO	Private Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	3,599	3,599			1,922.08	680.29	1,241.79	0.00	1,241.79	81%	19%	334.33	2.04	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$10.15
664	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X40CFLBK	1	RET		3X17LEDPLL-BYP		133	1	Retrofit - 2x2 Layin Prismatic Fixture, Compact Fluorescent, long twin, (3) 40 W lamps, w/ (3) LED plug in lamp PLL 4-pin, 17W, Direct wire, 17LEDPLL-BYP	51	2	90%	0.13	90%	0.05	0.07	3,714	3,714			493.99	189.42	304.56	0.00	304.56	81%	19%	82.00	0.50	\$13.37	\$3.71	\$1.34	\$0.00	5.0	0.0	\$15.75
665	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
666	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
667	TRUE	Justice Center Interior	1	HIGHER	PO	Private Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
668	TRUE	Justice Center Interior	1	HIGHER	PO	Private Office	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	3,599	3,599			1,281.39	453.52	827.86	0.00	827.86	81%	19%	222.89	1.36	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$6.77
669	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
670	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
671	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
672	TRUE	Justice Center Interior	1	HIGHER	CRAS	Conference Room Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	1,793	1,793			638.45	225.97	412.48	0.00	412.48	81%	19%	111.05	0.68	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$3.37
673	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	4,187	4,187			1,490.71	527.61	963.10	0.00	963.10	81%	19%	259.30	1.58	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$7.87
674	TRUE	Justice Center Interior	1	HIGHER	BR	Break room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,823	3,823			680.57	240.87	439.69	0.00	439.69	81%	19%	118.38	0.72	\$0.96	\$1.22	\$0.38	\$0.00	10.0	0.0	\$3.59
675	TRUE	Justice Center Interior	1	HIGHER	PO	Private Office	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	3,599	3,599			1,922.08	680.29	1,241.79	0.00	1,241.79	81%	19%	334.33	2.04	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$10.15
676	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X40CFLBK	1	RET		3X17LEDPLL-BYP		133	1	Retrofit - 2x2 Layin Prismatic Fixture, Compact Fluorescent, long twin, (3) 40 W lamps, w/ (3) LED plug in lamp PLL 4-pin, 17W, Direct wire, 17LEDPLL-BYP	51	2	90%	0.13	90%	0.05	0.07	3,714	3,714			493.99	189.42	304.56	0.00	304.56	81%	19%	82.00	0.50	\$13.37	\$3.71	\$1.34	\$0.00	5.0	0.0	\$15.75
677	TRUE	Justice Center Interior	1	HIGHER	PO	Private Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
678	TRUE	Justice Center Interior	1	HIGHER	PO	Private Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
679	TRUE	Justice Center Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	13	4S	2X32T8EBN	13	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.75	50%	0.27	0.24	392	392			295.57	107.02	188.55	0.00	188.55	81%	19%	50.76	0.31	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$2.14
680	TRUE	Justice Center Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	560	560			64.96	23.52</														

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
695	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	8RC	1X26CFL4P	1	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit BIN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.03	90%	0.02	0.01	5,085	5,085			147.46	96.61	50.85	0.00	50.85	81%	19%	13.69	0.08	\$1.65	\$2.54	\$0.85	\$0.28	5.0	5.0	\$3.06
696	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
697	TRUE	Justice Center Interior	1	HIGHER	CR	Conference Room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,562	2,562			456.04	161.41	294.63	0.00	294.63	81%	19%	79.32	0.48	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.41
698	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
699	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
700	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit BIN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
701	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	7	B	3X17T8EBN	7	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.33	90%	0.18	0.14	3,276	3,276			1,077.80	584.77	493.04	0.00	493.04	81%	19%	132.74	0.81	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$11.29
702	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	13	B	3X17T8EBN	13	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.61	90%	0.33	0.25	3,276	3,276			2,001.64	1,085.99	915.64	0.00	915.64	81%	19%	246.52	1.50	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$20.97
703	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	17	4S	2X32T8EBN	17	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.99	90%	0.36	0.57	3,276	3,276			3,230.14	1,169.53	2,060.60	0.00	2,060.60	81%	19%	554.78	3.38	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$23.39
704	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
705	TRUE	Justice Center Interior	1	HIGHER	CELL	Holding Cells	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.18	100%	0.06	0.12	8,760	8,760			1,559.28	551.88	1,007.40	0.00	1,007.40	81%	19%	271.22	1.65	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$8.23
706	TRUE	Justice Center Interior	1	HIGHER	CELL	Holding Cells	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	8,760	8,760			779.64	275.94	503.70	0.00	503.70	81%	19%	135.61	0.83	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$4.12
707	TRUE	Justice Center Interior	1	HIGHER	CELL	Holding Cells	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	8,760	8,760			779.64	275.94	503.70	0.00	503.70	81%	19%	135.61	0.83	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$4.12
708	TRUE	Justice Center Interior	1	HIGHER	CELL	Holding Cells	1	B	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	100%	0.03	100%	0.02	0.02	8,760	8,760			289.08	148.92	140.16	0.00	140.16	81%	19%	37.74	0.23	\$1.83	\$2.45	\$0.58	\$0.00	10.0	0.0	\$3.69
709	TRUE	Justice Center Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
710	TRUE	Justice Center Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
711	TRUE	Justice Center Interior	1	HIGHER	CRAS	Conference Room Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,793	1,793			84.29	45.73	38.56	0.00	38.56	81%	19%	10.38	0.06	\$0.56	\$0.50	\$0.18	\$0.00	10.0	0.0	\$0.88
712	TRUE	Justice Center Interior	1	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
713	TRUE	Justice Center Interior	1	HIGHER	ST	Storage	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,680	1,680			149.52	52.92	96.60	0.00	96.60	81%	19%	26.01	0.16	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$0.79
714	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
715	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	1	8RC	2X26CFL4P	1	KIT	8RC	1XLEDF-8RC		51	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit BIN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.05	90%	0.02	0.03	5,085	5,085			259.32	96.61	162.71	0.00	162.71	81%	19%	43.81	0.27	\$3.31	\$2.54	\$0.85	\$0.28	5.0	5.0	\$4.71
716	TRUE	Justice Center Interior	1	HIGHER	CRAS	Conference Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,793	1,793			319.23	112.98	206.24	0.00	206.24	81%	19%	55.53	0.34	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$1.69
717	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
718	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, 9watt LED pin based	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
719	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit BIN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
720	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	7	B	3X17T8EBN	7	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.33	90%	0.18	0.14	3,276	3,276			1,077.80	584.77	493.04	0.00	493.04	81%	19%	132.74	0.81	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$11.29
721	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	13	B	3X17T8EBN	13	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.61	90%	0.33	0.25	3,276	3,276			2,001.64	1,085.99	915.64	0.00	915.64	81%	19%	246.52	1.50	\$1.02	\$0.92	\$0.33	\$0.00	10.0	0.0	\$20.97
7																																												

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
737	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
738	TRUE	Justice Center Interior	1	HIGHER	LO	Lobby/Entry Vestibule	4	A	1X20LEDf	4	NR				20	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.08	90%	0.08	0.00	4,761	4,761			380.91	380.91	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.67	\$0.44	\$0.00	\$0.00	0.0	0.0	\$0.00
739	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,176	1,176			68.21	24.70	43.51	0.00	43.51	81%	19%	11.71	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.49
740	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	77	APB	3X32T8EBN	77	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	6.85	90%	2.43	3.98	4,187	4,187			28,696.25	10,156.54	18,539.71	0.00	18,539.71	81%	19%	4,991.46	30.43	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$151.54
741	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	4,187	4,187			196.81	106.78	90.03	0.00	90.03	81%	19%	24.24	0.15	\$1.31	\$1.17	\$0.42	\$0.00	10.0	0.0	\$2.06
742	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	5	EXIT	1X4LEDEXIT	5	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.02	100%	0.02	0.00	8,760	8,760			175.20	175.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
743	TRUE	Justice Center Interior	1	HIGHER	BRAS	Break Room Already Sensored	5	APB	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	2,677	2,677			776.27	281.06	495.21	0.00	495.21	81%	19%	133.33	0.81	\$0.45	\$0.86	\$0.18	\$0.00	10.0	0.0	\$5.62
744	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
745	TRUE	Justice Center Interior	1	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
746	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
747	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
748	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
749	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
750	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
751	TRUE	Justice Center Interior	1	HIGHER	BRAS	Break Room Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,677	2,677			476.47	168.64	307.83	0.00	307.83	81%	19%	82.88	0.51	\$0.67	\$0.86	\$0.27	\$0.00	10.0	0.0	\$2.52
752	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
753	TRUE	Justice Center Interior	1	HIGHER	POAS	Private Office Already Sensored	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,520	2,520			672.84	238.14	434.70	0.00	434.70	81%	19%	117.03	0.71	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$3.55
754	TRUE	Justice Center Interior	1	HIGHER	CRAS	Conference Room Already Sensored	7	APB	3X32T8EBN	7	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.62	90%	0.22	0.36	1,793	1,793			1,117.29	395.44	721.84	0.00	721.84	81%	19%	194.34	1.18	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$5.90
755	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
756	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,176	1,176			313.99	111.13	202.86	0.00	202.86	81%	19%	54.62	0.33	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.66
757	TRUE	Justice Center Interior	1	HIGHER	ST	Storage	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,680	1,680			299.04	105.84	193.20	0.00	193.20	81%	19%	52.02	0.32	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$1.58
758	TRUE	Justice Center Interior	1	HIGHER	SW	Stairwell	6	4W	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.35	100%	0.13	0.22	8,760	8,760			3,048.48	1,103.76	1,944.72	0.00	1,944.72	81%	19%	523.58	3.19	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$22.08
759	TRUE	Justice Center Interior	1	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
760	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	18	APB	3X32T8EBN	18	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.60	90%	0.57	0.93	1,176	1,176			1,883.95	666.79	1,217.16	0.00	1,217.16	81%	19%	327.70	2.00	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$9.95
761	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
762	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,176	1,176			104.66	37.04	67.62	0.00	67.62	81%	19%	18.21	0.11	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.55
763	TRUE	Justice Center Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46														

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
778	TRUE	Justice Center Interior	1	HIGHER	RR	Restroom	5	C	1X54TSHOEBHPS	5	RET		1XAFTLEDTYPEB-TSHO		64	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, NLO (95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	0.32	90%	0.13	0.18	5,306	5,306			1,697.92	663.25	1,034.67	0.00	1,034.67	81%	19%	278.57	1.70	\$0.88	\$3.82	\$0.18	\$0.00	10.0	0.0	\$22.64
779	TRUE	Justice Center Interior	1	HIGHER	RR	Restroom	4	6RC	1X26CFL4P	4	KIT	6RC	1XLEDF-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.12	90%	0.06	0.05	5,306	5,306			615.50	318.36	297.14	0.00	297.14	81%	19%	80.00	0.49	\$1.72	\$2.65	\$0.74	\$0.24	5.0	5.0	\$13.56
780	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	6	APB	3X32T8EBN	6	RET		3XAFTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3XAFTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	4,187	4,187			2,236.07	791.42	1,444.65	0.00	1,444.65	81%	19%	388.95	2.37	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$11.81
781	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	1	APB	3X32T8EBN	1	RET		3XAFTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3XAFTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	4,187	4,187			372.68	131.90	240.78	0.00	240.78	81%	19%	64.82	0.40	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$1.97
782	TRUE	Justice Center Interior	1	HIGHER	OO	Open Office	8	6RC	1X26CFL4P	8	KIT	6RC	1XLEDF-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.23	90%	0.12	0.10	4,187	4,187			971.48	502.49	468.99	0.00	468.99	81%	19%	126.27	0.77	\$1.36	\$2.09	\$0.59	\$0.19	5.0	5.0	\$21.40
783	TRUE	Justice Center Interior	1	HIGHER	ST	Storage	8	APB	3X32T8EBN	8	RET		3XAFTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3XAFTLEDTYPE HYBRID	31.5	2	90%	0.71	90%	0.25	0.41	1,680	1,680			1,196.16	423.36	772.80	0.00	772.80	81%	19%	208.06	1.27	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$6.32
784	TRUE	Justice Center Interior	1	HIGHER	ST	Storage	6	APB	3X32T8EBN	6	RET		3XAFTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3XAFTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	1,680	1,680			897.12	317.52	579.60	0.00	579.60	81%	19%	156.05	0.95	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$4.74
785	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	59	APB	3X32T8EBN	59	RET		3XAFTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3XAFTLEDTYPE HYBRID	31.5	2	90%	5.25	90%	1.86	3.05	3,276	3,276			17,202.28	6,088.45	11,113.83	0.00	11,113.83	81%	19%	2,992.19	18.24	\$0.82	\$1.05	\$0.33	\$0.00	10.0	0.0	\$90.84
786	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	6	4S	2X32T8EBN	6	RET		2XAFTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	3,276	3,276			1,140.05	412.78	727.27	0.00	727.27	81%	19%	195.80	1.19	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$8.26
787	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	6	4S	2X32T8EBN	6	RET		2XAFTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	3,276	3,276			1,140.05	412.78	727.27	0.00	727.27	81%	19%	195.80	1.19	\$0.55	\$1.05	\$0.22	\$0.00	10.0	0.0	\$8.26
788	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	1	P-DEC	10X26CFL4P	1	RET		10X9LEDPL-BYP		290	2	Retrofit - Compact Fluorescent, Multi, 4-pin, (10) 26W lamp, w/ (10) LED plug in Lamp, 9W, Direct wire, Swat LED pin bases	90	2	90%	0.29	90%	0.09	0.18	3,276	3,276			950.04	294.84	655.20	0.00	655.20	81%	19%	176.40	1.08	\$10.65	\$16.38	\$3.93	\$0.00	5.0	0.0	\$23.10
789	TRUE	Justice Center Interior	1	HIGHER	CT	Court Room/Trial Areas	13	8RC	1X26CFL4P	13	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.38	90%	0.25	0.12	3,276	3,276			1,235.05	809.17	425.88	0.00	425.88	81%	19%	114.66	0.70	\$1.06	\$1.64	\$0.55	\$0.18	5.0	5.0	\$25.62
790	TRUE	Justice Center Interior	1	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2XAFTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
791	TRUE	Justice Center Interior	1	HIGHER	STAS	Storage Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	1,176	1,176			55.27	29.99	25.28	0.00	25.28	81%	19%	6.81	0.04	\$0.37	\$0.33	\$0.12	\$0.00	10.0	0.0	\$0.58
792	TRUE	Justice Center Interior	1	HIGHER	RR	Restroom	4	C	1X54TSHOEBHPS	4	RET		1XAFTLEDTYPEB-TSHO		64	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent (1) 45.8" T-5 HO lamp, (1) PRS Electronic Ballast, NLO (95 < BF < 1.1), w/ LED Tube, (1) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	25	2	90%	0.26	90%	0.10	0.14	5,306	5,306			1,358.34	530.60	827.74	0.00	827.74	81%	19%	222.85	1.36	\$0.88	\$3.82	\$0.18	\$0.00	10.0	0.0	\$18.11
793	TRUE	Justice Center Interior	1	HIGHER	RR	Restroom	3	6RC	1X26CFL4P	3	KIT	6RC	1XLEDF-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.09	90%	0.05	0.04	5,306	5,306			461.62	238.77	222.85	0.00	222.85	81%	19%	60.00	0.37	\$1.72	\$2.65	\$0.74	\$0.24	5.0	5.0	\$10.17
794	TRUE	Justice Center Interior	B	HIGHER	LO	Lobby/Entry Vestibule	3	APB	2X32T8EBN	3	RET		2XAFTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	4,761	4,761			828.48	299.97	528.52	0.00	528.52	81%	19%	142.29	0.87	\$0.79	\$1.52	\$0.32	\$0.00	10.0	0.0	\$6.00
795	TRUE	Justice Center Interior	B	HIGHER	LO	Lobby/Entry Vestibule	1	APB	2X32T8EBN	1	RET		2XAFTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	4,761	4,761			276.16	99.99	176.17	0.00	176.17	81%	19%	47.43	0.29	\$0.79	\$1.52	\$0.32	\$0.00	10.0	0.0	\$2.00
796	TRUE	Justice Center Interior	B	HIGHER	STAS	Storage Already Sensored	2	8S	4X32T8EBN	2	RET		4XAFTLEDTYPEB		112	1	Retrofit - 8" Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4XAFTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	1,176	1,176			263.42	98.78	164.64	0.00	164.64	81%	19%	44.33	0.27	\$0.39	\$0.38	\$0.16	\$0.00	10.0	0.0	\$1.22
797	TRUE	Justice Center Interior	B	HIGHER	POAS	Private Office Already Sensored	2	8S	4X32T8EBN	2	RET		4XAFTLEDTYPEB		112	1	Retrofit - 8" Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4XAFTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,520	2,520			564.48	211.68	352.80	0.00	352.80	81%	19%	94.98	0.58	\$0.84	\$0.81	\$0.34	\$0.00	10.0	0.0	\$2.62
798	TRUE	Justice Center Interior	B	HIGHER	OSAS	Office Support (copy room, coffee room, etc) Already Sensored	12	4S	2X32T8EBN	12	RET		2XAFTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	90%	0.70	90%	0.25	0.40	1,999	1,999			1,391.44	503.80	887.64	0.00	887.64	81%	19%	238.98	1.46	\$0.33	\$0.64	\$0.13	\$0.00	10.0	0.0	\$10.08
799	TRUE	Justice Center Interior	B	HIGHER	STAS	Storage Already Sensored	8	4S	2X32T8EBN	8	RET		2XAFTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	90%	0.46	90%	0.17	0.27	1,176	1,176			545.66	197.57	348.10	0.00	348.10	81%	19%	93.72	0.57	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$3.95
800	TRUE	Justice Center Interior	B	HIGHER	STAS	Storage Already Sensored	64	8S	4X32T8EBN	64	RET		4XAFTLEDTYPEB		112	1	Retrofit - 8" Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4XAFTLEDTYPEB	42	2	90%	7.17	90%	2.69	4.03	1,176	1,176			8,429.57	3,161.09	5,268.48	0.00	5,268.48	81%	19%	1,418.44	8.65	\$0.39	\$0.38	\$0.16	\$0.00	10.0	0.0	\$39.14
801	TRUE	Justice Center Interior	B	HIGHER	SW	Stairwell	2	4W	2X32T8EBN	2	RET		2XAFTLEDTYPEB		58	1	Retrofit - 4" Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2XAFTLEDTYPEB	21	2	100%	0.12	100%	0.04	0.07	8,760	8,760			1,016.16	367.92	648.24	0.00	648.24	81%	19%	174.53	1.06	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$7.36
802	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	4	A	3X32T8EBN	4	RET		3XAFTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3XAFTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	5,085	5,085			1,810.19	640.68	1,169.50	0.00	1,169.50	81%	19%	314.87	1.92	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$9.56
803	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	1	A	3X32T8EBN	1	RET		3XAFTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3XAFTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
804	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.																					

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
818	TRUE	Justice Center Interior	B	HIGHER	STAS	Storage Already Sensored	10	4S	2X32T8EBN	10	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.58	90%	0.21	0.33	1,176	1,176			682.08	246.96	435.12	0.00	435.12	81%	19%	117.15	0.71	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$4.94
819	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	5	A	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	5,085	5,085			2,262.74	800.86	1,461.88	0.00	1,461.88	81%	19%	393.58	2.40	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$11.95
820	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
821	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W Lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
822	TRUE	Justice Center Interior	B	HIGHER	LR	Locker Room	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	4,480	4,480			797.44	282.24	515.20	0.00	515.20	81%	19%	138.71	0.85	\$1.12	\$1.43	\$0.45	\$0.00	10.0	0.0	\$4.21
823	TRUE	Justice Center Interior	B	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
824	TRUE	Justice Center Interior	B	HIGHER	RR	Restroom	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,306	5,306			472.23	167.14	305.10	0.00	305.10	81%	19%	82.14	0.50	\$1.33	\$1.70	\$0.53	\$0.00	10.0	0.0	\$2.49
825	TRUE	Justice Center Interior	B	HIGHER	RRAS	Restroom Already Sensored	1	B	3X17T8EBN	1	RET		3X2FTLEDTYPEB		47	1	Retrofit - 2x2 Layin Prismatic Fixture, Fluorescent, (3) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.02	3,714	3,714			174.57	94.71	79.86	0.00	79.86	81%	19%	21.50	0.13	\$1.16	\$1.04	\$0.37	\$0.00	10.0	0.0	\$1.83
826	TRUE	Justice Center Interior	B	HIGHER	CRAS	Conference Room Already Sensored	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	1,793	1,793			957.68	338.95	618.72	0.00	618.72	81%	19%	166.58	1.02	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$5.06
827	TRUE	Justice Center Interior	B	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
828	TRUE	Justice Center Interior	B	HIGHER	OQAS	Open Office Already Sensored	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,932	2,932			1,043.65	369.38	674.27	0.00	674.27	81%	19%	181.53	1.11	\$0.73	\$0.94	\$0.29	\$0.00	10.0	0.0	\$5.51
829	TRUE	Justice Center Interior	B	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
830	TRUE	Justice Center Interior	B	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
831	TRUE	Justice Center Interior	B	HIGHER	POAS	Private Office Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,520	2,520			224.28	79.38	144.90	0.00	144.90	81%	19%	39.01	0.24	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$1.18
832	TRUE	Justice Center Interior	B	HIGHER	POAS	Private Office Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,520	2,520			448.56	158.76	289.80	0.00	289.80	81%	19%	78.02	0.48	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$2.37
833	TRUE	Justice Center Interior	B	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,176	1,176			209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
834	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	5,085	5,085			1,810.19	640.68	1,169.50	0.00	1,169.50	81%	19%	314.87	1.92	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$9.56
835	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
836	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W Lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
837	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	12	A	3X32T8EBN	12	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.07	90%	0.38	0.62	5,085	5,085			5,430.57	1,922.05	3,508.51	0.00	3,508.51	81%	19%	944.60	5.76	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$28.68
838	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	5,085	5,085			1,357.64	480.51	877.13	0.00	877.13	81%	19%	236.15	1.44	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$7.17
839	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W Lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
840	TRUE	Justice Center Interior	B	HIGHER	CELL	Holding Cells	16	A	3X32T8EBN	16	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	1.42	100%	0.50	0.92	8,760	8,760			12,474.24	4,415.04	8,059.20	0.00	8,059.20	81%	19%	2,169.78	13.23	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$65.88
841	TRUE	Justice Center Interior	B	HIGHER	OO-DIM	Open Office Dimmer added no hour reduction	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEC	FCJS	89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 15W LED Tube, Type C with External Driver, 4FTLEDTYPEFCJS	45	2	90%	0.36	90%	0.18	0.16	4,187	4,187	LED WIRELESS D	Sensor: No Additional Description.	1,490.71	753.73	736.98	0.00	736.98	81%	19%	198.42	1.21	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$7.87
842	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	5	A	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	5,085	5,085			2,262.74	800.86	1,461.88	0.00	1,461.88	81%	19%	393.58	2.40	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$11.95
843	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
844	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W Lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00								

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
860	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
861	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
862	TRUE	Justice Center Interior	B	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensoried	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	392	392			22.74	8.23	14.50	0.00	14.50	81%	19%	3.90	0.02	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.16
863	TRUE	Justice Center Interior	B	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensoried	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
864	TRUE	Justice Center Interior	B	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensoried	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	392	392			45.47	16.46	29.01	0.00	29.01	81%	19%	7.81	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.33
865	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	5,085	5,085			1,810.19	640.68	1,169.50	0.00	1,169.50	81%	19%	314.87	1.92	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$9.56
866	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
867	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
868	TRUE	Justice Center Interior	B	HIGHER	SW	Stairwell	2	4W	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.12	100%	0.04	0.07	8,760	8,760			1,016.16	367.92	648.24	0.00	648.24	81%	19%	174.53	1.06	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$7.36
869	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	5	A	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	5,085	5,085			2,262.74	800.86	1,461.88	0.00	1,461.88	81%	19%	393.58	2.40	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$11.95
870	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
871	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
872	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
873	TRUE	Justice Center Interior	B	HIGHER	ME	Mechanical/Electrical Rooms	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	560	560			64.96	23.52	41.44	0.00	41.44	81%	19%	11.16	0.07	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.47
874	TRUE	Justice Center Interior	B	HIGHER	SW	Stairwell	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.36	100%	0.13	0.23	8,760	8,760			3,118.56	1,103.76	2,014.80	0.00	2,014.80	81%	19%	542.45	3.31	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$16.47
875	TRUE	Justice Center Interior	B	HIGHER	SW	Stairwell	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	8,760	8,760			779.64	275.94	503.70	0.00	503.70	81%	19%	135.61	0.83	\$2.19	\$2.80	\$0.88	\$0.00	10.0	0.0	\$4.12
876	TRUE	Justice Center Interior	B	HIGHER	SW	Stairwell	4	4W	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.23	100%	0.08	0.15	8,760	8,760			2,032.32	735.84	1,296.48	0.00	1,296.48	81%	19%	349.05	2.13	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$14.72
877	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	4	8S	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8' Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	5,085	5,085			2,277.99	854.25	1,423.74	0.00	1,423.74	81%	19%	383.32	2.34	\$1.69	\$1.63	\$0.68	\$0.00	10.0	0.0	\$10.58
878	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	9	8S	4X32T8EBN	9	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8' Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	1.01	90%	0.38	0.57	5,085	5,085			5,125.48	1,922.05	3,203.42	0.00	3,203.42	81%	19%	862.46	5.26	\$1.69	\$1.63	\$0.68	\$0.00	10.0	0.0	\$23.80
879	TRUE	Justice Center Interior	B	HIGHER	HW	Hallway	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
880	TRUE	Justice Center Interior	B	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
881	TRUE	Justice Center Interior	B	HIGHER	ST	Storage	1	WP	1X18CFL4P	1	IN	WP-DOORPACK	1X14LEDF		20	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Compact Fluorescent, Multi, 4-pin, (1) 15W lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 14W, with Separate or Integrated Driver Component, 14LEDF	14	1	90%	0.02	90%	0.01	0.01	1,680	1,680			33.60	23.52	10.08	0.00	10.08	81%	19%	2.71	0.02	\$0.55	\$0.84	\$0.09	\$0.06	7.0	7.0	\$1.24
882	TRUE	Justice Center Interior	B	HIGHER	ST	Storage	10	8S	4X32T8EBN	10	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8' Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	1.12	90%	0.42	0.63	1,680	1,680			1,881.60	705.60	1,176.00	0.00	1,176.00	81%	19%	316.62	1.93	\$0.56	\$0.54	\$0.22	\$0.00	10.0	0.0	\$8.74
883	TRUE	Justice Center Interior	TUNNEL	HIGHER	HW	Hallway	47	ASUR	3X32T8EBN	47	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Surface Mount Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	4.18	90%	1.48	2.43	5,085	5,085			21,269.72	7,528.05	13,741.67	0.00	13,741.67	81%	19%	3,699.68	22.55	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$112.32
884	TRUE	Justice Center Interior	TUNNEL	HIGHER	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
885	TRUE	Justice Center Interior	TUNNEL	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensoried	6	4S	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.35	50%	0.13	0.11	392	392			136.42	49.39	87.02	0.00	87.02	81%	19%	23.43	0.14	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.99
886	TRUE	Justice Center Interior	TUNNEL	HIGHER	SW	Stairwell	4	4W	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.23	100%	0.08	0.15	8,760	8,760			2,032.32	735.84	1,296.48	0.00	1,296.48	81%	19%	349.05	2.13	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$14.72
887	TRUE	Justice Center Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensoried	40	8S	4X32T8EBN	40																																		

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
902	TRUE	Justice Center Exterior	1	0	E	Exterior	14	WPFC	1X175MH	14	IN	WPFC	1X47LED		215	1	New/ Replacement Fixture - Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LED	47	1	10%	3.01	10%	0.66	0.24	4,380	4,380			13,183.80	2,882.04	10,301.76	0.00	10,301.76	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$104.79
903	TRUE	Justice Center Exterior	1	0	E	Exterior	2	SL	1X50MH	2	RET		1X17LED		64	1	Retrofit - Steplight Fixture, Metal Halide, (1) 50W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Screw-in Lamp, 17W, with Integrated Driver Component, 17LED	17	1	10%	0.13	10%	0.03	0.01	4,380	4,380			560.64	148.92	411.72	0.00	411.72	81%	19%	0.00	0.00	\$7.45	\$3.50	\$1.40	\$0.00	5.0	0.0	\$19.10
904	TRUE	Justice Center Exterior	1	0	E	Exterior	2	FL	1X175MH	2	IN	FL	1X51LED	MOGUL	215	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 51W, with Separate or Integrated Driver Component, 51LED	51	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	446.76	1,436.64	0.00	1,436.64	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.83	\$0.55	7.0	7.0	\$14.75
905	TRUE	Justice Center Exterior	1	0	E	Exterior	2	FL	1X175MH	2	IN	FL	1X51LED	MOGUL	215	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 51W, with Separate or Integrated Driver Component, 51LED	51	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	446.76	1,436.64	0.00	1,436.64	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.83	\$0.55	7.0	7.0	\$14.75
906	TRUE	Justice Center Exterior	1	0	E	Exterior	16	SL	1X50MH	16	RET		1X17LED		64	1	Retrofit - Steplight Fixture, Metal Halide, (1) 50W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Screw-in Lamp, 17W, with Integrated Driver Component, 17LED	17	1	10%	1.02	10%	0.27	0.08	4,380	4,380			4,485.12	1,191.36	3,293.76	0.00	3,293.76	81%	19%	0.00	0.00	\$7.45	\$3.50	\$1.40	\$0.00	5.0	0.0	\$152.77
907	TRUE	Justice Center Exterior	1	0	E	Exterior	2	WP	1X30LED	2	NR			BBU	30	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	10%	0.06	10%	0.06	0.00	4,380	4,380			262.80	262.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.92	\$0.61	\$0.00	\$0.00	0.0	0.0	\$0.00
908	TRUE	Justice Center Exterior	1	0	E	Exterior	2	FL	1X175MH	2	IN	FL	1X51LED	MOGUL	215	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 51W, with Separate or Integrated Driver Component, 51LED	51	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	446.76	1,436.64	0.00	1,436.64	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.83	\$0.55	7.0	7.0	\$14.75
909	TRUE	Justice Center Exterior	1	0	E	Exterior	2	FL	1X100LED	2	NR				100	1	Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 100W, with Separate or Integrated Driver Component - No Measure Recommended	100	-1	10%	0.20	10%	0.20	0.00	4,380	4,380			876.00	876.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.07	\$2.02	\$0.00	\$0.00	0.0	0.0	\$0.00
910	TRUE	Justice Center Exterior	1	0	E	Exterior	4	SL	1X50MH	4	RET		1X17LED		64	1	Retrofit - Steplight Fixture, Metal Halide, (1) 50W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Screw-in Lamp, 17W, with Integrated Driver Component, 17LED	17	1	10%	0.26	10%	0.07	0.02	4,380	4,380			1,121.28	297.84	823.44	0.00	823.44	81%	19%	0.00	0.00	\$7.45	\$3.50	\$1.40	\$0.00	5.0	0.0	\$38.19
911	TRUE	Justice Center Exterior	1	0	E	Exterior	10	SL	1X50MH	10	RET		1X17LED		64	1	Retrofit - Steplight Fixture, Metal Halide, (1) 50W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Screw-in Lamp, 17W, with Integrated Driver Component, 17LED	17	1	10%	0.64	10%	0.17	0.05	4,380	4,380			2,803.20	744.60	2,058.60	0.00	2,058.60	81%	19%	0.00	0.00	\$7.45	\$3.50	\$1.40	\$0.00	5.0	0.0	\$95.48
912	TRUE	Justice Center Exterior	1	0	E	Exterior	7	12RCSQ	1X175MH	7	RET		1X34LED		215	1	Retrofit - Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Screw-in Lamp, 34W, with Integrated Driver Component, 34LED	34	1	10%	1.51	10%	0.24	0.13	4,380	4,380			6,591.90	1,042.44	5,549.46	0.00	5,549.46	81%	19%	0.00	0.00	\$5.69	\$3.07	\$1.52	\$0.00	5.0	0.0	\$50.69
913	TRUE	Justice Center Exterior	1	0	E	Exterior	5	WPFC	1X175MH	5	IN	WPFC	1X47LED		215	1	New/ Replacement Fixture - Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LED	47	1	10%	1.08	10%	0.24	0.08	4,380	4,380			4,708.50	1,029.30	3,679.20	0.00	3,679.20	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$37.42
914	TRUE	Juvenile Detention Interior	1	HIGHER	LO	Lobby/Entry Vestibule	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	4,761	4,761			276.16	99.99	176.17	0.00	176.17	81%	19%	47.43	0.29	\$0.79	\$1.52	\$0.32	\$0.00	10.0	0.0	\$2.00
915	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
916	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	5	A	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	5,085	5,085			1,474.59	533.90	940.69	0.00	940.69	81%	19%	253.26	1.54	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$10.68
917	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
918	TRUE	Juvenile Detention Interior	1	HIGHER	OO	Open Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	4,187	4,187			485.74	175.87	309.87	0.00	309.87	81%	19%	83.43	0.51	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$3.52
919	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
920	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
921	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
922	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
923	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,599	3,599			835.06	302.35	532.71	0.00	532.71	81%	19%	143.42	0.87	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$6.05
924	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,599	3,599			835.06	302.35	532.71	0.00	532.71	81%	19%	143.42	0.87	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$6.05
925	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,599	3,599			835.06	302.35	532.71	0.00	532.71	81%	19%	143.42	0.87	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$6.05
926	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	6	A	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	3,599	3,599			1,252.59	453.52	799.07	0.00	799.07	81%	19%	215.13	1.31	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$9.07
927	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	2	C	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,306	5,306			615.50	222.85	392.64	0.00	392.64	81%	19%	105.71	0.64	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$4.46
928	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	GRC	1X60INCA	1	KIT	6RC	1XLED-6RC		60	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Incandescent, (1) 60W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RC	15	2	90%	0.06	90%	0.02	0.04	1,680	1,680			100.80	25.20	75.60	0.00	75.60	81%	19%	20.35	0.12	\$0.95	\$0.00	\$0.24	\$0.08	5.0	5.0	\$0.64
929	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43														

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
943	TRUE	Juvenile Detention Interior	1	HIGHER	LO	Lobby/Entry Vestibule	6	A	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	4,761	4,761			1,656.97	599.94	1,057.03	0.00	1,057.03	81%	19%	284.59	1.73	\$0.79	\$1.52	\$0.32	\$0.00	10.0	0.0	\$12.00
944	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
945	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
946	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
947	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
948	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10NCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
949	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
950	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
951	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
952	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
953	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
954	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,599	3,599			835.06	302.35	532.71	0.00	532.71	81%	19%	143.42	0.87	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$6.05
955	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	5,085	5,085			1,179.67	427.12	752.55	0.00	752.55	81%	19%	202.61	1.24	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$8.54
956	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
957	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10NCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
958	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
959	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
960	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
961	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
962	TRUE	Juvenile Detention Interior	1	HIGHER	BR	Break room	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	3,823	3,823			665.27	240.87	424.40	0.00	424.40	81%	19%	114.26	0.70	\$0.64	\$1.22	\$0.25	\$0.00	10.0	0.0	\$4.82
963	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
964	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
965	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
966	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
967	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
968	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
969	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.5															

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
983	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
984	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
985	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
986	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,562	2,562			573.89	215.21	358.68	0.00	358.68	81%	19%	96.57	0.59	\$0.85	\$0.82	\$0.34	\$0.00	10.0	0.0	\$2.66
987	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	2,562	2,562			1,721.66	645.62	1,076.04	0.00	1,076.04	81%	19%	289.70	1.77	\$0.85	\$0.82	\$0.34	\$0.00	10.0	0.0	\$7.99
988	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	3,599	3,599			403.13	151.17	251.96	0.00	251.96	81%	19%	67.83	0.41	\$1.20	\$1.15	\$0.48	\$0.00	10.0	0.0	\$1.87
989	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
990	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	5	A	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	5,085	5,085			1,474.59	533.90	940.69	0.00	940.69	81%	19%	253.26	1.54	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$10.68
991	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
992	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	2	EXIT	2X10INCEXIT	2	IN	EXIT	1X2LEDEXIT		20	1	New/Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.04	100%	0.00	0.04	8,760	8,760			350.40	35.04	315.36	0.00	315.36	81%	19%	84.90	0.52	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$1.58)
993	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
994	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
995	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
996	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	2	C	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,680	1,680			194.88	70.56	124.32	0.00	124.32	81%	19%	33.47	0.20	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$1.41
997	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	5	A	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	2,562	2,562			742.98	269.01	473.97	0.00	473.97	81%	19%	127.61	0.78	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$5.38
998	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,599	3,599			208.77	75.59	133.18	0.00	133.18	81%	19%	35.86	0.22	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$1.51
999	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,599	3,599			208.77	75.59	133.18	0.00	133.18	81%	19%	35.86	0.22	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$1.51
1000	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1001	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,562	2,562			297.19	107.60	189.59	0.00	189.59	81%	19%	51.04	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.15
1002	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,562	2,562			148.60	53.80	94.79	0.00	94.79	81%	19%	25.52	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
1003	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,562	2,562			148.60	53.80	94.79	0.00	94.79	81%	19%	25.52	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
1004	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,562	2,562			148.60	53.80	94.79	0.00	94.79	81%	19%	25.52	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
1005	TRUE	Juvenile Detention Interior	1	HIGHER	CR	Conference Room	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,562	2,562			148.60	53.80	94.79	0.00	94.79	81%	19%	25.52	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
1006	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1007	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1008	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1009	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320														

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1023	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	2	EXIT	2X10INCEXIT	2	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.04	100%	0.00	0.04	8,760	8,760			350.40	35.04	315.36	0.00	315.36	81%	19%	84.90	0.52	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$1.58)
1024	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	3,599	3,599			403.13	151.17	251.96	0.00	251.96	81%	19%	67.83	0.41	\$1.20	\$1.15	\$0.48	\$0.00	10.0	0.0	\$1.87
1025	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,599	3,599			835.06	302.35	532.71	0.00	532.71	81%	19%	143.42	0.87	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$6.05
1026	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1027	TRUE	Juvenile Detention Interior	1	HIGHER	OO	Open Office	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	4,187	4,187			971.48	351.74	619.74	0.00	619.74	81%	19%	166.85	1.02	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$7.03
1028	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	GRC	1X60INCA	1	KIT	6RC	1XLED6-GRC		60	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Incandescent, (1) 60W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED6-GRC	15	2	90%	0.06	90%	0.02	0.04	1,680	1,680			100.80	25.20	75.60	0.00	75.60	81%	19%	20.35	0.12	\$0.95	\$0.00	\$0.24	\$0.08	5.0	5.0	\$0.64
1029	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1030	TRUE	Juvenile Detention Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	560	560			32.48	11.76	20.72	0.00	20.72	81%	19%	5.58	0.03	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.24
1031	TRUE	Juvenile Detention Interior	1	HIGHER	CF	Cafeteria	12	A	2X32T8EBN	12	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.70	90%	0.25	0.40	4,187	4,187			2,914.43	1,055.22	1,859.21	0.00	1,859.21	81%	19%	500.56	3.05	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$21.10
1032	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	5,085	5,085			1,179.67	427.12	752.55	0.00	752.55	81%	19%	202.61	1.24	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$8.54
1033	TRUE	Juvenile Detention Interior	1	HIGHER	BR	Break room	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,823	3,823			443.51	160.58	282.93	0.00	282.93	81%	19%	76.17	0.46	\$0.64	\$1.22	\$0.25	\$0.00	10.0	0.0	\$3.21
1034	TRUE	Juvenile Detention Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,856	2,856			496.94	179.93	317.02	0.00	317.02	81%	19%	85.35	0.52	\$0.48	\$0.91	\$0.19	\$0.00	10.0	0.0	\$3.60
1035	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
1036	TRUE	Juvenile Detention Interior	1	HIGHER	KT	Kitchen	7	A	2X32T8EBN	7	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.41	90%	0.15	0.23	2,520	2,520			1,023.12	370.44	652.68	0.00	652.68	81%	19%	175.72	1.07	\$0.42	\$0.81	\$0.17	\$0.00	10.0	0.0	\$7.41
1037	TRUE	Juvenile Detention Interior	1	HIGHER	KT	Kitchen	3	J	1X150INCA	3	LAMP		1X15LEDSI		150	1	Relamp - Jar Fixture, Incandescent, (1) 150W lamp, w/ Light Emitting Diode (LED) Screw-in Lamp, 15W, with Integrated Driver Component, 15LEDSI	15	1	90%	0.45	90%	0.05	0.36	2,520	2,520			1,134.00	113.40	1,020.60	0.00	1,020.60	81%	19%	274.78	1.68	\$5.04	\$0.00	\$1.01	\$0.00	5.0	0.0	\$12.10
1038	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	2	J	1X60INCA	2	LAMP		1X9LEDSI		60	1	Relamp - Jar Fixture, Incandescent, (1) 60W lamp, w/ Light Emitting Diode (LED) Screw-in Lamp, 9W, with Integrated Driver Component, 9LEDSI	9	1	90%	0.12	90%	0.02	0.09	1,680	1,680			201.60	30.24	171.36	0.00	171.36	81%	19%	46.14	0.28	\$0.95	\$0.00	\$0.40	\$0.00	5.0	0.0	\$1.10
1039	TRUE	Juvenile Detention Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	4	C	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,856	2,856			662.59	239.90	422.69	0.00	422.69	81%	19%	113.80	0.69	\$0.48	\$0.91	\$0.19	\$0.00	10.0	0.0	\$4.80
1040	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1041	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1042	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1043	TRUE	Juvenile Detention Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	2	BS	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8" Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	50%	0.22	50%	0.08	0.07	560	560			125.44	47.04	78.40	0.00	78.40	81%	19%	21.11	0.13	\$0.19	\$0.18	\$0.07	\$0.00	10.0	0.0	\$0.58
1044	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	6	A	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	5,085	5,085			1,769.51	640.68	1,128.83	0.00	1,128.83	81%	19%	303.91	1.85	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$12.81
1045	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1046	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	6	CSUR-VANDAL	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.35	100%	0.13	0.22	8,760	8,760			3,048.48	1,103.76	1,944.72	0.00	1,944.72	81%	19%	523.58	3.19	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$22.08
1047	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	6	CSUR	1X9CFL2P	6	RET		1X35LEDPL-BYP		12	1	Retrofit - 1x4 Surface Mount Prismatic Fixture, Compact Fluorescent, twin, (1) 9W lamp, w/ LED plug-in lamp, 3.5W Direct wire, 3.5 Watt LED pin based	3.5	2	100%	0.07	100%	0.02	0.05	8,760	8,760			630.72	183.96	446.76	0.00	446.76	81%	19%	120.28	0.73	\$2.63	\$2.28	\$1.05	\$0.00	5.0	0.0	\$23.13
1048	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	1	CSUR	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Surface Mount Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,085	5,085			294.92	106.78	188.14	0.00	188.14	81%	19%	50.65	0.31	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$2.14
1049	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	1	CSUR-VANDAL	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.06	100%	0.02	0.04	8,760	8,760			508.08	183.96	324.12	0.00	324.12	81%	19%	87.26	0.53	\$1.46	\$2.80	\$0.58	\$0.00	1		

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1065	TRUE	Juvenile Detention Interior	1	HIGHER	HW	Hallway	8	A	2X32T8EBN	8	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	90%	0.17	0.27	5,085	5,085			2,359.35	854.25	1,505.10	0.00	1,505.10	81%	19%	405.22	2.47	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$17.08	
1066	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1067	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1068	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	16	A	2X32T8EBN	16	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.93	90%	0.34	0.53	2,961	2,961			2,747.81	994.90	1,752.91	0.00	1,752.91	81%	19%	471.94	2.88	\$0.49	\$0.95	\$0.20	\$0.00	10.0	0.0	\$19.90
1069	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	16	A	1X9CFL2P	16	RET		1X3SLEDPL-BYP		12	1	Retrofit - 2x4 Layin Prismatic Fixture, Compact Fluorescent, twin, (1) 9W lamp, w/ LED plug in Lamp, 3.5W, Direct wire, 3.5Watt LED pin based	3.5	2	90%	0.19	90%	0.06	0.12	2,961	2,961			568.51	165.82	402.70	0.00	402.70	81%	19%	108.42	0.66	\$0.89	\$0.77	\$0.36	\$0.00	5.0	0.0	\$20.85
1070	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,961	2,961			171.74	62.18	109.56	0.00	109.56	81%	19%	29.50	0.18	\$0.49	\$0.95	\$0.20	\$0.00	10.0	0.0	\$1.24
1071	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	18	4VD	2X32T8EBN	18	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Vandal Resistant Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	1.04	100%	0.38	0.67	8,760	8,760			9,145.44	3,311.28	5,834.16	0.00	5,834.16	81%	19%	1,570.74	9.58	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$66.23
1072	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	18	ASUR	1X9CFL2P	18	RET		1X3SLEDPL-BYP		12	1	Retrofit - 2x4 Surface Mount Prismatic Fixture, Compact Fluorescent, twin, (1) 9W lamp, w/ LED plug in Lamp, 3.5W, Direct wire, 3.5Watt LED pin based	3.5	2	100%	0.22	100%	0.06	0.15	8,760	8,760			1,892.16	551.88	1,340.28	0.00	1,340.28	81%	19%	360.84	2.20	\$2.63	\$2.28	\$1.05	\$0.00	5.0	0.0	\$69.38
1073	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	6RC	1X60INCA	1	KIT	6RC	1XLEDF-6RC		60	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Incandescent, (1) 60W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.06	90%	0.02	0.04	1,680	1,680			100.80	25.20	75.60	0.00	75.60	81%	19%	20.35	0.12	\$0.95	\$0.00	\$0.24	\$0.08	5.0	5.0	\$0.64
1074	TRUE	Juvenile Detention Interior	1	HIGHER	OO	Open Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	4,187	4,187			485.74	175.87	309.87	0.00	309.87	81%	19%	83.43	0.51	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$3.52
1075	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1076	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1077	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	16	A	2X32T8EBN	16	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.93	90%	0.34	0.53	2,961	2,961			2,747.81	994.90	1,752.91	0.00	1,752.91	81%	19%	471.94	2.88	\$0.49	\$0.95	\$0.20	\$0.00	10.0	0.0	\$19.90
1078	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	16	A	1X9CFL2P	16	RET		1X3SLEDPL-BYP		12	1	Retrofit - 2x4 Layin Prismatic Fixture, Compact Fluorescent, twin, (1) 9W lamp, w/ LED plug in Lamp, 3.5W, Direct wire, 3.5Watt LED pin based	3.5	2	90%	0.19	90%	0.06	0.12	2,961	2,961			568.51	165.82	402.70	0.00	402.70	81%	19%	108.42	0.66	\$0.89	\$0.77	\$0.36	\$0.00	5.0	0.0	\$20.85
1079	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,961	2,961			171.74	62.18	109.56	0.00	109.56	81%	19%	29.50	0.18	\$0.49	\$0.95	\$0.20	\$0.00	10.0	0.0	\$1.24
1080	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	18	ASUR	2X32T8EBN	18	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Surface Mount Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	1.04	100%	0.38	0.67	8,760	8,760			9,145.44	3,311.28	5,834.16	0.00	5,834.16	81%	19%	1,570.74	9.58	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$66.23
1081	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	18	ASUR	1X9CFL2P	18	RET		1X3SLEDPL-BYP		12	1	Retrofit - 2x4 Surface Mount Prismatic Fixture, Compact Fluorescent, twin, (1) 9W lamp, w/ LED plug in Lamp, 3.5W, Direct wire, 3.5Watt LED pin based	3.5	2	100%	0.22	100%	0.06	0.15	8,760	8,760			1,892.16	551.88	1,340.28	0.00	1,340.28	81%	19%	360.84	2.20	\$2.63	\$2.28	\$1.05	\$0.00	5.0	0.0	\$69.38
1082	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	6RC	1X60INCA	1	KIT	6RC	1XLEDF-6RC		60	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Incandescent, (1) 60W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.06	90%	0.02	0.04	1,680	1,680			100.80	25.20	75.60	0.00	75.60	81%	19%	20.35	0.12	\$0.95	\$0.00	\$0.24	\$0.08	5.0	5.0	\$0.64
1083	TRUE	Juvenile Detention Interior	1	HIGHER	OO	Open Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	4,187	4,187			485.74	175.87	309.87	0.00	309.87	81%	19%	83.43	0.51	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$3.52
1084	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1085	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1086	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	10	A	2X32T8EBN	10	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.58	90%	0.21	0.33	2,961	2,961			1,717.38	621.81	1,095.57	0.00	1,095.57	81%	19%	294.96	1.80	\$0.49	\$0.95	\$0.20	\$0.00	10.0	0.0	\$12.44
1087	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	10	A	1X9CFL2P	10	RET		1X3SLEDPL-BYP		12	1	Retrofit - 2x4 Layin Prismatic Fixture, Compact Fluorescent, twin, (1) 9W lamp, w/ LED plug in Lamp, 3.5W, Direct wire, 3.5Watt LED pin based	3.5	2	90%	0.12	90%	0.04	0.08	2,961	2,961			355.32	103.64	251.69	0.00	251.69	81%	19%	67.76	0.41	\$0.89	\$0.77	\$0.36	\$0.00	5.0	0.0	\$13.03
1088	TRUE	Juvenile Detention Interior	1	HIGHER	MP	Multipurpose	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,961	2,961			171.74	62.18	109.56	0.00	109.56	81%	19%	29.50	0.18	\$0.49	\$0.95	\$0.20	\$0.00	10.0	0.0	\$1.24
1089	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	12	ASUR	2X32T8EBN	12	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Surface Mount Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.70	100%	0.25	0.44	8,760	8,760			6,096.96	2,207.52	3,889.44	0.00	3,889.44	81%	19%	1,047.16	6.38	\$1.46	\$2.80	\$0.58	\$0.00	10.0	0.0	\$44.15
1090	TRUE	Juvenile Detention Interior	1	HIGHER	CELL	Holding Cells	12	ASUR	1X9CFL2P	12	RET		1X3SLEDPL-BYP		12	1	Retrofit - 2x4 Surface Mount Prismatic Fixture, Compact Fluorescent, twin, (1) 9W lamp, w/ LED plug in Lamp, 3.5W, Direct wire, 3.5Watt LED pin based	3.5	2	100%	0.14	100%	0.04	0.10	8,760	8,760			1,261.44	367.92	893.52	0.00	893.52	81%	19%	240.56	1.47	\$2.63	\$2.28	\$1.05	\$0.00	5.0	0.0	\$46.25
1091	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	1	6RC	1X60INCA	1	KIT	6RC	1XLEDF-6RC		60	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Incandescent, (1) 60W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.06	90%	0.02	0.04	1,680	1,680			100.80	25.20	75.60	0.00	75.60	81%	19%	20.35	0.12	\$0.95						

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1107	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1108	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1109	TRUE	Juvenile Detention Interior	1	HIGHER	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1110	TRUE	Juvenile Detention Interior	1	HIGHER	OO	Open Office	3	4S	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	4,187	4,187			728.61	263.81	464.80	0.00	464.80	81%	19%	125.14	0.76	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$5.28
1111	TRUE	Juvenile Detention Interior	1	HIGHER	OO	Open Office	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	4,187	4,187			2,813.93	1,055.22	1,758.71	0.00	1,758.71	81%	19%	473.50	2.89	\$1.40	\$1.34	\$0.56	\$0.00	10.0	0.0	\$13.06
1112	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1113	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1114	TRUE	Juvenile Detention Interior	1	HIGHER	CL	Classroom	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	2,632	2,632			1,768.70	663.26	1,105.44	0.00	1,105.44	81%	19%	297.62	1.81	\$0.88	\$0.84	\$0.35	\$0.00	10.0	0.0	\$8.21
1115	TRUE	Juvenile Detention Interior	1	HIGHER	CL	Classroom	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	2,632	2,632			1,768.70	663.26	1,105.44	0.00	1,105.44	81%	19%	297.62	1.81	\$0.88	\$0.84	\$0.35	\$0.00	10.0	0.0	\$8.21
1116	TRUE	Juvenile Detention Interior	1	HIGHER	CL	Classroom	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	2,632	2,632			1,768.70	663.26	1,105.44	0.00	1,105.44	81%	19%	297.62	1.81	\$0.88	\$0.84	\$0.35	\$0.00	10.0	0.0	\$8.21
1117	TRUE	Juvenile Detention Interior	1	HIGHER	CL	Classroom	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	2,632	2,632			1,768.70	663.26	1,105.44	0.00	1,105.44	81%	19%	297.62	1.81	\$0.88	\$0.84	\$0.35	\$0.00	10.0	0.0	\$8.21
1118	TRUE	Juvenile Detention Interior	1	HIGHER	OO	Open Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	4,187	4,187			1,875.96	703.48	1,172.47	0.00	1,172.47	81%	19%	315.67	1.92	\$1.40	\$1.34	\$0.56	\$0.00	10.0	0.0	\$8.71
1119	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1120	TRUE	Juvenile Detention Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	560	560			32.48	11.76	20.72	0.00	20.72	81%	19%	5.58	0.03	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.24
1121	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1122	TRUE	Juvenile Detention Interior	1	HIGHER	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1123	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	1	6RC	1X60INCA	1	KIT	6RC	1XLEDF-6RC		60	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Incandescent, (1) 60W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	10%	0.06	10%	0.02	0.00	4,380	4,380			262.80	65.70	197.10	0.00	197.10	81%	19%	0.00	0.00	\$2.48	\$0.00	\$0.61	\$0.20	5.0	5.0	\$1.67
1124	TRUE	Juvenile Detention Interior	1	HIGHER	GYM	Gymnasium	12	LB	1X250MH	12	IN	HB-ROUND	KLEDF-HB-ROUND-MEDIUM WIRE GUARD		295	1	New/ Replacement Fixture - Lowbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDFWIRE GUARD	153	2	90%	3.54	90%	1.84	1.53	3,808	3,808			13,480.32	6,991.49	6,488.83	0.00	6,488.83	81%	19%	1,746.99	10.65	\$4.57	\$3.81	\$2.72	\$1.79	5.0	5.0	\$46.39
1125	TRUE	Juvenile Detention Interior	1	HIGHER	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1126	TRUE	Juvenile Detention Interior	1	HIGHER	ST	Storage	6	4VP	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Vapor Proof Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	1,680	1,680			584.64	211.68	372.96	0.00	372.96	81%	19%	100.41	0.61	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$4.23
1127	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF	WIRE GUARD	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
1128	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	6	WP	1X175MH	6	IN	WP	1X49LEDF	WIRE GUARD	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	1.29	10%	0.29	0.10	4,380	4,380			5,650.20	1,287.72	4,362.48	0.00	4,362.48	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$44.58
1129	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	2	FL	1X400MH	2	IN	FL	1X145LEDF		458	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 145W, with Separate or Integrated Driver Component, 145LEDF	145	1	10%	0.92	10%	0.29	0.06	4,380	4,380			4,012.08	1,270.20	2,741.88	0.00	2,741.88	81%	19%	0.00	0.00	\$3.94	\$5.26	\$2.37	\$1.56	7.0	7.0	\$10.53
1130	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	3	WP	1X175MH	3	IN	WP	1X49LEDF	WIRE GUARD	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	0.65	10%	0.15	0.05	4,380	4,380			2,825.10	643.86	2,181.24	0.00	2,181.24	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$22.29
1131	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	1	WP	1X30LEDF	1	NR				30	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	10%	0.03	10%	0.03	0.00	4,380	4,380			131.40	131.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.92	\$0.61	\$0.00	\$0.00	0.0	0.0	\$0.00
1132	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	3	10RC	1X60INCA	3	KIT	10RC	1XLEDF-10RC		60	1	Retrofit with a Kit or Reflector - 10" Round Recessed Can Fixture, Incandescent, (1) 60W lamp, w/ 10" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 10IN. SET WATTAGE TO 30W. HIGH SETTING, 1X30LEDF-10RC	30	2	10%	0.18	10%	0.09	0.01	4,380	4,380			788.40	394.20	394.20	0.00	394.20	81%	19%	0.00	0.00	\$2.48	\$0.00	\$1.23	\$0.40	5.0	5.0	\$2.55
1133	TRUE	Juvenile Detention Exterior	1	O	E	Exterior	4	WP	1X175MH	4	IN	WP	1X49LEDF	WIRE GUARD	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	0.86	10%	0.20	0.07	4,380	4,380			3,766.80	858.48	2,908.32	0.00	2,908.32	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$29.72
1134	TRUE	Juvenile Detention Exterior	1</																																									

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1145	TRUE	Narcotics / Patrol Building Interior	1	0	ME	Mechanical/Electrical Rooms	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	50%	0.11	50%	0.04	0.04	400	400			44.80	16.80	28.00	0.00	28.00	81%	19%	7.54	0.05	\$0.13	\$0.13	\$0.05	\$0.00	10.0	0.0	\$0.21
1146	TRUE	Narcotics / Patrol Building Exterior	1	0	E	Exterior	2	WP	1X18CF4P	2	IN	WP-DOORPACK	1X14LED		20	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Compact Fluorescent, Multi, 4-pin, (1) 18W lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 14W, with Separate or Integrated Driver Component, 14LED	14	1	10%	0.04	10%	0.03	0.00	4,380	4,380			175.20	122.64	52.56	0.00	52.56	81%	19%	0.00	0.00	\$1.42	\$2.19	\$0.23	\$0.15	7.0	7.0	\$6.47
1147	TRUE	Narcotics / Patrol Building Exterior	1	0	E	Exterior	1	WP	1X18CF4P	1	IN	WP-DOORPACK	1X14LED		20	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Compact Fluorescent, Multi, 4-pin, (1) 18W lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 14W, with Separate or Integrated Driver Component, 14LED	14	1	10%	0.02	10%	0.01	0.00	4,380	4,380			87.60	61.32	26.28	0.00	26.28	81%	19%	0.00	0.00	\$1.42	\$2.19	\$0.23	\$0.15	7.0	7.0	\$3.23
1148	TRUE	Narcotics / Patrol Building Exterior	1	0	E	Exterior	1	FL	1X300HAL	1	IN	FL	1X85LED	Q1Z	300	1	New/ Replacement Fixture - Flood Fixture, Halogen, (1) 300W lamp, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 85W, with Separate or Integrated Driver Component, 85LEDQ1Z	85	1	10%	0.30	10%	0.09	0.02	4,380	4,380			1,314.00	372.30	941.70	0.00	941.70	81%	19%	0.00	0.00	\$3.65	\$0.00	\$1.39	\$0.92	7.0	7.0	\$1.34
1149	TRUE	Juvenile Probation Interior	1	0	LO	Lobby/Entry Vestibule	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	3,401	3,401			2,285.47	857.05	1,428.42	0.00	1,428.42	81%	19%	384.57	2.34	\$1.13	\$1.09	\$0.45	\$0.00	10.0	0.0	\$10.61
1150	TRUE	Juvenile Probation Interior	1	0	LO	Lobby/Entry Vestibule	4	B	2X32T8U6EBN	4	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.24	90%	0.10	0.12	3,401	3,401			802.64	346.90	455.73	0.00	455.73	81%	19%	122.70	0.75	\$2.89	\$1.09	\$0.34	\$0.00	10.0	0.0	\$14.56
1151	TRUE	Juvenile Probation Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1152	TRUE	Juvenile Probation Interior	1	0	RR	Restroom	1	2VAN	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2' Vanity Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	90%	0.03	90%	0.02	0.01	3,790	3,790			125.07	64.43	60.64	0.00	60.64	81%	19%	16.33	0.10	\$0.79	\$1.06	\$0.25	\$0.00	10.0	0.0	\$1.60
1153	TRUE	Juvenile Probation Interior	1	0	RR	Restroom	1	2VAN	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2' Vanity Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	90%	0.03	90%	0.02	0.01	3,790	3,790			125.07	64.43	60.64	0.00	60.64	81%	19%	16.33	0.10	\$0.79	\$1.06	\$0.25	\$0.00	10.0	0.0	\$1.60
1154	TRUE	Juvenile Probation Interior	1	0	HW	Hallway	5	B	2X32T8U6EBN	5	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.30	90%	0.13	0.15	3,632	3,632			1,071.44	463.08	608.36	0.00	608.36	81%	19%	163.79	1.00	\$3.09	\$1.16	\$0.36	\$0.00	10.0	0.0	\$19.43
1155	TRUE	Juvenile Probation Interior	1	0	HW	Hallway	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	3,632	3,632			406.78	152.54	254.24	0.00	254.24	81%	19%	68.45	0.42	\$1.21	\$1.16	\$0.48	\$0.00	10.0	0.0	\$1.89
1156	TRUE	Juvenile Probation Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1157	TRUE	Juvenile Probation Interior	1	0	ME	Mechanical/Electrical Rooms	1	4S	2X34T12MB	1	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", 5S lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.07	50%	0.02	0.03	400	400			28.80	8.40	20.40	0.00	20.40	81%	19%	5.49	0.03	\$0.14	\$0.14	\$0.03	\$0.00	10.0	0.0	\$0.26
1158	TRUE	Juvenile Probation Interior	1	0	HW	Hallway	10	B	2X32T8U6EBN	10	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.59	90%	0.26	0.30	3,632	3,632			2,142.88	926.16	1,216.72	0.00	1,216.72	81%	19%	327.58	2.00	\$3.09	\$1.16	\$0.36	\$0.00	10.0	0.0	\$38.86
1159	TRUE	Juvenile Probation Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1160	TRUE	Juvenile Probation Interior	1	0	BR	Break room	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,731	2,731			611.74	229.40	382.34	0.00	382.34	81%	19%	102.94	0.63	\$0.91	\$0.87	\$0.36	\$0.00	10.0	0.0	\$2.84
1161	TRUE	Juvenile Probation Interior	1	0	RR	Restroom	4	C	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,790	3,790			879.28	318.36	560.92	0.00	560.92	81%	19%	151.02	0.92	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$6.37
1162	TRUE	Juvenile Probation Interior	1	0	RR	Restroom	4	C	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,790	3,790			879.28	318.36	560.92	0.00	560.92	81%	19%	151.02	0.92	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$6.37
1163	TRUE	Juvenile Probation Interior	1	0	HW	Hallway	2	B	2X32T8U6EBN	2	KIT	B	3X2FTLEDTYPEB	B8U	59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.12	90%	0.05	0.06	3,632	3,632			428.58	185.23	243.34	0.00	243.34	81%	19%	65.52	0.40	\$3.09	\$1.16	\$0.36	\$0.00	10.0	0.0	\$7.77
1164	TRUE	Juvenile Probation Interior	1	0	HW	Hallway	2	B	2X32T8U6EBN	2	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB8BU	25.5	2	90%	0.12	90%	0.05	0.06	3,632	3,632			428.58	185.23	243.34	0.00	243.34	81%	19%	65.52	0.40	\$3.09	\$1.16	\$0.36	\$0.00	10.0	0.0	\$7.77
1165	TRUE	Juvenile Probation Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1166	TRUE	Juvenile Probation Interior	1	0	ST	Storage	1	4W	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
1167	TRUE	Juvenile Probation Interior	1	0	ST	Storage	1	4S	2X34T12MB	1	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", 5S lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.07	90%	0.02	0.05	1,200	1,200			86.40	25.20	61.20	0.00	61.20	81%	19%	16.48	0.10	\$0.42	\$0.43	\$0.08	\$0.00	10.0	0.0	\$0.77
1168	TRUE	Juvenile Probation Interior	1	0	ST	Storage	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,200	1,200			139.20	50.40	88.80	0.00	88.80	81%	19%	23.91	0.15	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$1.01
1169	TRUE	Juvenile Probation Interior	1	0	CL	Classroom	12	A	4X32T8EBN	12	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	1.34	90%	0.50	0.76	1,880	1,880			2,526.72	947.52	1,579.20	0.00	1,579.20	81%	19%	425.17	2.59	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$11.73
1170	TRUE	Juvenile Probation Interior	1	0	CR	Conference Room	17	A	4X32T8EBN	17	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	1.90	90%	0.71	1.07	1,830	1,830			3,484.32	1,306.62	2,177.70	0.00	2,177.70	81%	19%	586.30	3.57	\$0.61	\$0.59	\$0.24	\$0.00	10.0	0.0	\$16.18
1171	TRUE	Juvenile Probation Interior	1	0	ME	Mechanical/Electrical Rooms	1	4W	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	400	400			23.20	8.40	14.80	0.00	14.80	81%	19%	3.98	0.02	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.17
1172	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1186	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,571	2,571			1,151.81	431.93	719.88	0.00	719.88	81%	19%	193.81	1.18	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$5.35
1187	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,571	2,571			1,151.81	431.93	719.88	0.00	719.88	81%	19%	193.81	1.18	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$5.35
1188	TRUE	Juvenile Probation Interior	1	0	HW	Hallway	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	3,632	3,632			1,627.14	610.18	1,016.96	0.00	1,016.96	81%	19%	273.80	1.67	\$1.21	\$1.16	\$0.48	\$0.00	10.0	0.0	\$7.55
1189	TRUE	Juvenile Probation Interior	1	0	ST	Storage	1	4W	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.05	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
1190	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,571	2,571			1,151.81	431.93	719.88	0.00	719.88	81%	19%	193.81	1.18	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$5.35
1191	TRUE	Juvenile Probation Interior	1	0	ST	Storage	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	1,200	1,200			134.40	50.40	84.00	0.00	84.00	81%	19%	22.62	0.14	\$0.40	\$0.38	\$0.16	\$0.00	10.0	0.0	\$0.62
1192	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,571	2,571			575.90	215.96	359.94	0.00	359.94	81%	19%	96.91	0.59	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$2.67
1193	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,571	2,571			575.90	215.96	359.94	0.00	359.94	81%	19%	96.91	0.59	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$2.67
1194	TRUE	Juvenile Probation Interior	1	0	OO	Open Office	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	2,991	2,991			2,679.94	1,004.98	1,674.96	0.00	1,674.96	81%	19%	450.95	2.75	\$1.00	\$0.96	\$0.40	\$0.00	10.0	0.0	\$12.44
1195	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	4	A-VANDAL	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,571	2,571			1,151.81	431.93	719.88	0.00	719.88	81%	19%	193.81	1.18	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$5.35
1196	TRUE	Juvenile Probation Interior	1	0	PO	Private Office	4	A-VANDAL	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,571	2,571			1,151.81	431.93	719.88	0.00	719.88	81%	19%	193.81	1.18	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$5.35
1197	TRUE	Juvenile Probation Exterior	1	0	E	Exterior	4	12RCSQ	1X60INCA	4	LAMP		1X9LEDSI		60	1	Relamp - Incandescent, (1) 60W lamp, w/ Light Emitting Diode (LED) Screw-in Lamp, 9W, with Integrated Driver Component, 9LEDSI	9	1	10%	0.24	10%	0.04	0.02	4,380	4,380			1,051.20	157.68	893.52	0.00	893.52	81%	19%	0.00	0.00	\$2.48	\$0.00	\$1.05	\$0.00	5.0	0.0	\$5.72
1198	TRUE	Juvenile Probation Exterior		0	E	Exterior	3	POLESB	2X250MH	3	IN	POLESB	2XLED-F-POLESB-MEDIUM	5WQ	590	1	New/ Replacement Fixture - Pole-Mounted Shoebox Fixture, Metal Halide, (2) 250W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, (2) LED Shoebox Medium, 74LED5WQ	148	2	10%	1.77	10%	0.44	0.13	4,380	4,380			7,752.60	1,944.72	5,807.88	0.00	5,807.88	81%	19%	0.00	0.00	\$10.51	\$8.76	\$2.21	\$1.46	5.0	5.0	\$46.83
1199	TRUE	Vehicle Maintenance Interior	1	0	LO	Lobby/Entry Vestibule	5	B	2X32T8U6EBN	5	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.30	90%	0.13	0.15	3,401	3,401			1,003.30	433.63	569.67	0.00	569.67	81%	19%	153.37	0.94	\$2.89	\$1.09	\$0.34	\$0.00	10.0	0.0	\$18.20
1200	TRUE	Vehicle Maintenance Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1201	TRUE	Vehicle Maintenance Interior	1	0	OO	Open Office	9	B	2X32T8U6EBN	9	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.53	90%	0.23	0.27	2,991	2,991			1,588.22	686.43	901.79	0.00	901.79	81%	19%	242.79	1.48	\$2.54	\$0.96	\$0.30	\$0.00	10.0	0.0	\$28.80
1202	TRUE	Vehicle Maintenance Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1203	TRUE	Vehicle Maintenance Interior	1	0	ST	Storage	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.05	90%	0.03	0.03	1,200	1,200			70.80	30.60	40.20	0.00	40.20	81%	19%	10.82	0.07	\$1.02	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.28
1204	TRUE	Vehicle Maintenance Interior	1	0	PO	Private Office	6	B	2X32T8U6EBN	6	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.35	90%	0.15	0.18	2,571	2,571			910.13	393.36	516.77	0.00	516.77	81%	19%	139.13	0.85	\$2.19	\$0.82	\$0.26	\$0.00	10.0	0.0	\$16.51
1205	TRUE	Vehicle Maintenance Interior	1	0	ST	Storage	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.06	90%	0.03	0.03	1,200	1,200			70.80	30.60	40.20	0.00	40.20	81%	19%	10.82	0.07	\$1.02	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.28
1206	TRUE	Vehicle Maintenance Interior	1	0	HW	Hallway	2	B	2X32T8U6EBN	2	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.12	90%	0.05	0.06	3,632	3,632			428.58	185.23	243.34	0.00	243.34	81%	19%	65.52	0.40	\$3.09	\$1.16	\$0.36	\$0.00	10.0	0.0	\$7.77
1207	TRUE	Vehicle Maintenance Interior	1	0	CR	Conference Room	6	B	2X32T8U6EBN	6	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.35	90%	0.15	0.18	1,830	1,830			647.82	279.99	367.83	0.00	367.83	81%	19%	99.03	0.60	\$1.56	\$0.59	\$0.18	\$0.00	10.0	0.0	\$11.75
1208	TRUE	Vehicle Maintenance Interior	1	0	ME	Mechanical/Electrical Rooms	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	50%	0.06	50%	0.03	0.02	400	400			23.60	10.20	13.40	0.00	13.40	81%	19%	3.61	0.02	\$0.34	\$0.13	\$0.04	\$0.00	10.0	0.0	\$0.43
1209	TRUE	Vehicle Maintenance Interior	1	0	HW	Hallway	5	B	2X32T8U6EBN	5	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.30	90%	0.13	0.15	3,632	3,632			1,071.44	463.08	608.36	0.00	608.36	81%	19%	163.79	1.00	\$3.09	\$1.16	\$0.36	\$0.00	10.0	0.0	\$19.43
1210	TRUE	Vehicle Maintenance Interior	1	0	OS	Office Support (copy room, coffee room, etc)	4	B	2X32T8U6EBN	4	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.24	90%	0.10	0.12	2,040	2,040			481.44	208.08	273.36	0.00	273.36	81%	19%	73.60	0.45	\$1.73	\$0.65	\$0.20	\$0.00	10.0	0.0	\$8.73
1211	TRUE	Vehicle Maintenance Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1212	TRUE	Vehicle Maintenance Interior	1	0	LO	Lobby/Entry Vestibule	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	3,401	3,401			761.82	285.68	476.14	0.00	476.14	81%	19%	128.19	0.78	\$1.13	\$1.09	\$0.45	\$0.00	10.0	0.0	\$3.54
1213	TRUE	Vehicle Maintenance Interior	1	0	X	Exit Signs	1	EXIT	2X10																																			

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings		
1229	TRUE	Vehicle Maintenance Interior	1	0	WS	Workshop	37	4I	2X34T12MB	37	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", ES lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	2.66	90%	0.78	1.70	1,301	1,301			3,465.86	1,010.88	2,454.99	0.00	2,454.99	81%	19%	660.96	4.03	\$0.46	\$0.47	\$0.09	\$0.00	\$0.00	10.0	0.0	\$30.97
1230	TRUE	Vehicle Maintenance Interior	1	0	WS	Workshop	8	HB	1X400MH	8	IN	HB-ROUND	1XLEDf-HB-ROUND-HIGH		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ 197W LED Round High bay, 197LEDF	197	2	90%	3.66	90%	1.58	1.88	1,301	1,301			4,766.86	2,050.38	2,716.49	0.00	2,716.49	81%	19%	731.36	4.46	\$1.17	\$1.56	\$0.93	\$0.61	5.0	5.0	\$9.53	
1231	TRUE	Vehicle Maintenance Interior	1	0	X	Exit Signs	1	EXIT	2X10NCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)	
1232	TRUE	Vehicle Maintenance Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59	
1233	TRUE	Vehicle Maintenance Interior	2	0	ST	Storage	6	8S	4X34T12MB2	6	RET		4X4FTLEDTYPEB		144	1	Retrofit - 8' Strip Fixture, Fluorescent, (4) 48", ES lamps, w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.86	90%	0.25	0.55	1,200	1,200			1,036.80	302.40	734.40	0.00	734.40	81%	19%	197.72	1.21	\$0.84	\$0.86	\$0.16	\$0.00	10.0	0.0	\$9.26	
1234	TRUE	Vehicle Maintenance Interior	1	0	WS	Workshop	8	4I	2X54TSHOEHBPS	8	RET		2X4FTLEDTYPEB-TSHO		117	1	Retrofit - 4' Industrial Fixture, Fluorescent (2) 45.8" T-5 HO lamps, (1) PRS Electronic Ballast, HLO (.95 < BF < 1.1), w/ LED Tube, (2) 48", 25W LED TSHO Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-TSHO	50	2	90%	0.94	90%	0.40	0.48	1,301	1,301			1,217.74	520.40	697.34	0.00	697.34	81%	19%	187.74	1.14	\$0.43	\$0.94	\$0.09	\$0.00	10.0	0.0	\$10.27	
1235	TRUE	Vehicle Maintenance Interior	1	0	WS	Workshop	4	HB	1X400MH	4	IN	HB-ROUND	1XLEDf-HB-ROUND-HIGH		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ 197W LED Round High bay, 197LEDF	197	2	90%	1.83	90%	0.79	0.94	1,301	1,301			2,383.43	1,025.19	1,358.24	0.00	1,358.24	81%	19%	365.68	2.23	\$1.17	\$1.56	\$0.93	\$0.61	5.0	5.0	\$4.76	
1236	TRUE	Vehicle Maintenance Interior	1	0	X	Exit Signs	1	EXIT	2X10NCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)	
1237	TRUE	Vehicle Maintenance Interior	1	0	PO	Private Office	1	B	2X32T8U6EBN	1	KIT	8	3X2FTLEDTYPEB		59	1	Retrofit with a kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.06	90%	0.03	0.03	2,571	2,571			151.69	65.56	86.13	0.00	86.13	81%	19%	23.19	0.14	\$2.19	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.75	
1238	TRUE	Vehicle Maintenance Interior	1	0	WS	Workshop	1	WP	1X175MH	1	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	90%	0.22	90%	0.05	0.15	1,301	1,301			279.72	63.75	215.97	0.00	215.97	81%	19%	58.14	0.35	\$1.69	\$0.91	\$0.24	\$0.16	7.0	7.0	\$2.21	
1239	TRUE	Vehicle Maintenance Interior	1	0	WS	Workshop	17	4I	2X34T12MB	17	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", ES lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	1.22	90%	0.36	0.78	1,301	1,301			1,592.42	464.46	1,127.97	0.00	1,127.97	81%	19%	303.68	1.85	\$0.46	\$0.47	\$0.09	\$0.00	10.0	0.0	\$14.23	
1240	TRUE	Vehicle Maintenance Interior	1	0	WS	Workshop	3	HB	1X400MH	3	IN	HB-ROUND	1XLEDf-HB-ROUND-HIGH		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ 197W LED Round High bay, 197LEDF	197	2	90%	1.37	90%	0.59	0.70	1,301	1,301			1,787.57	768.89	1,018.68	0.00	1,018.68	81%	19%	274.26	1.67	\$1.17	\$1.56	\$0.93	\$0.61	5.0	5.0	\$3.57	
1241	TRUE	Vehicle Maintenance Exterior	1	0	E	Exterior	4	WP	1X175MH	4	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.86	10%	0.20	0.07	4,380	4,380			3,766.80	858.48	2,908.32	0.00	2,908.32	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$29.72	
1242	TRUE	Vehicle Maintenance Interior	1	0	ME	Mechanical/Electrical Rooms	6	4S	2X34T12MB	6	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", ES lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.43	50%	0.13	0.15	400	400			172.80	50.40	122.40	0.00	122.40	81%	19%	32.95	0.20	\$0.14	\$0.14	\$0.03	\$0.00	10.0	0.0	\$1.54	
1243	TRUE	Vehicle Maintenance Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86	
1244	TRUE	Vehicle Maintenance Exterior	1	0	E	Exterior	4	WP	1X175MH	4	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.86	10%	0.20	0.07	4,380	4,380			3,766.80	858.48	2,908.32	0.00	2,908.32	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$29.72	
1245	TRUE	Vehicle Maintenance Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86	
1246	TRUE	Vehicle Maintenance Exterior	1	0	E	Exterior	6	CPY	1X175MH	6	IN	CPY	1X56LEDF		215	1	New/ Replacement Fixture - Exterior Canopy Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Canopy Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 56W, with Separate or Integrated Driver Component, 56LEDF	56	1	10%	1.29	10%	0.34	0.10	4,380	4,380			5,650.20	1,471.68	4,178.52	0.00	4,178.52	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.92	\$0.60	7.0	7.0	\$43.44	
1247	TRUE	Vehicle Maintenance Exterior	1	0	E	Exterior	8	CPY	1X175MH	8	IN	CPY	1X56LEDF		215	1	New/ Replacement Fixture - Exterior Canopy Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Canopy Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 56W, with Separate or Integrated Driver Component, 56LEDF	56	1	10%	1.72	10%	0.45	0.13	4,380	4,380			7,533.60	1,962.24	5,571.36	0.00	5,571.36	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.92	\$0.60	7.0	7.0	\$57.92	
1248	TRUE	Vehicle Maintenance Interior	1	0	ST	Storage	2	8S	2X95T12HOMB	2	KIT	8S	4X4FTLEDTYPEB-HO		227	1	Retrofit with a kit or Reflector - 8' Strip Fixture, Fluorescent, (2) 96", ES HO lamps, w/ 8' Strip Fixture, LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	0.45	90%	0.12	0.30	1,200	1,200			544.80	144.00	400.80	0.00	400.80	81%	19%	107.91	0.66	\$1.10	\$0.96	\$0.16	\$0.00	10.0	0.0	\$3.80	
1249	TRUE	Sienna Annex Interior	2	HIGHER	HW	Hallway	14	4DI	4X32T8EBN	14	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 4' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	1.57	90%	0.84	0.66	5,085	5,085			7,972.97	4,271.23	3,701.73	0.00	3,701.73	81%	19%	996.62	6.08	\$1.69	\$1.63	\$0.68	\$0.00	10.0	0.0	\$37.02	
1250	TRUE	Sienna Annex Interior	2	HIGHER	HW	Hallway	5	6RC	1X26GFL4P	5	KIT	6RC	1XLEDf-6RC		29	1	Retrofit with a kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.15	90%	0.08	0.06	5,085	5,085			737.30	381.36	355.94	0.00	355.94	81%	19%	95.83	0.58	\$1.65	\$2.54	\$0.71	\$0.23	5.0	5.0	\$16.24	
1251	TRUE	Sienna Annex Interior	2	HIGHER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00	
1252	TRUE	Sienna Annex Interior	2	HIGHER	SW	Stairwell	4	4DI	4X32T8EBN	4	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 4' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	100%	0.45	100%	0.24	0.21	8,760	8,760			3,924.48	2,102.40	1,822.08	0.00	1,822.08	81%	19%	490.56	2.99	\$2.92	\$2.80	\$1.17	\$0.00	10.0	0.0	\$18.22	
1253	TRUE	Sienna Annex Interior	2	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	4	4I	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.23	50%	0.08	0.07	392	392	WS	Sensor: No Additional Description.	90.94	32.93	58.02	0.00	58.02	81%	19%	15.62	0.10	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.66	
1254	TRUE	Sienna Annex Interior	3	HIGHER	ME	Mechanical/Electrical Rooms	4	4I	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.23	50%	0.08	0.07	560	560			129.92	47.04	82.88	0.00	82.88	81%	19%	22.31	0.14	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.94	
1255	TRUE	Sienna Annex Interior	2	HIGHER	HW	Hallway	4	APB	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	5,085	5,085			1,810.19	640.68	1,169.50	0.00	1,169.50	81%	19%	314.87	1.92	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$9.56	
1256	TRUE	Sienna Annex Interior	2	HIGHER	HW	Hallway	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4																												

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Source Quality	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
1272	TRUE	Sienna Annex Interior	2	HIGHER	OO	Open Office	8	APB	2X32T8EBN	8	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.46	90%	0.17	0.27	4,187	4,187		Sensor: No Additional Description.	1,942.95	703.48	1,239.47	0.00	1,239.47	81%	19%	333.70	2.03	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$14.07
1273	TRUE	Sienna Annex Interior	2	HIGHER	OSAS	Office Support (copy room, coffee room, etc) Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,999	1,999	WS		355.86	125.95	229.91	0.00	229.91	81%	19%	61.90	0.38	\$0.50	\$0.64	\$0.20	\$0.00	10.0	0.0	\$1.88
1274	TRUE	Sienna Annex Interior	2	HIGHER	CL	Classroom	9	APB	2X32T8EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.52	90%	0.19	0.30	2,632	2,632			1,373.90	497.45	876.46	0.00	876.46	81%	19%	235.97	1.44	\$0.44	\$0.84	\$0.18	\$0.00	10.0	0.0	\$9.95
1275	TRUE	Sienna Annex Interior	2	HIGHER	CL	Classroom	9	APB	2X32T8EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.52	90%	0.19	0.30	2,632	2,632			1,373.90	497.45	876.46	0.00	876.46	81%	19%	235.97	1.44	\$0.44	\$0.84	\$0.18	\$0.00	10.0	0.0	\$9.95
1276	TRUE	Sienna Annex Interior	2	HIGHER	OO	Open Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	4,187	4,187			745.36	263.81	481.55	0.00	481.55	81%	19%	129.65	0.79	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$3.94
1277	TRUE	Sienna Annex Interior	2	HIGHER	HW	Hallway	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	5,085	5,085			1,357.64	480.51	877.13	0.00	877.13	81%	19%	236.15	1.44	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$7.17
1278	TRUE	Sienna Annex Interior	2	HIGHER	LQ	Living Quarters/Bunk Rooms	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	1,680	1,680			897.12	317.52	579.60	0.00	579.60	81%	19%	156.05	0.95	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$4.74
1279	TRUE	Sienna Annex Interior	2	HIGHER	SW	Stairwell	4	4DI	4X32T8EBN	4	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 4' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB-HO	60	2	100%	0.45	100%	0.24	0.21	8,760	8,760			3,924.48	2,102.40	1,822.08	0.00	1,822.08	81%	19%	490.56	2.99	\$2.92	\$2.80	\$1.17	\$0.00	10.0	0.0	\$18.22
1280	TRUE	Sienna Annex Interior	2	HIGHER	HW	Hallway	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
1281	TRUE	Sienna Annex Interior	2	HIGHER	MP	Multipurpose	11	A	3X32T8EBN	11	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.98	90%	0.35	0.57	2,961	2,961			2,898.82	1,025.99	1,872.83	0.00	1,872.83	81%	19%	504.22	3.07	\$0.74	\$0.95	\$0.30	\$0.00	10.0	0.0	\$15.31
1282	TRUE	Sienna Annex Interior	2	HIGHER	MP	Multipurpose	4	GRC	1X100INCA	4	KIT	6RC	1XLEDF-6RC		100	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Incandescent, (1) 100W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.40	90%	0.06	0.31	2,961	2,961			1,184.40	177.66	1,006.74	0.00	1,006.74	81%	19%	271.05	1.65	\$0.30	\$0.00	\$0.41	\$0.14	5.0	5.0	(\$1.02)
1283	TRUE	Sienna Annex Interior	2	HIGHER	KT	Kitchen	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,520	2,520			672.84	238.14	434.70	0.00	434.70	81%	19%	117.03	0.71	\$0.63	\$0.81	\$0.25	\$0.00	10.0	0.0	\$3.55
1284	TRUE	Sienna Annex Interior	2	HIGHER	RRAS	Restroom Already Sensored	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,714	3,714	WS	Sensor: No Additional Description.	330.56	117.00	213.57	0.00	213.57	81%	19%	57.50	0.35	\$0.93	\$1.19	\$0.37	\$0.00	10.0	0.0	\$1.75
1285	TRUE	Sienna Annex Interior	2	HIGHER	OSAS	Office Support (copy room, coffee room, etc) Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,999	1,999	WS	Sensor: No Additional Description.	177.93	62.97	114.95	0.00	114.95	81%	19%	30.95	0.19	\$0.50	\$0.64	\$0.20	\$0.00	10.0	0.0	\$0.94
1286	TRUE	Sienna Annex Interior	2	HIGHER	LQ	Living Quarters/Bunk Rooms	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,680	1,680			149.52	52.92	96.60	0.00	96.60	81%	19%	26.01	0.16	\$0.42	\$0.54	\$0.17	\$0.00	10.0	0.0	\$0.79
1287	TRUE	Sienna Annex Interior	2	HIGHER	PO	Private Office	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	3,599	3,599			961.04	340.14	620.90	0.00	620.90	81%	19%	167.16	1.02	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$5.08
1288	TRUE	Sienna Annex Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.18	50%	0.06	0.06	1,176	1,176	WS	Sensor: No Additional Description.	209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
1289	TRUE	Sienna Annex Interior	2	HIGHER	STAS	Storage Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.18	50%	0.06	0.06	1,176	1,176	WS	Sensor: No Additional Description.	209.33	74.09	135.24	0.00	135.24	81%	19%	36.41	0.22	\$0.29	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.11
1290	TRUE	Sienna Annex Interior	2	HIGHER	CL	Classroom	9	APB	2X32T8EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.52	90%	0.19	0.30	2,632	2,632			1,373.90	497.45	876.46	0.00	876.46	81%	19%	235.97	1.44	\$0.44	\$0.84	\$0.18	\$0.00	10.0	0.0	\$9.95
1291	TRUE	Sienna Annex Interior	2	HIGHER	CL	Classroom	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,632	2,632			305.31	110.54	194.77	0.00	194.77	81%	19%	52.44	0.32	\$0.44	\$0.84	\$0.18	\$0.00	10.0	0.0	\$2.21
1292	TRUE	Sienna Annex Interior	2	HIGHER	CL	Classroom	9	APB	2X32T8EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.52	90%	0.19	0.30	2,632	2,632			1,373.90	497.45	876.46	0.00	876.46	81%	19%	235.97	1.44	\$0.44	\$0.84	\$0.18	\$0.00	10.0	0.0	\$9.95
1293	TRUE	Sienna Annex Interior	2	HIGHER	MP	Multipurpose	9	APB	2X32T8EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.52	90%	0.19	0.30	2,961	2,961			1,545.64	559.63	986.01	0.00	986.01	81%	19%	265.47	1.62	\$0.49	\$0.95	\$0.20	\$0.00	10.0	0.0	\$11.19
1294	TRUE	Sienna Annex Interior	2	HIGHER	HW	Hallway	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,085	5,085			589.84	213.56	376.28	0.00	376.28	81%	19%	101.30	0.62	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$4.27
1295	TRUE	Sienna Annex Interior	2	HIGHER	RRAS	Restroom Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,714	3,714	WS	Sensor: No Additional Description.	661.13	233.99	427.13	0.00	427.13	81%	19%	115.00	0.70	\$0.93	\$1.19	\$0.37	\$0.00	10.0	0.0	\$3.49
1296	TRUE	Sienna Annex Interior	2	HIGHER	RR	Restroom	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	5,306	5,306			307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$2.23
1297	TRUE	Sienna Annex Interior	2	HIGHER	LRAS	Locker Room Already Sensored	1	APB	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,136	3,136	WS	Sensor: No Additional Description.	279.10	98.78	180.32	0.00	180.32	81%	19%	48.55	0.30	\$0.78	\$1.00	\$0.31	\$0.00			

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1312	TRUE	Sienna Annex Interior	1	HIGHER	X	Exit Signs	1	EXIT	1XALEDXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1313	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	18	GRC	1X2GCF4P	18	KIT	6RC	1XLED-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit GIN. SET WATTAGE TO 15W. HIGH SETTING, 1X1SLED-6RC	15	2	90%	0.52	90%	0.27	0.23	5,085	5,085			2,654.27	1,372.90	1,281.37	0.00	1,281.37	81%	19%	344.98	2.10	\$1.65	\$2.54	\$0.71	\$0.23	5.0	5.0	\$58.47
1314	TRUE	Sienna Annex Interior	1	HIGHER	X	Exit Signs	3	EXIT	1XALEDXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1315	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	67	4DI	4X32T8BN	67	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 4' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	7.50	90%	4.02	3.14	5,085	5,085			38,156.34	20,440.90	17,715.44	0.00	17,715.44	81%	19%	4,769.54	29.08	\$1.69	\$1.63	\$0.68	\$0.00	10.0	0.0	\$177.15
1316	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	11	FL-UP	1X175MH	11	KIT	ALD	1XLEDLOCK-LOW	WHITE	215	1	Retrofit with a Kit or Reflector - Metal Halide, (1) 175W lamp, Magnetic ballast, w/ LED RETROFIT KIT LOWER WATTAGE - POLE DECORATIVE, 52LEDWHITE	60	2	90%	2.37	90%	0.66	1.53	5,085	5,085			12,025.55	3,355.97	8,669.58	0.00	8,669.58	81%	19%	2,334.12	14.23	\$6.61	\$3.56	\$1.02	\$0.41	10.0	10.0	\$96.20
1317	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	20	4WM-DEC	2X32T8BN	20	RET		2X4FTLEDTYPEB		58	1	Retrofit - Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	1.16	90%	0.42	0.67	5,085	5,085			5,898.37	2,135.62	3,762.75	0.00	3,762.75	81%	19%	1,013.05	6.18	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$42.71
1318	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	1	APB	3X32T8BN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,085	5,085			452.55	160.17	292.38	0.00	292.38	81%	19%	78.72	0.48	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$2.39
1319	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	7	GRC	1X2GCF4P	7	KIT	6RC	1XLED-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit GIN. SET WATTAGE TO 15W. HIGH SETTING, 1X1SLED-6RC	15	2	90%	0.20	90%	0.11	0.09	5,085	5,085			1,032.21	533.90	498.31	0.00	498.31	81%	19%	134.16	0.82	\$1.65	\$2.54	\$0.71	\$0.23	5.0	5.0	\$22.74
1320	TRUE	Sienna Annex Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensor	4	4I	2X32T8BN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.23	50%	0.08	0.07	392	392	WS	Sensor: No Additional Description.	90.94	32.93	58.02	0.00	58.02	81%	19%	15.62	0.10	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.66
1321	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	8	APB	3X32T8BN	8	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.71	90%	0.25	0.41	5,085	5,085			3,620.38	1,281.37	2,339.01	0.00	2,339.01	81%	19%	629.73	3.84	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$19.12
1322	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	3	APB	3X32T8BN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	5,085	5,085			1,357.64	480.51	877.13	0.00	877.13	81%	19%	236.15	1.44	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$7.17
1323	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	8	4DI	4X32T8BN	8	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 4' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	0.90	90%	0.48	0.37	5,085	5,085			4,555.98	2,440.70	2,115.28	0.00	2,115.28	81%	19%	569.50	3.47	\$1.69	\$1.63	\$0.68	\$0.00	10.0	0.0	\$21.15
1324	TRUE	Sienna Annex Interior	1	HIGHER	X	Exit Signs	2	EXIT	1XALEDXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1325	TRUE	Sienna Annex Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	15	4I	2X32T8BN	15	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.87	90%	0.32	0.50	2,856	2,856			2,484.72	899.64	1,585.08	0.00	1,585.08	81%	19%	426.75	2.60	\$0.48	\$0.91	\$0.19	\$0.00	10.0	0.0	\$17.99
1326	TRUE	Sienna Annex Interior	1	HIGHER	X	Exit Signs	1	EXIT	1XALEDXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1327	TRUE	Sienna Annex Interior	1	HIGHER	ST	Storage	1	4I	2X32T8BN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1328	TRUE	Sienna Annex Interior	1	HIGHER	ST	Storage	2	2W	2X17T8BN	2	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2' Wrap Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	90%	0.07	90%	0.03	0.03	1,680	1,680			110.88	57.12	53.76	0.00	53.76	81%	19%	14.47	0.09	\$0.35	\$0.47	\$0.11	\$0.00	10.0	0.0	\$1.42
1329	TRUE	Sienna Annex Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensor	3	4I	2X32T8BN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.17	50%	0.06	0.06	392	392	WS	Sensor: No Additional Description.	68.21	24.70	43.51	0.00	43.51	81%	19%	11.71	0.07	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.49
1330	TRUE	Sienna Annex Interior	1	HIGHER	LO	Lobby/Entry Vestibule	2	APB	3X32T8BN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	4,761	4,761			847.53	299.97	547.56	0.00	547.56	81%	19%	147.42	0.90	\$1.19	\$1.52	\$0.48	\$0.00	10.0	0.0	\$4.48
1331	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	4	APB	3X32T8BN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	5,085	5,085			1,810.19	640.68	1,169.50	0.00	1,169.50	81%	19%	314.87	1.92	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$9.56
1332	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	3X32T8BN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1333	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	3X32T8BN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1334	TRUE	Sienna Annex Interior	1	HIGHER	MP	Multipurpose	2	APB	3X32T8BN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,961	2,961			527.06	186.54	340.52	0.00	340.52	81%	19%	91.68	0.56	\$0.74	\$0.95	\$0.30	\$0.00	10.0	0.0	\$2.78
1335	TRUE	Sienna Annex Interior	1	HIGHER	CR	Conference Room	4	APB	2X32T8BN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,562	2,562			594.38	215.21	379.18	0.00	379.18	81%	19%	102.09	0.62	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$4.30
1336	TRUE	Sienna Annex Interior	1	HIGHER	OO	Open Office	6	A	1X30LED	6	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.18	90%	0.18	0.00	4,187	4,187			753.73	753.73	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.88	\$0.58	\$0.00	\$0.00	0.0	0.0	\$0.00
1337	TRUE	Sienna Annex Interior	1	HIGHER	CR	Conference Room	3	A	1X30LED	3	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.09	90%	0.09	0.00	2,562	2,562			230.58	230.58	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.54	\$0.35	\$0.00	\$0.00	0.0	0.0	\$0.00
1338	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	3	A	1X30LED	3	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.09	90%	0.09	0.00	3,599	3,599			323.95	323.95	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.76	\$0.50	\$0.00	\$0.00	0.0	0.0	\$0.00
1339	TRUE	Sienna Annex Interior	1	HIGHER	ST	Storage	9	APB	2X32T8BN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 1																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
1355	TRUE	Sienna Annex Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.18	50%	0.06	0.06	392	392	WS	Sensor: No Additional Description.	69.78	24.70	45.08	0.00	45.08	81%	19%	12.14	0.07	\$0.10	\$0.13	\$0.04	\$0.00	10.0	0.0	\$0.37
1356	TRUE	Sienna Annex Interior	1	HIGHER	OO	Open Office	9	APB	2X32T8EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.52	90%	0.19	0.30	4,187	4,187			2,185.82	791.42	1,394.40	0.00	1,394.40	81%	19%	375.42	2.29	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$15.83
1357	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	1	GRC	1X26CFL4P	1	KIT	6RC	1XLED-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RC	15	2	90%	0.03	90%	0.02	0.01	5,085	5,085			147.46	76.27	71.19	0.00	71.19	81%	19%	19.17	0.12	\$1.65	\$2.54	\$0.71	\$0.23	5.0	5.0	\$3.25
1358	TRUE	Sienna Annex Interior	1	HIGHER	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,306	5,306			944.47	334.28	610.19	0.00	610.19	81%	19%	164.28	1.00	\$1.33	\$1.70	\$0.53	\$0.00	10.0	0.0	\$4.99
1359	TRUE	Sienna Annex Interior	1	HIGHER	RR	Restroom	2	C	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,306	5,306			615.50	222.85	392.64	0.00	392.64	81%	19%	105.71	0.64	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$4.46
1360	TRUE	Sienna Annex Interior	1	HIGHER	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,306	5,306			944.47	334.28	610.19	0.00	610.19	81%	19%	164.28	1.00	\$1.33	\$1.70	\$0.53	\$0.00	10.0	0.0	\$4.99
1361	TRUE	Sienna Annex Interior	1	HIGHER	RR	Restroom	2	C	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	5,306	5,306			615.50	222.85	392.64	0.00	392.64	81%	19%	105.71	0.64	\$0.88	\$1.70	\$0.35	\$0.00	10.0	0.0	\$4.46
1362	TRUE	Sienna Annex Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	1	4I	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	560	560			32.48	11.76	20.72	0.00	20.72	81%	19%	5.58	0.03	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.24
1363	TRUE	Sienna Annex Interior	1	HIGHER	STAS	Storage Already Sensored	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	1,176	1,176	WS	Sensor: No Additional Description.	68.21	24.70	43.51	0.00	43.51	81%	19%	11.71	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.49
1364	TRUE	Sienna Annex Interior	1	HIGHER	ST	Storage	6	APB	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	1,680	1,680			584.64	211.68	372.96	0.00	372.96	81%	19%	100.41	0.61	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$4.23
1365	TRUE	Sienna Annex Interior	1	HIGHER	CR	Conference Room	8	APB	2X32T8EBN	8	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.46	90%	0.17	0.27	2,562	2,562			1,188.77	430.42	758.35	0.00	758.35	81%	19%	204.17	1.24	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$8.61
1366	TRUE	Sienna Annex Interior	1	HIGHER	CR	Conference Room	8	APB	2X32T8EBN	8	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.46	90%	0.17	0.27	2,562	2,562			1,188.77	430.42	758.35	0.00	758.35	81%	19%	204.17	1.24	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$8.61
1367	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1368	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1369	TRUE	Sienna Annex Interior	1	HIGHER	OO	Open Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	4,187	4,187			745.36	263.81	481.55	0.00	481.55	81%	19%	129.65	0.79	\$1.05	\$1.34	\$0.42	\$0.00	10.0	0.0	\$3.94
1370	TRUE	Sienna Annex Interior	1	HIGHER	OO	Open Office	3	APB	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	4,187	4,187			728.61	263.81	464.80	0.00	464.80	81%	19%	125.14	0.76	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$5.28
1371	TRUE	Sienna Annex Interior	1	HIGHER	OO	Open Office	46	APB	2X32T8EBN	46	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	2.67	90%	0.97	1.53	4,187	4,187			11,171.98	4,045.03	7,126.95	0.00	7,126.95	81%	19%	1,918.80	11.70	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$80.90
1372	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1373	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1374	TRUE	Sienna Annex Interior	1	HIGHER	BR	Break room	4	APB	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,823	3,823			887.03	321.17	565.86	0.00	565.86	81%	19%	152.35	0.93	\$0.64	\$1.22	\$0.25	\$0.00	10.0	0.0	\$6.42
1375	TRUE	Sienna Annex Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	1	4I	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	560	560			32.48	11.76	20.72	0.00	20.72	81%	19%	5.58	0.03	\$0.09	\$0.18	\$0.04	\$0.00	10.0	0.0	\$0.24
1376	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1377	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1378	TRUE	Sienna Annex Interior	1	HIGHER	OO	Open Office	9	APB	2X32T8EBN	9	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.52	90%	0.19	0.30	4,187	4,187			2,185.82	791.42	1,394.40	0.00	1,394.40	81%	19%	375.42	2.29	\$0.70	\$1.34	\$0.28	\$0.00	10.0	0.0	\$15.83
1379	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1380	TRUE	Sienna Annex Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,856	2,856			331.30	119.95	211.34	0.00	211.34	81%	19%	56.90	0.35	\$0.48	\$0.91	\$0.19	\$0.00	10.0	0.0	\$2.40
1381	TRUE	Sienna Annex Interior	1	HIGHER	BR	Break room	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Lay																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1395	TRUE	Sienna Annex Interior	1	HIGHER	LO	Lobby/Entry Vestibule	3	APB	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	4,761	4,761			1,271.29	449.95	821.34	0.00	821.34	81%	19%	221.13	1.35	\$1.19	\$1.52	\$0.48	\$0.00	10.0	0.0	\$6.71
1396	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	6	APB	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	5,085	5,085			2,715.28	961.03	1,754.26	0.00	1,754.26	81%	19%	472.30	2.88	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$14.34
1397	TRUE	Sienna Annex Interior	1	HIGHER	HW	Hallway	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	5,085	5,085			905.09	320.34	584.75	0.00	584.75	81%	19%	157.43	0.96	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$4.78
1398	TRUE	Sienna Annex Interior	1	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1399	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	1	APB	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,599	3,599			208.77	75.59	133.18	0.00	133.18	81%	19%	35.86	0.22	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$1.51
1400	TRUE	Sienna Annex Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	APB	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.18	50%	0.06	0.06	392	392	WS	Sensor: No Additional Description.	69.78	24.70	45.08	0.00	45.08	81%	19%	12.14	0.07	\$0.10	\$0.13	\$0.04	\$0.00	10.0	0.0	\$0.37
1401	TRUE	Sienna Annex Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,856	2,856			331.30	119.95	211.34	0.00	211.34	81%	19%	56.90	0.35	\$0.48	\$0.91	\$0.19	\$0.00	10.0	0.0	\$2.40
1402	TRUE	Sienna Annex Interior	1	HIGHER	BR	Break room	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,823	3,823			443.51	160.58	282.93	0.00	282.93	81%	19%	76.17	0.46	\$0.64	\$1.22	\$0.25	\$0.00	10.0	0.0	\$3.21
1403	TRUE	Sienna Annex Interior	1	HIGHER	CR	Conference Room	10	APB	2X32T8EBN	10	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.58	90%	0.21	0.33	2,562	2,562			1,485.96	538.02	947.94	0.00	947.94	81%	19%	255.21	1.56	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$10.76
1404	TRUE	Sienna Annex Interior	1	HIGHER	ST	Storage	4	APB	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	1,680	1,680			389.76	141.12	248.64	0.00	248.64	81%	19%	66.94	0.41	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$2.82
1405	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1406	TRUE	Sienna Annex Interior	1	HIGHER	PO	Private Office	2	APB	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Parabolic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,599	3,599			417.53	151.17	266.36	0.00	266.36	81%	19%	71.71	0.44	\$0.60	\$1.15	\$0.24	\$0.00	10.0	0.0	\$3.02
1407	TRUE	Sienna Annex Exterior	1	0	E	Exterior	7	8RC	1X100INCA	7	KIT	8RC	1XLEDF-8RC		100	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Incandescent, (1) 100W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	10%	0.70	10%	0.13	0.06	4,380	4,380			3,066.00	582.54	2,483.46	0.00	2,483.46	81%	19%	0.00	0.00	\$0.44	\$0.00	\$0.74	\$0.24	5.0	5.0	(\$3.78)
1408	TRUE	Sienna Annex Exterior	1	0	E	Exterior	7	8RC	1X100INCA	7	KIT	8RC	1XLEDF-8RC		100	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Incandescent, (1) 100W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	10%	0.70	10%	0.13	0.06	4,380	4,380			3,066.00	582.54	2,483.46	0.00	2,483.46	81%	19%	0.00	0.00	\$0.44	\$0.00	\$0.74	\$0.24	5.0	5.0	(\$3.78)
1409	TRUE	Sienna Annex Exterior	1	0	E	Exterior	1	WS	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - Wall Sconce Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	10%	0.03	10%	0.02	0.00	4,380	4,380			144.54	74.46	70.08	0.00	70.08	81%	19%	0.00	0.00	\$0.91	\$1.23	\$0.29	\$0.00	10.0	0.0	\$1.85
1410	TRUE	Sienna Annex Exterior	1	0	E	Exterior	4	LB	1X60LED	4	NR				60	1	Lowbay Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 60W, with Separate or Integrated Driver Component - No Measure Recommended	60	-1	10%	0.24	10%	0.24	0.00	4,380	4,380			1,051.20	1,051.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.84	\$1.21	\$0.00	\$0.00	0.0	0.0	\$0.00
1411	TRUE	Kitty Hollow Park Interior	1	0	OO	Open Office	14	AV	2X32T8EBN	14	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.81	90%	0.29	0.47	2,991	2,991			2,428.69	879.35	1,549.34	0.00	1,549.34	81%	19%	417.13	2.54	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$17.59
1412	TRUE	Kitty Hollow Park Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1413	TRUE	Kitty Hollow Park Interior	1	0	ME	Mechanical/Electrical Rooms	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	400	400			46.40	16.80	29.60	0.00	29.60	81%	19%	7.97	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.34
1414	TRUE	Kitty Hollow Park Interior	1	0	ME	Mechanical/Electrical Rooms	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	400	400			23.20	8.40	14.80	0.00	14.80	81%	19%	3.98	0.02	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.17
1415	TRUE	Kitty Hollow Park Interior	1	0	HW	Hallway	7	AV	2X32T8EBN	7	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.41	90%	0.15	0.23	3,632	3,632			1,474.59	533.90	940.69	0.00	940.69	81%	19%	253.26	1.54	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$10.68
1416	TRUE	Kitty Hollow Park Interior	1	0	HW	Hallway	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
1417	TRUE	Kitty Hollow Park Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1418	TRUE	Kitty Hollow Park Interior	1	0	PO	Private Office	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,571	2,571			596.47	215.96	380.51	0.00	380.51	81%	19%	102.44	0.62	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$4.32
1419	TRUE	Kitty Hollow Park Interior	1	0	PO	Private Office	6	A	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	2,571	2,571			894.71	323.95	570.76	0.00	570.76	81%	19%	153.67	0.94	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$6.48
1420	TRUE	Kitty Hollow Park Interior	1	0	ST	Storage	4	A	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	1,200	1,200			278.40	100.80	177.60	0.00	177.60	81%	19%	47.82	0.29	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$2.02
1421	TRUE	Kitty Hollow Park Interior	1	0	RR	Restroom	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	3,790	3,790			659.46	238.77	420.69	0.00	420.69	81%	19%	113.26	0.69	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$4.78

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1436	TRUE	Kitty Hollow Park Interior	1	0	HW	Hallway	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	3,632	3,632			631.97	228.82	403.15	0.00	403.15	81%	19%	108.54	0.66	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$4.58
1437	TRUE	Kitty Hollow Park Interior	1	0	HW	Hallway	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
1438	TRUE	Kitty Hollow Park Interior	1	0	X	Exit Signs	1	EXIT	1X4LEEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1439	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	4	WP	1X30LEDF	4	NR				30	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	10%	0.12	10%	0.12	0.00	4,380	4,380			525.60	525.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.92	\$0.61	\$0.00	\$0.00	0.0	0.0	\$0.00
1440	TRUE	Kitty Hollow Park Interior	1	0	RRAS	Restroom Already Sensored	5	WP	1X20LEDF	5	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.10	90%	0.10	0.00	2,653	2,653	CS	Sensor: No Additional Description.	265.30	265.30	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.37	\$0.24	\$0.00	\$0.00	0.0	0.0	\$0.00
1441	TRUE	Kitty Hollow Park Interior	1	0	RRAS	Restroom Already Sensored	4	WP	1X20LEDF	4	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.08	90%	0.08	0.00	2,653	2,653	CS	Sensor: No Additional Description.	212.24	212.24	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.37	\$0.24	\$0.00	\$0.00	0.0	0.0	\$0.00
1442	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	3	WP	1X20LEDF	3	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	10%	0.06	10%	0.06	0.00	4,380	4,380			262.80	262.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
1443	TRUE	Kitty Hollow Park Interior	1	0	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
1444	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	2	SPORTS	2X1000MH	2	NR				2160	1	Metal Halide, (2) 1000W lamps, Magnetic ballasts - No Measure Recommended	2160	-1	10%	4.32	10%	4.32	0.00	4,380	4,380			18,921.60	18,921.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$14.60	\$17.52	\$0.00	\$0.00	0.0	0.0	\$0.00
1445	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	2	SPORTS	4X1000MH	2	NR				4320	1	Metal Halide, (4) 1000W lamps, Magnetic ballasts - No Measure Recommended	4320	-1	10%	8.64	10%	8.64	0.00	4,380	4,380			37,843.20	37,843.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$29.20	\$35.04	\$0.00	\$0.00	0.0	0.0	\$0.00
1446	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	1	SPORTS	6X1000MH	1	NR				1080	2	Metal Halide, (1) 1000W lamp, Magnetic ballast - No Measure Recommended	1080	-1	10%	1.08	10%	1.08	0.00	4,380	4,380			4,730.40	4,730.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$7.30	\$8.76	\$0.00	\$0.00	0.0	0.0	\$0.00
1447	TRUE	Kitty Hollow Park Interior	1	0	WS	Workshop	3	LB	1X175MH	3	IN	HB-ROUND	KLEDF-HB-ROUND-MEDIUM		215	1	New/ Replacement Fixture - Lowbay Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDF	153	2	90%	0.65	90%	0.46	0.17	1,301	1,301			839.15	597.16	241.99	0.00	241.99	81%	19%	65.15	0.40	\$1.69	\$0.91	\$0.93	\$0.61	5.0	5.0	\$3.18
1448	TRUE	Kitty Hollow Park Interior	1	0	WS	Workshop	1	LB	1X250MH	1	IN	HB-ROUND	KLEDF-HB-ROUND-MEDIUM		295	1	New/ Replacement Fixture - Lowbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDF	153	2	90%	0.30	90%	0.15	0.13	1,301	1,301			383.80	199.05	184.74	0.00	184.74	81%	19%	49.74	0.30	\$1.56	\$1.30	\$0.93	\$0.61	5.0	5.0	\$1.32
1449	TRUE	Kitty Hollow Park Interior	1	0	WS	Workshop	1	3S	1X25T12MB	1	RET		1X3FTLEDTYPEB		42	1	Retrofit - 3" Strip Fixture, Fluorescent, (1) 36", ES lamp, w/ LED Tube, (1) 36", 12W LED Tube, Line Voltage Type B Direct Wire, 1X3FTLEDTYPEB	12	2	90%	0.04	90%	0.01	0.03	1,301	1,301			54.64	15.61	39.03	0.00	39.03	81%	19%	10.51	0.06	\$0.16	\$0.39	\$0.04	\$0.00	10.0	0.0	\$0.50
1450	TRUE	Kitty Hollow Park Interior	1	0	WS	Workshop	2	8S	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8" Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	1,301	1,301			291.42	109.28	182.14	0.00	182.14	81%	19%	49.04	0.30	\$0.43	\$0.42	\$0.17	\$0.00	10.0	0.0	\$1.35
1451	TRUE	Kitty Hollow Park Interior	1	0	BR	Break room	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,731	2,731			1,223.49	458.81	764.68	0.00	764.68	81%	19%	205.88	1.26	\$0.91	\$0.87	\$0.36	\$0.00	10.0	0.0	\$5.68
1452	TRUE	Kitty Hollow Park Interior	1	0	RR	Restroom	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	3,790	3,790			424.48	159.18	265.30	0.00	265.30	81%	19%	71.43	0.44	\$1.26	\$1.21	\$0.51	\$0.00	10.0	0.0	\$1.97
1453	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	3	WP	1X20LEDF	3	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	10%	0.06	10%	0.06	0.00	4,380	4,380			262.80	262.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
1454	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
1455	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
1456	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
1457	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	5	POLEDEC	1X80LEDF	5	NR				80	1	Decorative Pole, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component - No Measure Recommended	80	-1	10%	0.40	10%	0.40	0.00	4,380	4,380			1,752.00	1,752.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.45	\$1.62	\$0.00	\$0.00	0.0	0.0	\$0.00
1458	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	4	FL	1X20LEDF	4	NR				20	1	Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	10%	0.08	10%	0.08	0.00	4,380	4,380			350.40	350.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
1459	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
1460	TRUE	Kitty Hollow Park Interior	1	0	RRAS	Restroom Already Sensored	2	4W	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,653	2,653	WS	Sensor: No Additional Description.	307.75	111.43	196.32	0.00	196.32	81%	19%	52.86	0.32	\$0.44	\$0.85	\$0.18	\$0.00	10.0	0.0	\$2.23
1461	TRUE	Kitty Hollow Park Exterior	1	0	E	Exterior	3	WP	1X20LEDF	3	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	10%	0.06	10%	0.06	0.00	4,380	4,380			262.80	262.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
1462	TRUE	Kitty Hollow Park Interior	1	0	ST	Storage	2	4W	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,200	1,200			139.20	50.40	88.80	0.00	88.80	81%	19%	23.91	0.15	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$1.01
1463	TRUE	Jake Dove Juvenile Interior	1	LOWER	OO	Open Office	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	1,795	1,795			958.32	339.18	619.14	0.00	619.14	81%	19%	166.69	1.02	\$0.45	\$0.57	\$0.18	\$0.00	10.0	0.0	\$5.06
1464	TRUE	Jake Dove Juvenile Interior	1	LOWER	HW	Hallway	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,179	2,179			581.85	205.93	375.91	0.00	375.91	8										

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1480	TRUE	Jake Dove Juvenile Interior	1	LOWER	CL	Classroom	8	A	3X32T8EBN	8	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.71	90%	0.25	0.41	1,128	1,128			803.14	284.26	518.88	0.00	518.88	81%	19%	139.70	0.85	\$0.28	\$0.36	\$0.11	\$0.00	10.0	0.0	\$4.24
1481	TRUE	Jake Dove Juvenile Interior	1	LOWER	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,274	2,274			202.39	71.63	130.76	0.00	130.76	81%	19%	35.20	0.21	\$0.57	\$0.73	\$0.23	\$0.00	10.0	0.0	\$1.07
1482	TRUE	Jake Dove Juvenile Interior	1	LOWER	PO	Private Office	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,543	1,543			411.87	145.78	266.10	0.00	266.10	81%	19%	71.64	0.44	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$2.18
1483	TRUE	Jake Dove Juvenile Interior	1	LOWER	PO	Private Office	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,543	1,543			411.87	145.78	266.10	0.00	266.10	81%	19%	71.64	0.44	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$2.18
1484	TRUE	Jake Dove Juvenile Interior	1	LOWER	OS	Office Support (copy room, coffee room, etc)	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,224	1,224			108.94	38.56	70.38	0.00	70.38	81%	19%	18.95	0.12	\$0.31	\$0.39	\$0.12	\$0.00	10.0	0.0	\$0.58
1485	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	720	720			64.08	22.68	41.40	0.00	41.40	81%	19%	11.15	0.07	\$0.18	\$0.23	\$0.07	\$0.00	10.0	0.0	\$0.34
1486	TRUE	Jake Dove Juvenile Interior	1	LOWER	PO	Private Office	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,543	1,543			411.87	145.78	266.10	0.00	266.10	81%	19%	71.64	0.44	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$2.18
1487	TRUE	Jake Dove Juvenile Interior	1	LOWER	PO	Private Office	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,543	1,543			411.87	145.78	266.10	0.00	266.10	81%	19%	71.64	0.44	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$2.18
1488	TRUE	Jake Dove Juvenile Exterior	1	O	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF	WIRE GUAR	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
1489	TRUE	Jake Dove Juvenile Exterior	1	O	E	Exterior	3	WP	1X175MH	3	IN	WP	1X49LEDF	WIRE GUAR	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	0.65	10%	0.15	0.05	4,380	4,380			2,825.10	643.86	2,181.24	0.00	2,181.24	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$22.29
1490	TRUE	Jake Dove Juvenile Exterior	1	O	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF	WIRE GUAR	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	0.43	10%	0.10	0.03	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
1491	TRUE	Jake Dove Juvenile Exterior	1	O	E	Exterior	3	WP	1X175MH	3	IN	WP	1X49LEDF	WIRE GUAR	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDFWIRE GUARD	49	1	10%	0.65	10%	0.15	0.05	4,380	4,380			2,825.10	643.86	2,181.24	0.00	2,181.24	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$22.29
1492	TRUE	Jake Dove Juvenile Interior	1	LOWER	HW	Hallway	4	B	1X20LEDF	4	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.08	90%	0.08	0.00	2,179	2,179			174.34	174.34	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.31	\$0.20	\$0.00	\$0.00	0.0	0.0	\$0.00
1493	TRUE	Jake Dove Juvenile Interior	1	LOWER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1494	TRUE	Jake Dove Juvenile Interior	1	LOWER	RR	Restroom	2	DR	1X20LEDF	2	NR				20	1	Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.04	90%	0.04	0.00	2,274	2,274			90.96	90.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.32	\$0.21	\$0.00	\$0.00	0.0	0.0	\$0.00
1495	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	2	DR	2X40INCA	2	IN	DR	1X11LEDF		80	2	New/ Replacement Fixture - Drum Fixture, Incandescent, (2) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.16	90%	0.02	0.12	720	720			115.20	15.84	99.36	0.00	99.36	81%	19%	26.75	0.16	\$0.82	\$0.00	\$0.03	\$0.02	7.0	7.0	\$1.53
1496	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	2	DR	1X20LEDF	2	NR				20	1	Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.04	90%	0.04	0.00	720	720			28.80	28.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.10	\$0.07	\$0.00	\$0.00	0.0	0.0	\$0.00
1497	TRUE	Jake Dove Juvenile Interior	1	LOWER	GYM	Gymnasium	16	CH	1X14LEDSI	16	NR				14	1	China Hat Fixture, Light Emitting Diode (LED) Screw-in Lamp, 14W, with Integrated Driver Component - No Measure Recommended	14	-1	90%	0.22	90%	0.22	0.00	1,632	1,632			365.57	365.57	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.91	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1498	TRUE	Jake Dove Juvenile Interior	1	LOWER	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1499	TRUE	Jake Dove Juvenile Interior	1	LOWER	MP	Multipurpose	4	DR	3X6LEDSI	4	IN	DR	1X11LEDF		18	2	New/ Replacement Fixture - Drum Fixture, (3) 6W LED Screw in lamps, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.07	90%	0.04	0.03	1,269	1,269			91.37	55.84	35.53	0.00	35.53	81%	19%	9.57	0.06	\$0.91	\$0.00	\$0.05	\$0.03	7.0	7.0	\$3.31
1500	TRUE	Jake Dove Juvenile Interior	1	LOWER	MP	Multipurpose	1	DR	2X40INCA	1	IN	DR	1X11LEDF		80	2	New/ Replacement Fixture - Drum Fixture, Incandescent, (2) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.08	90%	0.01	0.06	1,269	1,269			101.52	13.96	87.56	0.00	87.56	81%	19%	23.57	0.14	\$1.44	\$0.00	\$0.05	\$0.03	7.0	7.0	\$1.35
1501	TRUE	Jake Dove Juvenile Interior	1	LOWER	HW	Hallway	3	B	1X20LEDF	3	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.06	90%	0.06	0.00	2,179	2,179			130.75	130.75	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.31	\$0.20	\$0.00	\$0.00	0.0	0.0	\$0.00
1502	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	2	DR	2X40INCA	2	IN	DR	1X11LEDF		80	2	New/ Replacement Fixture - Drum Fixture, Incandescent, (2) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.16	90%	0.02	0.12	720	720			115.20	15.84	99.36	0.00	99.36	81%	19%	26.75	0.16	\$0.82	\$0.00	\$0.03	\$0.02	7.0	7.0	\$1.53
1503	TRUE	Jake Dove Juvenile Interior	1	LOWER	MP	Multipurpose	12	A	1X30LEDF	12	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.36	90%	0.36	0.00	1,269	1,269			456.84	456.84	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.27	\$0.18	\$0.00	\$0.00	0.0	0.0	\$0.00
1504	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	720	720			241.92	90.72	151.20	0.00	151.20	81%	19%	40.71	0.25	\$0.24	\$0.23	\$0.10	\$0.00	10.0	0.0	\$1.12
1505	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	720	720			322.56	120.96	201.60	0.00	201.60	81%	19%	54.28	0.33	\$0.24	\$0.23	\$0.10	\$0.00	10.0	0.0	\$1.50
1506	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	3	A	4X34T12MB2	3	RET		4X4FTLEDTYPEB		144	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", ES lamps, w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.43	90%	0.13	0.28	720	720			311.04	90.72	220.32	0.00	220.32	81%	19%	59.32	0.36	\$0.50	\$0.52	\$0.10	\$0.00	10.0	0.0	\$2.78
1507	TRUE	Jake Dove Juvenile Interior	1	LOWER	ST	Storage	3	6RC	1X7CFLSI	3	KIT	6RC	1XLEDF-6RC		7	1	Retrofit with a kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, (1) 7W screw-in lamp/base w/ permanent disk installed, any bulb shape, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit GIN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.02	90%	0.05	-0.02	720	720			15.12	32.40	(17.28)	0.00	(17.28)	81%	19%	(4.65)	-0.03	\$0.38	\$0.00	\$0.10	\$0.03	5.0	5.0	\$0.73
1508	TRUE	Jake Dove Juvenile Exterior	1	O	E	Exterior	3	DD	1X175MV	3	IN	DD	1XLEDF-DD		205	1	New/ Replacement Fixture - Dusk to Dawn Street & Area Fixture																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1521	TRUE	Jake Dove Juvenile Exterior	1	0	E	Exterior	1	FL	1X60LEDF	1	NR				60	1	Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 60W, with Separate or Integrated Driver Component - No Measure Recommended	60	-1	10%	0.06	10%	0.06	0.00	4,380	4,380			262.80	262.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.84	\$1.21	\$0.00	\$0.00	0.0	0.0	\$0.00
1522	TRUE	Jake Dove Juvenile Exterior	1	0	E	Exterior	4	BS	2X75T12EBN	4	KIT	BS	4X4FTLEDTYPEB-HO		134	1	Retrofit with a Kit or Reflector - 8' Strip Fixture, Fluorescent, (2) 96", STD lamps, w/ 8' Strip Fixture, LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPE-HO	60	2	10%	0.54	10%	0.24	0.03	4,380	4,380			2,347.68	1,051.20	1,296.48	0.00	1,296.48	81%	19%	0.00	0.00	\$2.30	\$2.19	\$0.58	\$0.00	10.0	0.0	\$15.62
1523	TRUE	Jake Dove Juvenile Exterior	1	0	E	Exterior	1	KL	1X20LEDSI	1	NR				20	1	Keyless Fixture, Light Emitting Diode (LED) Screw-in Lamp, 20W, with Integrated Driver Component - No Measure Recommended	20	-1	10%	0.02	10%	0.02	0.00	4,380	4,380			87.60	87.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.10	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1539	TRUE	Mustang Community Center Interior	1	LOWER	MP	Multipurpose	12	A	4X32T8EBN	12	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	1.34	90%	0.50	0.76	1,269	1,269			1,705.54	639.58	1,065.96	0.00	1,065.96	81%	19%	286.99	1.75	\$0.42	\$0.41	\$0.17	\$0.00	10.0	0.0	\$7.92
1540	TRUE	Mustang Community Center Interior	1	LOWER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1541	TRUE	Mustang Community Center Interior	1	LOWER	ST	Storage	2	4W	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	720	720			83.52	30.24	53.28	0.00	53.28	81%	19%	14.34	0.09	\$0.12	\$0.23	\$0.05	\$0.00	10.0	0.0	\$0.60
1542	TRUE	Mustang Community Center Interior	1	LOWER	KT	Kitchen	4	4W	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	1,080	1,080			250.56	90.72	159.84	0.00	159.84	81%	19%	43.03	0.26	\$0.18	\$0.35	\$0.07	\$0.00	10.0	0.0	\$1.81
1543	TRUE	Mustang Community Center Interior	1	LOWER	ST	Storage	2	KL	1X40INCA	2	LAMP		1X5LEDSI		40	1	ReLamp - Keyless Fixture, Incandescent, (1) 40W lamp, w/ Light Emitting Diode (LED) Screw-in Lamp, 5W, with Integrated Driver Component, 5LEDSI	5	1	90%	0.08	90%	0.01	0.06	720	720			57.60	7.20	50.40	0.00	50.40	81%	19%	13.57	0.08	\$0.41	\$0.00	\$0.10	\$0.00	5.0	0.0	\$0.62
1544	TRUE	Mustang Community Center Interior	1	LOWER	ST	Storage	2	4W	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	720	720			83.52	30.24	53.28	0.00	53.28	81%	19%	14.34	0.09	\$0.12	\$0.23	\$0.05	\$0.00	10.0	0.0	\$0.60
1545	TRUE	Mustang Community Center Interior	1	LOWER	MP	Multipurpose	12	A	3X32T8EBN	12	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.07	90%	0.38	0.62	1,269	1,269			1,355.29	479.68	875.61	0.00	875.61	81%	19%	235.74	1.44	\$0.32	\$0.41	\$0.13	\$0.00	10.0	0.0	\$7.16
1546	TRUE	Mustang Community Center Interior	1	LOWER	HW	Hallway	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,179	2,179			581.85	205.93	375.91	0.00	375.91	81%	19%	101.21	0.62	\$0.54	\$0.70	\$0.22	\$0.00	10.0	0.0	\$3.07
1547	TRUE	Mustang Community Center Interior	1	LOWER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1548	TRUE	Mustang Community Center Interior	1	LOWER	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,274	2,274			202.39	71.63	130.76	0.00	130.76	81%	19%	35.20	0.21	\$0.57	\$0.73	\$0.23	\$0.00	10.0	0.0	\$1.07
1549	TRUE	Mustang Community Center Interior	1	LOWER	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,274	2,274			202.39	71.63	130.76	0.00	130.76	81%	19%	35.20	0.21	\$0.57	\$0.73	\$0.23	\$0.00	10.0	0.0	\$1.07
1550	TRUE	Mustang Community Center Interior	1	LOWER	ME	Mechanical/Electrical Rooms	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.09	50%	0.03	0.03	240	240			21.36	7.56	13.80	0.00	13.80	81%	19%	3.72	0.02	\$0.06	\$0.08	\$0.02	\$0.00	10.0	0.0	\$0.11
1551	TRUE	Mustang Community Center Interior	1	LOWER	RR	Restroom	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	2,274	2,274			254.69	95.51	159.18	0.00	159.18	81%	19%	42.86	0.26	\$0.76	\$0.73	\$0.30	\$0.00	10.0	0.0	\$1.18
1552	TRUE	Mustang Community Center Interior	1	LOWER	RR	Restroom	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	2,274	2,274			254.69	95.51	159.18	0.00	159.18	81%	19%	42.86	0.26	\$0.76	\$0.73	\$0.30	\$0.00	10.0	0.0	\$1.18
1553	TRUE	Mustang Community Center Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.43	10%	0.09	0.03	4,380	4,380			1,883.40	411.72	1,471.68	0.00	1,471.68	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$14.97
1554	TRUE	Mustang Community Center Exterior	1	0	E	Exterior	2	WP-DOORPAC	2X13CF12P	2	IN	WP-DOORPAC	1X14LEDF		31	1	New/ Replacement Fixture - Compact Fluorescent, twin, (2) 13W lamps, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 14W, with Separate or Integrated Driver Component, 14LEDF	14	1	10%	0.06	10%	0.03	0.00	4,380	4,380			271.56	122.64	148.92	0.00	148.92	81%	19%	0.00	0.00	\$2.10	\$1.14	\$0.23	\$0.15	7.0	7.0	\$5.72
1555	TRUE	Mustang Community Center Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.43	10%	0.09	0.03	4,380	4,380			1,883.40	411.72	1,471.68	0.00	1,471.68	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$14.97
1556	TRUE	Mustang Community Center Exterior	1	0	E	Exterior	3	WP	1X175MH	3	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.65	10%	0.14	0.05	4,380	4,380			2,825.10	617.58	2,207.52	0.00	2,207.52	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$22.45
1557	TRUE	Mustang Community Center Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.43	10%	0.09	0.03	4,380	4,380			1,883.40	411.72	1,471.68	0.00	1,471.68	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$14.97
1558	TRUE	Mustang Community Center Exterior	1	0	E	Exterior	8	6RC	1X26CF14P	8	KIT	6RC	1XLED-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RC	15	2	10%	0.23	10%	0.12	0.01	4,380	4,380			1,016.16	525.60	490.56	0.00	490.56	81%	19%	0.00	0.00	\$1.42	\$2.19	\$0.61	\$0.20	5.0	5.0	\$22.39
1559	TRUE	Mustang Community Center Exterior		0	E	Exterior	2	POLE5B	3X250MH	2	IN	POLE5B	3XLED-POLE5B-MEDIUM 5WQ		885	1	New/ Replacement Fixture - Pole-Mounted Shoebox Fixture, Metal Halide, (3) 250W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, (3) LED Shoebox Medium, 74LED5WQ	222	2	10%	1.77	10%	0.44	0.13	4,380	4,380			7,752.60	1,944.72	5,807.88	0.00	5,807.88	81%	19%	0.00	0.00	\$15.77	\$13.14	\$3.31	\$2.18	5.0	5.0	\$46.83
1560	TRUE	Mustang Community Center Exterior	1	0	E	Exterior	4	HB	1X400MH	4	IN	HB-EXT	1X148LEDF		458	1	New/ Replacement Fixture - Highway Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 148W, with Separate or Integrated Driver Component, 148LEDF	148	1	10%	1.83	10%	0.59	0.12	4,380	4,380			8,024.16	2,592.96	5,431.20	0.00	5,431.20	81%	19%	0.00	0.00	\$3.94	\$5.26	\$2.42	\$1.60	7.0	7.0	\$20.73
1629	TRUE	Fort Bend Animal Services Building Interior	1	0	LO	Lobby/Entry Vestibule	2	A	4X34T12MB2	2	RET		4X4FTLEDTYPEB		144	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.29	90%	0.08	0.18	3,401	3,401			979.49	285.68	693.80	0.00	693.80	81%	19%	186.79	1.14	\$2.38	\$2.45	\$0.45	\$0.00	10.0	0.0	\$8.75
1630	TRUE	Fort Bend Animal Services Building Interior	1	0	X	Exit Signs	1	EXIT-COMBO	1X4LEDEXIT	1	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1631	TRUE	Fort Bend Animal Services Building Interior	1	0	HW	Hallway	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	3,632	3,632			1,627.14	610.18	1,016.96	0.00	1,016.96	81%										

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Best Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1647	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	1	WP	1X175MH	1	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.22	10%	0.05	0.02	4,380	4,380			941.70	205.86	735.84	0.00	735.84	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$7.48
1648	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.43	10%	0.09	0.03	4,380	4,380			1,883.40	411.72	1,471.68	0.00	1,471.68	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$14.97
1649	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	2	CPY	1X100MH	2	IN	CPY	1X39LEDF		128	1	New/ Replacement Fixture - Exterior Canopy Fixture, Metal Halide, (1) 100W lamp, Magnetic ballast, w/ Exterior Canopy Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 39W, with Separate or Integrated Driver Component, 39LEDF	39	1	10%	0.26	10%	0.08	0.02	4,380	4,380			1,121.28	341.64	779.64	0.00	779.64	81%	19%	0.00	0.00	\$4.39	\$3.50	\$0.64	\$0.42	7.0	7.0	\$13.68
1650	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.43	10%	0.09	0.03	4,380	4,380			1,883.40	411.72	1,471.68	0.00	1,471.68	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$14.97
1651	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	1	GMFL	1X250MH	1	IN	FL	1X85LEDF		295	1	New/ Replacement Fixture - Ground-Mount Flood Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 85W, with Separate or Integrated Driver Component, 85LEDF	85	1	10%	0.30	10%	0.09	0.02	4,380	4,380			1,292.10	372.30	919.80	0.00	919.80	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.39	\$0.92	7.0	7.0	\$7.33
1652	TRUE	Fort Bend Animal Services Building Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1653	TRUE	Fort Bend Animal Services Building Interior	1	0	OQAS	Open Office Already Sensored	6	A	3X34T12MB2	6	RET		3X4FTLEDTYPEB		115	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", ES lamps, w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.69	90%	0.19	0.45	2,094	2,094	CS	Sensor: No Additional Description.	1,444.86	395.77	1,049.09	0.00	1,049.09	81%	19%	282.45	1.72	\$1.10	\$1.51	\$0.21	\$0.00	10.0	0.0	\$14.39
1654	TRUE	Fort Bend Animal Services Building Interior	1	0	X	Exit Signs	1	EXIT	2X10NCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1655	TRUE	Fort Bend Animal Services Building Interior	1	0	OQAS	Open Office Already Sensored	4	A	3X34T12MB2	4	RET		3X4FTLEDTYPEB		115	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", ES lamps, w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.46	90%	0.13	0.30	2,094	2,094	CS	Sensor: No Additional Description.	963.24	263.84	699.40	0.00	699.40	81%	19%	188.30	1.15	\$1.10	\$1.51	\$0.21	\$0.00	10.0	0.0	\$9.59
1656	TRUE	Fort Bend Animal Services Building Interior	1	0	X	Exit Signs	1	EXIT	2X10NCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1657	TRUE	Fort Bend Animal Services Building Interior	1	0	HWAS	Hallway Already Sensored	1	A	3X34T12MB2	1	RET		3X4FTLEDTYPEB		115	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", ES lamps, w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.12	90%	0.03	0.08	2,542	2,542	WS	Sensor: No Additional Description.	292.33	80.07	212.26	0.00	212.26	81%	19%	57.15	0.35	\$1.33	\$1.83	\$0.25	\$0.00	10.0	0.0	\$2.91
1658	TRUE	Fort Bend Animal Services Building Interior	1	0	ST	Storage	3	4W	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	1,200	1,200			208.80	75.60	133.20	0.00	133.20	81%	19%	35.86	0.22	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$1.51
1659	TRUE	Fort Bend Animal Services Building Interior	1	0	OS	Office Support (copy room, coffee room, etc)	19	4S	2X32T8EBN	19	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	1.10	90%	0.40	0.63	2,040	2,040			2,248.08	813.96	1,434.12	0.00	1,434.12	81%	19%	386.11	2.35	\$0.34	\$0.65	\$0.14	\$0.00	10.0	0.0	\$16.28
1660	TRUE	Fort Bend Animal Services Building Interior	1	0	X	Exit Signs	2	EXIT	2X10NCEXIT	2	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.04	100%	0.00	0.04	8,760	8,760			350.40	35.04	315.36	0.00	315.36	81%	19%	84.90	0.52	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$1.58)
1661	TRUE	Fort Bend Animal Services Building Interior	1	0	X	Exit Signs	3	EXIT-COMBO	1X4LEDEXIT	3	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1662	TRUE	Fort Bend Animal Services Building Interior	1	0	OSAS	Office Support (copy room, coffee room, etc) Already Sensored	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,428	1,428	WS	Sensor: No Additional Description.	254.18	89.96	164.22	0.00	164.22	81%	19%	44.21	0.27	\$0.36	\$0.46	\$0.14	\$0.00	10.0	0.0	\$1.34
1663	TRUE	Fort Bend Animal Services Building Interior	1	0	X	Exit Signs	1	EXIT	2X10NCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1664	TRUE	Fort Bend Animal Services Building Interior	1	0	RRAS	Restroom Already Sensored	1	4W	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,653	2,653	WS	Sensor: No Additional Description.	153.87	55.71	98.16	0.00	98.16	81%	19%	26.43	0.16	\$0.44	\$0.85	\$0.18	\$0.00	10.0	0.0	\$1.11
1665	TRUE	Fort Bend Animal Services Building Interior	1	0	STAS	Storage Already Sensored	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.09	50%	0.03	0.03	840	840	WS	Sensor: No Additional Description.	74.76	26.46	48.30	0.00	48.30	81%	19%	13.00	0.08	\$0.21	\$0.27	\$0.08	\$0.00	10.0	0.0	\$0.39
1666	TRUE	Fort Bend Animal Services Building Interior	1	0	ST	Storage	3	4W	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 4' Wrap Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,200	1,200			320.40	113.40	207.00	0.00	207.00	81%	19%	55.73	0.34	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.69
1667	TRUE	Fort Bend Animal Services Building Interior	1	0	ST	Storage	3	4W	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 4' Wrap Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,200	1,200			320.40	113.40	207.00	0.00	207.00	81%	19%	55.73	0.34	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.69
1668	TRUE	Fort Bend Animal Services Building Interior	1	0	OS	Office Support (copy room, coffee room, etc)	6	4S	2X15LEDTDW	6	NR				30	2	4' Strip Fixture, LED Tube, (2) 48", 15W LED Tube, Line Voltage - No Measure Recommended	30	-1	90%	0.18	90%	0.18	0.00	2,040	2,040			367.20	367.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.22	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1669	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	2	WPFC	2X26CFL4P	2	IN	WPFC	1X47LEDF	WHITE	51	1	New/ Replacement Fixture - Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDFWHITE	47	1	10%	0.10	10%	0.09	0.00	4,380	4,380			446.76	411.72	35.04	0.00	35.04	81%	19%	0.00	0.00	\$2.85	\$2.19	\$0.77	\$0.51	7.0	7.0	\$7.52
1670	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	3	WPFC	2X26CFL4P	3	IN	WPFC	1X47LEDF	WHITE	51	1	New/ Replacement Fixture - Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDFWHITE	47	1	10%	0.15	10%	0.14	0.00	4,380	4,380			670.14	617.58	52.56	0.00	52.56	81%	19%	0.00	0.00	\$2.85	\$2.19	\$0.77	\$0.51	7.0	7.0	\$11.29
1671	TRUE	Fort Bend Animal Services Building Interior	1	0	OS	Office Support (copy room, coffee room, etc)	6	4S	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	2,040	2,040			709.92	257.04	452.88	0.00	452.88	81%	19%	121.93	0.74	\$0.34	\$0.65	\$0.14	\$0.00	10.0	0.0	\$5.14
1672	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	3	WPFC	2X26CFL4P	3	IN	WPFC	1X47LEDF	WHITE	51	1	New/ Replacement Fixture - Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDFWHITE	47	1	10%	0.15	10%	0.14	0.00	4,380	4,380			670.14	617.58	52.56	0.00	52.56	81%	19%	0.00	0.00	\$2.85	\$2.19	\$0.77	\$0.51	7.0	7.0	\$11.29
1673	TRUE	Fort Bend Animal Services Building Exterior	1	0	E	Exterior	3	WPFC	2X26CFL4P	3	IN	WPFC	1X47LEDF	WHITE	51	1	New/ Replacement Fixture - Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDFWHITE	47	1	10%	0.15	10%	0.14	0.00	4,380	4,380			670.14	617.58	52.56	0.00	52.56	81%	19%	0.00	0.00	\$2.85	\$2.19	\$0.77	\$0.51	7.0	7.0	\$11.29
1674	TRUE	Recycling Center Interior	1	0	WS	Workshop	21	HB	1X250MH	21	IN	HB-ROUND	1XLEDf-HB-ROUND-LOW		295	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 96W LED Round High Bay, 96LEDF	98	2	90%	6.20	90%	2.06	3.72	1,301	1,301			8,059.70	2,677.46	5,382.24	0.00	5,382											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1690	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,790	3,790			337.31	119.39	217.93	0.00	217.93	81%	19%	58.67	0.36	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$1.78
1691	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	OS	Office Support (copy room, coffee room, etc)	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,040	2,040			363.12	128.52	234.60	0.00	234.60	81%	19%	63.16	0.39	\$0.51	\$0.65	\$0.20	\$0.00	10.0	0.0	\$1.92
1692	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	MP	Multipurpose	10	A	1X30LEDF	10	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.30	90%	0.30	0.00	2,115	2,115			634.50	634.50	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.44	\$0.29	\$0.00	\$0.00	0.0	0.0	\$0.00
1693	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	ME	Mechanical/Electrical Rooms	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	400	400			46.40	16.80	29.60	0.00	29.60	81%	19%	7.97	0.05	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.34
1694	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	PO	Private Office	1	A	1X30LEDF	1	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.03	90%	0.03	0.00	2,571	2,571			77.13	77.13	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.54	\$0.36	\$0.00	\$0.00	0.0	0.0	\$0.00
1695	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	CL	Classroom	6	A	1X30LEDF	6	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.18	90%	0.18	0.00	1,880	1,880			338.40	338.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.39	\$0.26	\$0.00	\$0.00	0.0	0.0	\$0.00
1696	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	OS	Office Support (copy room, coffee room, etc)	3	AEC	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,040	2,040			544.68	192.78	351.90	0.00	351.90	81%	19%	94.74	0.58	\$0.51	\$0.65	\$0.20	\$0.00	10.0	0.0	\$2.88
1697	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	MP	Multipurpose	9	HB	1X400MH	9	IN	HB-ROUND	1XLEDF-HB-ROUND-HIGH		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ 197W LED Round High bay, 197LEDF	197	2	90%	4.12	90%	1.77	2.11	2,115	2,115			8,718.03	3,749.90	4,968.14	0.00	4,968.14	81%	19%	1,337.57	8.15	\$1.90	\$2.54	\$1.51	\$1.00	5.0	5.0	\$17.42
1698	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1699	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	HW	Hallway	9	A	3X32T8EBN	9	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.80	90%	0.28	0.47	3,632	3,632			2,909.23	1,029.67	1,879.56	0.00	1,879.56	81%	19%	506.04	3.09	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$15.36
1700	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1701	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	HW	Hallway	2	8RC	2X26CFL4P	2	KIT	8RC	1XLEDF-8RC		51	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.10	90%	0.04	0.06	3,632	3,632			370.46	138.02	232.45	0.00	232.45	81%	19%	62.58	0.38	\$2.36	\$1.82	\$0.61	\$0.20	5.0	5.0	\$6.73
1702	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	GYM	Gymnasium	20	HB	1X400MH	20	IN	HB-ROUND	1XLEDF-HB-ROUND-HIGH WIRE GUAR		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ 197W LED Round High bay, 197LEDF WIRE GUARD	197	2	90%	9.16	90%	3.94	4.70	2,720	2,720			24,915.20	10,716.80	14,198.40	0.00	14,198.40	81%	19%	3,822.65	23.30	\$2.45	\$3.26	\$1.94	\$1.28	5.0	5.0	\$49.79
1703	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1704	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
1705	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	CL	Classroom	8	A	1X30LEDF	8	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.24	90%	0.24	0.00	1,880	1,880			451.20	451.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.39	\$0.26	\$0.00	\$0.00	0.0	0.0	\$0.00
1706	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
1707	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	CF	Cafeteria	9	AEC	3X32T8EBN	9	RET		3X4FTLEDTYPEB		89	1	Retrofit - Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.80	90%	0.28	0.47	2,991	2,991			2,395.79	847.95	1,547.84	0.00	1,547.84	81%	19%	416.73	2.54	\$0.75	\$0.96	\$0.30	\$0.00	10.0	0.0	\$12.65
1708	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	KT	Kitchen	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,800	1,800			480.60	170.10	310.50	0.00	310.50	81%	19%	83.60	0.51	\$0.45	\$0.58	\$0.18	\$0.00	10.0	0.0	\$2.54
1709	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,200	1,200			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.56
1710	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	RR	Restroom	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	3,790	3,790			1,349.24	477.54	871.70	0.00	871.70	81%	19%	234.69	1.43	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$7.13
1711	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
1712	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	RR	Restroom	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	3,790	3,790			2,023.86	716.31	1,307.55	0.00	1,307.55	81%	19%	352.03	2.15	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$10.69
1713	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
1714	TRUE	Fort Bend Hobby Boys & Girls Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
1715	TRUE	Fort Bend Hobby Boys & Girls Exterior	0	E		Exterior	1	POLESB-ROUN	1X250MH	1	IN	POLESB	1XLEDF-POLESB-SMALL	5WQ	295	1	New/ Replacement Fixture - Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, LED Shoebox Small, 54LEDPSWQ	54	2	10%	0.30	10%	0.05	0.02	4,380	4,380			1,292.10	236.52	1,055.58	0.00	1,055.58	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.10	\$0.73	5.0	5.0	\$7.80
1716	TRUE	Fort Bend Hobby Boys & Girls Exterior	1	0	E	Exterior	3	WP	1X175MH	3	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.65	10%	0.15	0.05	4,380	4,380			2,825.10	643.86	2,181.24	0.00	2,181.24	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$22.29
1717	TRUE	Fort Bend Hobby Boys & Girls Exterior	1	0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	10%	0.43	10%	0.10	0.03</																				

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1738	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	BR	Break room	9	A	1X30LEDF	9	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.27	90%	0.27	0.00	3,823	3,823			1,032.32	1,032.32	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.80	\$0.53	\$0.00	\$0.00	0.0	0.0	\$0.00
1739	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1740	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	RR	Restroom	4	A	1X30LEDF	4	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.12	90%	0.12	0.00	5,306	5,306			636.72	636.72	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.11	\$0.73	\$0.00	\$0.00	0.0	0.0	\$0.00
1741	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	1	4S	2X34T12MB	1	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", ES lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.07	50%	0.02	0.03	560	560			40.32	11.76	28.56	0.00	28.56	81%	19%	7.69	0.05	\$0.20	\$0.20	\$0.04	\$0.00	10.0	0.0	\$0.36
1742	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	6	A	1X30LEDF	6	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.18	90%	0.18	0.00	3,599	3,599			647.89	647.89	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.76	\$0.50	\$0.00	\$0.00	0.0	0.0	\$0.00
1743	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	X	Exit Signs	1	EXIT	2X10INCEXIT	1	IN	EXIT	1X2LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 2W lamp, Single Sided, LED2W	2	1	100%	0.02	100%	0.00	0.02	8,760	8,760			175.20	17.52	157.68	0.00	157.68	81%	19%	42.45	0.26	\$0.88	\$0.00	\$1.67	\$0.00	5.0	0.0	(\$0.79)
1744	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	4	A	1X30LEDF	4	NR				30	1	2x4 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	90%	0.12	90%	0.12	0.00	3,599	3,599			431.93	431.93	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.76	\$0.50	\$0.00	\$0.00	0.0	0.0	\$0.00
1745	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	RR	Restroom	2	B	1X20LEDF	2	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.04	90%	0.04	0.00	5,306	5,306			212.24	212.24	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.74	\$0.49	\$0.00	\$0.00	0.0	0.0	\$0.00
1746	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	SW	Stairwell	7	B	1X20LEDF	7	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.14	100%	0.14	0.00	8,760	8,760			1,226.40	1,226.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.23	\$0.81	\$0.00	\$0.00	0.0	0.0	\$0.00
1747	TRUE	Beechnut Roads & Bridge Exterior	1	0	E	Exterior	3	FL	1X60LEDF	3	NR				60	1	Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 60W, with Separate or Integrated Driver Component - No Measure Recommended	60	-1	10%	0.18	10%	0.18	0.00	4,380	4,380			788.40	788.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.84	\$1.21	\$0.00	\$0.00	0.0	0.0	\$0.00
1748	TRUE	Beechnut Roads & Bridge Exterior	1	0	E	Exterior	1	FL	1X20LEDF	1	NR				20	1	Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	10%	0.02	10%	0.02	0.00	4,380	4,380			87.60	87.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
1749	TRUE	Beechnut Roads & Bridge Exterior	1	0	E	Exterior	1	WP	1X30LEDF	1	NR				30	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	10%	0.03	10%	0.03	0.00	4,380	4,380			131.40	131.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.92	\$0.61	\$0.00	\$0.00	0.0	0.0	\$0.00
1750	TRUE	Beechnut Roads & Bridge Exterior	1	0	E	Exterior	2	HB	1X120LEDSDI	2	IN	HB-EXT	1X105LEDF		120	2	New/ Replacement Fixture - Highway Fixture, 120W LED Screw in lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 105W, with Separate or Integrated Driver Component, 105LEDF	105	1	10%	0.24	10%	0.21	0.00	4,380	4,380			1,051.20	919.80	131.40	0.00	131.40	81%	19%	0.00	0.00	\$2.10	\$0.00	\$1.72	\$1.13	7.0	7.0	(\$1.49)
1751	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	ST	Storage	1	4S	1X20LEDF	1	NR				20	1	4' Strip Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.02	90%	0.02	0.00	1,680	1,680			33.60	33.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.24	\$0.16	\$0.00	\$0.00	0.0	0.0	\$0.00
1752	TRUE	Beechnut Roads & Bridge Exterior	1	0	E	Exterior	1	WP	1X30LEDF	1	NR				30	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	10%	0.03	10%	0.03	0.00	4,380	4,380			131.40	131.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.92	\$0.61	\$0.00	\$0.00	0.0	0.0	\$0.00
1753	TRUE	Beechnut Roads & Bridge Exterior	1	0	E	Exterior	11	FL	2X14LEDSDI	11	IN	FL-DOUBLE	1X22LEDF	PAR38	28	1	New/ Replacement Fixture - Flood Fixture, (2) Light Emitting Diode (LED) Screw-in Lamp, 14W, with Integrated Driver Component, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 22W, with Separate or Integrated Driver Component, 22LEDPPAR38	22	1	10%	0.31	10%	0.24	0.01	4,380	4,380			1,349.04	1,059.96	289.08	0.00	289.08	81%	19%	0.00	0.00	\$4.91	\$0.00	\$0.36	\$0.24	7.0	7.0	\$47.40
1754	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	ST	Storage	2	BS	2X30LEDTDW	2	NR				60	2	8' Strip Fixture, LED Tube, (2) 96", 30W LED Tube, Line Voltage - No Measure Recommended	60	-1	90%	0.12	90%	0.12	0.00	1,680	1,680			201.60	201.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.01	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1755	TRUE	Beechnut Roads & Bridge Exterior	1	0	E	Exterior	2	WP	1X30LEDF	2	NR				30	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 30W, with Separate or Integrated Driver Component - No Measure Recommended	30	-1	10%	0.06	10%	0.06	0.00	4,380	4,380			262.80	262.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.92	\$0.61	\$0.00	\$0.00	0.0	0.0	\$0.00
1756	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	HW	Hallway	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	5,085	5,085			1,357.64	480.51	877.13	0.00	877.13	81%	19%	236.15	1.44	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$7.17
1757	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	X	Exit Signs	1	EXIT-COMBO	1X4LEDEXIT	1	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1758	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	5,306	5,306			472.23	167.14	305.10	0.00	305.10	81%	19%	82.14	0.50	\$1.33	\$1.70	\$0.53	\$0.00	10.0	0.0	\$2.49
1759	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	HW	Hallway	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	5,085	5,085			2,715.28	961.03	1,754.26	0.00	1,754.26	81%	19%	472.30	2.88	\$1.27	\$1.63	\$0.51	\$0.00	10.0	0.0	\$14.34
1760	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	X	Exit Signs	2	EXIT-COMBO	1X4LEDEXIT	2	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1761	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1762	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1763	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1764	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1765	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00	413.93	81%	19%	111.44	0.68	\$0.90	\$1.15	\$0.36	\$0.00	10.0	0.0	\$3.38
1766	TRUE	Beechnut Roads & Bridge Interior	1	HIGHER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,599	3,599			640.69	226.76	413.93	0.00												

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1784	TRUE	Medic 1 Interior	1	HIGHER	LQ	Living Quarters/Bunk Rooms	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1785	TRUE	Medic 1 Interior	1	HIGHER	LQ	Living Quarters/Bunk Rooms	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1786	TRUE	Medic 1 Interior	1	HIGHER	LQ	Living Quarters/Bunk Rooms	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1787	TRUE	Medic 1 Interior	1	HIGHER	LQ	Living Quarters/Bunk Rooms	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,680	1,680			97.44	35.28	62.16	0.00	62.16	81%	19%	16.74	0.10	\$0.28	\$0.54	\$0.11	\$0.00	10.0	0.0	\$0.71
1788	TRUE	Medic 1 Interior	1	HIGHER	RRAS	Restroom Already Sensored	3	4W	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	3,714	3,714	WS	Sensor: No Additional Description.	646.27	233.99	412.28	0.00	412.28	81%	19%	111.00	0.68	\$0.62	\$1.19	\$0.25	\$0.00	10.0	0.0	\$4.68
1789	TRUE	Medic 1 Interior	1	HIGHER	RR	Restroom	1	8RC	1X32CF14P	1	KIT	8RC	1XLEDF-8RC		35	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 32W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 130W. HIGH SETTING, 1X13LEDF-8RC	19	2	90%	0.04	90%	0.02	0.01	5,306	5,306			185.71	100.81	84.90	0.00	84.90	81%	19%	22.86	0.14	\$1.99	\$2.65	\$0.89	\$0.29	5.0	5.0	\$3.46
1790	TRUE	Medic 1 Interior	1	HIGHER	STAS	Storage Already Sensored	1	4W	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	1,176	1,176	WS	Sensor: No Additional Description.	68.21	24.70	43.51	0.00	43.51	81%	19%	11.71	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.49
1791	TRUE	Medic 1 Interior	2	HIGHER	ME	Mechanical/Electrical Rooms	6	8S	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8' Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	50%	0.67	50%	0.25	0.21	560	560			376.32	141.12	235.20	0.00	235.20	81%	19%	63.32	0.39	\$0.19	\$0.18	\$0.07	\$0.00	10.0	0.0	\$1.75
1792	TRUE	Medic 1 Interior	1	HIGHER	RRAS	Restroom Already Sensored	2	4W	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,714	3,714	WS	Sensor: No Additional Description.	430.85	156.00	274.85	0.00	274.85	81%	19%	74.00	0.45	\$0.62	\$1.19	\$0.25	\$0.00	10.0	0.0	\$3.12
1793	TRUE	Medic 1 Interior	1	HIGHER	STAS	Storage Already Sensored	1	8S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 8' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	1,176	1,176	WS	Sensor: No Additional Description.	68.21	24.70	43.51	0.00	43.51	81%	19%	11.71	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.49
1794	TRUE	Medic 1 Interior	1	HIGHER	POAS	Private Office Already Sensored	1	8DI	4X32T8EBN	1	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 8' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	0.11	90%	0.06	0.05	2,520	2,520	WS	Sensor: No Additional Description.	282.24	151.20	131.04	0.00	131.04	81%	19%	35.28	0.22	\$0.84	\$0.81	\$0.34	\$0.00	10.0	0.0	\$1.31
1795	TRUE	Medic 1 Interior	1	HIGHER	OSAS	Office Support (copy room, coffee room, etc) Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,999	1,999	WS	Sensor: No Additional Description.	231.91	83.97	147.94	0.00	147.94	81%	19%	39.83	0.24	\$0.33	\$0.64	\$0.13	\$0.00	10.0	0.0	\$1.68
1796	TRUE	Medic 1 Interior	1	HIGHER	BRAS	Break Room Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,677	2,677	WS	Sensor: No Additional Description.	310.51	112.43	198.08	0.00	198.08	81%	19%	53.33	0.33	\$0.45	\$0.86	\$0.18	\$0.00	10.0	0.0	\$2.25
1797	TRUE	Medic 1 Interior	1	HIGHER	RRAS	Restroom Already Sensored	2	4W	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,714	3,714	WS	Sensor: No Additional Description.	430.85	156.00	274.85	0.00	274.85	81%	19%	74.00	0.45	\$0.62	\$1.19	\$0.25	\$0.00	10.0	0.0	\$3.12
1798	TRUE	Medic 1 Interior	1	HIGHER	HW	Hallway	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	5,085	5,085			884.76	320.34	564.41	0.00	564.41	81%	19%	151.96	0.93	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$6.41
1799	TRUE	Medic 1 Interior	1	HIGHER	RRAS	Restroom Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,714	3,714	WS	Sensor: No Additional Description.	430.85	156.00	274.85	0.00	274.85	81%	19%	74.00	0.45	\$0.62	\$1.19	\$0.25	\$0.00	10.0	0.0	\$3.12
1800	TRUE	Medic 1 Interior	1	HIGHER	HW	Hallway	5	AV	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	5,085	5,085			1,474.59	533.90	940.69	0.00	940.69	81%	19%	253.26	1.54	\$0.85	\$1.63	\$0.34	\$0.00	10.0	0.0	\$10.68
1801	TRUE	Medic 1 Interior	1	HIGHER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1802	TRUE	Medic 1 Interior	1	HIGHER	POAS	Private Office Already Sensored	1	8DI	4X32T8EBN	1	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 8' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	0.11	90%	0.06	0.05	2,520	2,520	WS	Sensor: No Additional Description.	282.24	151.20	131.04	0.00	131.04	81%	19%	35.28	0.22	\$0.84	\$0.81	\$0.34	\$0.00	10.0	0.0	\$1.31
1803	TRUE	Medic 1 Interior	1	HIGHER	POAS	Private Office Already Sensored	1	8DI	4X32T8EBN	1	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 8' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	0.11	90%	0.06	0.05	2,520	2,520	WS	Sensor: No Additional Description.	282.24	151.20	131.04	0.00	131.04	81%	19%	35.28	0.22	\$0.84	\$0.81	\$0.34	\$0.00	10.0	0.0	\$1.31
1804	TRUE	Medic 1 Interior	1	HIGHER	POAS	Private Office Already Sensored	1	8DI	4X32T8EBN	1	RET		4X4FTLEDTYPEB-HO		112	1	Retrofit - 8' Direct And/Or Indirect Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	90%	0.11	90%	0.06	0.05	2,520	2,520	WS	Sensor: No Additional Description.	282.24	151.20	131.04	0.00	131.04	81%	19%	35.28	0.22	\$0.84	\$0.81	\$0.34	\$0.00	10.0	0.0	\$1.31
1805	TRUE	Medic 1 Interior	1	HIGHER	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	1X32T8EBN	2	RET		1X4FTLEDTYPEB		31	1	Retrofit - 4' Strip Fixture, Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (1) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 1X4FTLEDTYPEB	10.5	2	50%	0.06	50%	0.02	0.02	392	392	WS	Sensor: No Additional Description.	24.30	8.23	16.07	0.00	16.07	81%	19%	4.33	0.03	\$0.03	\$0.13	\$0.01	\$0.00	10.0	0.0	\$0.29
1806	TRUE	Medic 1 Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	6	8S	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8' Strip Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	2,856	2,856			1,919.23	719.71	1,199.52	0.00	1,199.52	81%	19%	322.95	1.97	\$0.95	\$0.91	\$0.38	\$0.00	10.0	0.0	\$8.91
1807	TRUE	Medic 1 Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,856	2,856			331.30	119.95	211.34	0.00	211.34	81%	19%	56.90	0.35	\$0.48	\$0.91	\$0.19	\$0.00	10.0	0.0	\$2.40
1808	TRUE	Medic 1 Interior	1	HIGHER	ME	Mechanical/Electrical Rooms	1	4S	1X32T8EBN	1	RET		1X4FTLEDTYPEB		31	1	Retrofit - 4' Strip Fixture, Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (1) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 1X4FTLEDTYPEB	10.5	2	50%	0.03	50%	0.01	0.01	560	560			17.36	5.88	11.48	0.00	11.48	81%	19%	3.09	0.02	\$0.05	\$0.18	\$0.02	\$0.00	10.0	0.0	\$0.21
1809	TRUE	Medic 1 Interior	1	HIGHER	OSAS	Office Support (copy room, coffee room, etc) Already Sensored	2	8VP	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 8' Vapor Proof Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	1,999	1,999	WS	Sensor: No Additional Description.	447.82	167.93	279.89	0.00	279.89	81%	19%	75.35	0.46	\$0.67	\$0.64	\$0.27	\$0.00	10.0	0.0	\$2.08
1810	TRUE	Medic 1 Interior	1	HIGHER	OS	Office Support (copy room, coffee room, etc)	13	AV	2X32T																																			

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1823	TRUE	36 Park & Ride (FBC Fair Grounds) Exterior		0	E	Exterior	2	POLESB	2X250MH	2	IN	POLESB	EDF-POLESB-MEDIUM-LA	5WQ	590	1	New/ Replacement Fixture - Pole-Mounted Shoebox Fixture, Metal Halide, (2) 250W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, (2) LED Shoebox Medium-Large, 112LED/5WQ	224	2	10%	1.18	10%	0.45	0.07	4,380	4,380			5,168.40	1,962.24	3,206.16	0.00	3,206.16	81%	19%	0.00	0.00	\$10.51	\$8.76	\$2.21	\$1.46	5.0	5.0	\$31.22
1824	TRUE	36 Park & Ride (FBC Fair Grounds) Exterior	1	0	E	Exterior	12	4S	1X32T8EBN	12	RET		1X4FTLEDTYPEB		31	1	Retrofit - 4' Strip Fixture, Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (1) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 1X4FTLEDTYPEB	10.5	2	10%	0.37	10%	0.13	0.02	4,380	4,380			1,629.36	551.88	1,077.48	0.00	1,077.48	81%	19%	0.00	0.00	\$0.37	\$1.40	\$0.15	\$0.00	10.0	0.0	\$19.45
1852	TRUE	Central Appraisal Interior	1	0	LO	Lobby/Entry Vestibule	7	AV	2X32T8EBN	7	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.41	90%	0.15	0.23	3,401	3,401			1,380.81	499.95	880.86	0.00	880.86	81%	19%	237.15	1.45	\$0.57	\$1.09	\$0.23	\$0.00	10.0	0.0	\$10.00
1853	TRUE	Central Appraisal Interior	1	0	LO	Lobby/Entry Vestibule	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB	B8U	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB8BU	21	2	90%	0.17	90%	0.06	0.10	3,401	3,401			591.77	214.26	377.51	0.00	377.51	81%	19%	101.64	0.62	\$0.57	\$1.09	\$0.23	\$0.00	10.0	0.0	\$4.29
1854	TRUE	Central Appraisal Interior	1	0	LO	Lobby/Entry Vestibule	13	GRC	1X26CFL4P	13	KIT	GRC	1XLEDF-GRC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-GRC	15	2	90%	0.38	90%	0.20	0.16	3,401	3,401			1,282.18	663.20	618.98	0.00	618.98	81%	19%	166.65	1.02	\$1.11	\$1.70	\$0.48	\$0.16	5.0	5.0	\$28.25
1855	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1856	TRUE	Central Appraisal Interior	1	0	HW	Hallway	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,632	3,632			842.62	305.09	537.54	0.00	537.54	81%	19%	144.72	0.88	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$6.10
1857	TRUE	Central Appraisal Interior	1	0	HW	Hallway	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	B8U	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB8BU	21	2	90%	0.06	90%	0.02	0.03	3,632	3,632			210.66	76.27	134.38	0.00	134.38	81%	19%	36.18	0.22	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$1.53
1858	TRUE	Central Appraisal Interior	1	0	OO	Open Office	20	AV	2X32T8EBN	20	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	1.16	90%	0.42	0.67	2,991	2,991			3,469.56	1,256.22	2,213.34	0.00	2,213.34	81%	19%	595.90	3.63	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$25.12
1859	TRUE	Central Appraisal Interior	1	0	OO	Open Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB	B8U	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB8BU	21	2	90%	0.23	90%	0.08	0.13	2,991	2,991			693.91	251.24	442.67	0.00	442.67	81%	19%	119.18	0.73	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$5.02
1860	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1861	TRUE	Central Appraisal Interior	1	0	OO	Open Office	6	AV	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	2,991	2,991			1,040.87	376.87	664.00	0.00	664.00	81%	19%	178.77	1.09	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$7.54
1862	TRUE	Central Appraisal Interior	1	0	OO	Open Office	6	GRC	1X26CFL4P	6	KIT	GRC	1XLEDF-GRC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-GRC	15	2	90%	0.17	90%	0.09	0.08	2,991	2,991			520.43	269.19	251.24	0.00	251.24	81%	19%	67.64	0.41	\$0.97	\$1.50	\$0.42	\$0.14	5.0	5.0	\$11.46
1863	TRUE	Central Appraisal Interior	1	0	HW	Hallway	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
1864	TRUE	Central Appraisal Interior	1	0	HW	Hallway	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	B8U	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB8BU	21	2	90%	0.06	90%	0.02	0.03	3,632	3,632			210.66	76.27	134.38	0.00	134.38	81%	19%	36.18	0.22	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$1.53
1865	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,094	2,094	WS	Sensor: No Additional Description.	364.36	131.92	232.43	0.00	232.43	81%	19%	62.58	0.38	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$2.64
1866	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,094	2,094	WS	Sensor: No Additional Description.	364.36	131.92	232.43	0.00	232.43	81%	19%	62.58	0.38	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$2.64
1867	TRUE	Central Appraisal Interior	1	0	BRAS	Break Room Already Sensored	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	1,912	1,912	WS	Sensor: No Additional Description.	332.69	120.46	212.23	0.00	212.23	81%	19%	57.14	0.35	\$0.32	\$0.61	\$0.13	\$0.00	10.0	0.0	\$2.41
1868	TRUE	Central Appraisal Interior	1	0	HW	Hallway	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	3,632	3,632			1,292.99	457.63	835.36	0.00	835.36	81%	19%	224.90	1.37	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$6.83
1869	TRUE	Central Appraisal Interior	1	0	HW	Hallway	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB	B8U	89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRIDB8U	31.5	2	90%	0.09	90%	0.03	0.05	3,632	3,632			323.25	114.41	208.84	0.00	208.84	81%	19%	56.23	0.34	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$1.71
1870	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1871	TRUE	Central Appraisal Interior	1	0	OO	Open Office	12	AV	2X32T8EBN	12	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.70	90%	0.25	0.40	2,991	2,991			2,081.74	753.73	1,328.00	0.00	1,328.00	81%	19%	357.54	2.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$15.07
1872	TRUE	Central Appraisal Interior	1	0	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,200	1,200			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.56
1873	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,800	1,800	WS	Sensor: No Additional Description.	208.80	75.60	133.20	0.00	133.20	81%	19%	35.86	0.22	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$1.51
1874	TRUE	Central Appraisal Interior	1	0	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,790	3,790			337.31	119.39	217.93	0.00	217.93	81%	19%	58.67	0.36	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$1.78
1875	TRUE	Central Appraisal Interior	1	0	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,790	3,790			674.62	238.77	435.85	0.00	435.85	81%	19%	117.34	0.72	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$3.56
1876	TRUE	Central Appraisal Interior	1	0	ME	Mechanical/Electrical Rooms	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.18	50%																						

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1891	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	1	EXIT	1XALEDXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1892	TRUE	Central Appraisal Interior	1	0	BR	Break room	7	AV	2X32T8EBN	7	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.41	90%	0.15	0.23	2,731	2,731			1,108.79	401.46	707.33	0.00	707.33	81%	19%	190.43	1.16	\$0.46	\$0.87	\$0.18	\$0.00	10.0	0.0	\$8.03
1893	TRUE	Central Appraisal Interior	1	0	OS	Office Support (copy room, coffee room, etc)	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,040	2,040			236.64	85.68	150.96	0.00	150.96	81%	19%	40.64	0.25	\$0.34	\$0.65	\$0.14	\$0.00	10.0	0.0	\$1.71
1894	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1895	TRUE	Central Appraisal Interior	1	0	ME	Mechanical/Electrical Rooms	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.23	50%	0.08	0.07	400	400			92.80	33.60	59.20	0.00	59.20	81%	19%	15.94	0.10	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.67
1896	TRUE	Central Appraisal Interior	1	0	OO	Open Office	11	AV	2X32T8EBN	11	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.64	90%	0.23	0.37	2,991	2,991			1,908.26	690.92	1,217.34	0.00	1,217.34	81%	19%	327.74	2.00	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$13.82
1897	TRUE	Central Appraisal Interior	1	0	PO	Private Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,571	2,571			596.47	215.96	380.51	0.00	380.51	81%	19%	102.44	0.62	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$4.32
1898	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1899	TRUE	Central Appraisal Interior	1	0	OO	Open Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,991	2,991			346.96	125.62	221.33	0.00	221.33	81%	19%	59.59	0.36	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$2.51
1900	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1901	TRUE	Central Appraisal Interior	1	0	PO	Private Office	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,571	2,571			447.35	161.97	285.38	0.00	285.38	81%	19%	76.83	0.47	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$3.24
1902	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1903	TRUE	Central Appraisal Interior	1	0	PO	Private Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,571	2,571			596.47	215.96	380.51	0.00	380.51	81%	19%	102.44	0.62	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$4.32
1904	TRUE	Central Appraisal Interior	1	0	PO	Private Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,571	2,571			596.47	215.96	380.51	0.00	380.51	81%	19%	102.44	0.62	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$4.32
1905	TRUE	Central Appraisal Interior	1	0	OO	Open Office	26	AV	2X32T8EBN	26	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	1.51	90%	0.55	0.87	2,991	2,991			4,510.43	1,633.09	2,877.34	0.00	2,877.34	81%	19%	774.67	4.72	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$32.66
1906	TRUE	Central Appraisal Interior	1	0	OO	Open Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.23	90%	0.08	0.13	2,991	2,991			693.91	251.24	442.67	0.00	442.67	81%	19%	119.18	0.73	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$5.02
1907	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	2	EXIT	1XALEDXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1908	TRUE	Central Appraisal Interior	1	0	HW	Hallway	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
1909	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	1	EXIT	1XALEDXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1910	TRUE	Central Appraisal Interior	1	0	HW	Hallway	1	6RC	1X26CFL4P	1	KIT	6RC	1XLEDF-6RC		29	1	Retrofit with a Kit or Reflector - 5" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture. LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.03	90%	0.02	0.01	3,632	3,632			105.33	54.48	50.85	0.00	50.85	81%	19%	13.69	0.08	\$1.18	\$1.82	\$0.51	\$0.17	5.0	5.0	\$2.32
1911	TRUE	Central Appraisal Interior	1	0	HW	Hallway	5	AV	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	3,632	3,632			1,053.28	381.36	671.92	0.00	671.92	81%	19%	180.90	1.10	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$7.63
1912	TRUE	Central Appraisal Interior	1	0	HW	Hallway	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
1913	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	1	EXIT	1XALEDXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1914	TRUE	Central Appraisal Interior	1	0	HW	Hallway	2	8RC	1X26CFL4P	2	KIT	8RC	1XLEDF-8RC		29	1	Retrofit with a Kit or Reflector - 8" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 8" Round Recessed Can Fixture. LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	90%	0.06	90%	0.04	0.02	3,632	3,632			210.66	138.02	72.64	0.00	72.64	81%	19%	19.56	0.12	\$1.18	\$1.82	\$0.61	\$0.20	5.0	5.0	\$4.37
1915	TRUE	Central Appraisal Interior	1	0	HW	Hallway	1	6RC	1X26CFL4P	1	KIT	6RC	1XLEDF-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture. LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.03	90%	0.02	0.01	3,632	3,632			105.33	54.48	50.85	0.00	50.85	81%	19%	13.69	0.08	\$1.18	\$1.82	\$0.51	\$0.17	5.0	5.0	\$2.32
1916	TRUE	Central Appraisal Interior	1	0	RRAS	Restroom Already Sensored	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,653	2,653	CS	Sensor: No Additional Description.	461.62	167.14	294.48	0.00	294.48	81%	19%	79.28	0.48	\$0.44	\$0.85	\$0.18	\$0.00	10.0	0.0	\$3.34
1917	TRUE	Central Appraisal Interior	1	0	RRAS	Restroom Already Sensored	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,653	2,653	CS	Sensor: No Additional Description.	461.62	167.14	294.48	0.00	294.48	81%	19%	79.28	0.48	\$0.44	\$0.85	\$0.18	\$0.00	10.0	0.0	\$3.34
1918	TRUE	Central Appraisal Interior	1	0	STAS	Storage Already Sensored	1																																					

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1932	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,800	1,800	WS	Sensor: No Additional Description.	208.80	75.60	133.20	0.00	133.20	81%	19%	35.86	0.22	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$1.51
1933	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,800	1,800	WS	Sensor: No Additional Description.	208.80	75.60	133.20	0.00	133.20	81%	19%	35.86	0.22	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$1.51
1934	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,800	1,800	WS	Sensor: No Additional Description.	208.80	75.60	133.20	0.00	133.20	81%	19%	35.86	0.22	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$1.51
1935	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,800	1,800	WS	Sensor: No Additional Description.	208.80	75.60	133.20	0.00	133.20	81%	19%	35.86	0.22	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$1.51
1936	TRUE	Central Appraisal Interior	1	0	OO	Open Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,991	2,991	1	Sensor: No Additional Description.	693.91	251.24	442.67	0.00	442.67	81%	19%	119.18	0.73	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$5.02
1937	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1938	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1939	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1940	TRUE	Central Appraisal Interior	1	0	OO	Open Office	6	AV	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	2,991	2,991			1,040.87	376.87	664.00	0.00	664.00	81%	19%	178.77	1.09	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$7.54
1941	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1942	TRUE	Central Appraisal Interior	1	0	PO	Private Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,571	2,571			149.12	53.99	95.13	0.00	95.13	81%	19%	25.61	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
1943	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1944	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1945	TRUE	Central Appraisal Interior	1	0	PO	Private Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,571	2,571			149.12	53.99	95.13	0.00	95.13	81%	19%	25.61	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
1946	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1947	TRUE	Central Appraisal Interior	1	0	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
1948	TRUE	Central Appraisal Interior	1	0	PO	Private Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,571	2,571			149.12	53.99	95.13	0.00	95.13	81%	19%	25.61	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
1949	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,800	1,800	WS	Sensor: No Additional Description.	104.40	37.80	66.60	0.00	66.60	81%	19%	17.93	0.11	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$0.76
1950	TRUE	Central Appraisal Interior	1	0	HW	Hallway	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,632	3,632			842.62	305.09	537.54	0.00	537.54	81%	19%	144.72	0.88	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$6.10
1951	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,800	1,800	WS	Sensor: No Additional Description.	104.40	37.80	66.60	0.00	66.60	81%	19%	17.93	0.11	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$0.76
1952	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,800	1,800	WS	Sensor: No Additional Description.	104.40	37.80	66.60	0.00	66.60	81%	19%	17.93	0.11	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$0.76
1953	TRUE	Central Appraisal Interior	1	0	HW	Hallway	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
1954	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,800	1,800	WS	Sensor: No Additional Description.	104.40	37.80	66.60	0.00	66.60	81%	19%	17.93	0.11	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$0.76
1955	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,800	1,800	WS	Sensor: No Additional Description.	104.40	37.80	66.60	0.00	66.60	81%	19%	17.93	0.11	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$0.76
1956	TRUE	Central Appraisal Interior	1	0	HW	Hallway	8	AV	2X32T8EBN	8	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.46	90%	0.17	0.27	3,632	3,632			1,685.25	610.18	1,075.07	0.00	1,075.07	81%	19%	289.44	1.76	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$12.20
1957	TRUE	Central Appraisal Interior	1	0	HW	Hallway	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBU	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
1958	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	2	EXIT	1X4LEEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4</																										

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
1971	TRUE	Central Appraisal Interior	1	0	POAS	Private Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,800	1,800	WS	Sensor: No Additional Description.	208.80	75.60	133.20	0.00	133.20	81%	19%	35.86	0.22	\$0.30	\$0.58	\$0.12	\$0.00	10.0	0.0	\$1.51
1972	TRUE	Central Appraisal Interior	1	0	OO	Open Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,991	2,991	1	Sensor: No Additional Description.	693.91	251.24	442.67	0.00	442.67	81%	19%	119.18	0.73	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$5.02
1973	TRUE	Central Appraisal Interior	1	0	PO	Private Office	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,571	2,571	1	Sensor: No Additional Description.	596.47	215.96	380.51	0.00	380.51	81%	19%	102.44	0.62	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$4.32
1974	TRUE	Central Appraisal Interior	1	0	CR	Conference Room	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	1,830	1,830	1	Sensor: No Additional Description.	424.56	153.72	270.84	0.00	270.84	81%	19%	72.92	0.44	\$0.31	\$0.59	\$0.12	\$0.00	10.0	0.0	\$3.07
1975	TRUE	Central Appraisal Interior	1	0	CR	Conference Room	16	AV	2X32T8EBN	16	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.93	90%	0.34	0.53	1,830	1,830	2	Sensor: No Additional Description.	1,698.24	614.88	1,083.36	0.00	1,083.36	81%	19%	291.67	1.78	\$0.31	\$0.59	\$0.12	\$0.00	10.0	0.0	\$12.30
1976	TRUE	Central Appraisal Interior	1	0	LO	Lobby/Entry Vestibule	11	AV	2X32T8EBN	11	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.64	90%	0.23	0.37	3,401	3,401			2,169.84	785.63	1,384.21	0.00	1,384.21	81%	19%	372.67	2.27	\$0.57	\$1.09	\$0.23	\$0.00	10.0	0.0	\$15.71
1977	TRUE	Central Appraisal Interior	1	0	LO	Lobby/Entry Vestibule	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.12	90%	0.04	0.07	3,401	3,401			394.52	142.84	251.67	0.00	251.67	81%	19%	67.76	0.41	\$0.57	\$1.09	\$0.23	\$0.00	10.0	0.0	\$2.86
1978	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1979	TRUE	Central Appraisal Interior	1	0	RR	Restroom	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,790	3,790			439.64	159.18	280.46	0.00	280.46	81%	19%	75.51	0.46	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$3.18
1980	TRUE	Central Appraisal Interior	1	0	RR	Restroom	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.12	90%	0.04	0.07	3,790	3,790			439.64	159.18	280.46	0.00	280.46	81%	19%	75.51	0.46	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$3.18
1981	TRUE	Central Appraisal Interior	1	0	RR	Restroom	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	3,790	3,790			439.64	159.18	280.46	0.00	280.46	81%	19%	75.51	0.46	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$3.18
1982	TRUE	Central Appraisal Interior	1	0	RR	Restroom	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.12	90%	0.04	0.07	3,790	3,790			439.64	159.18	280.46	0.00	280.46	81%	19%	75.51	0.46	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$3.18
1983	TRUE	Central Appraisal Interior	1	0	HW	Hallway	16	AV	2X32T8EBN	16	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.93	90%	0.34	0.53	3,632	3,632			3,370.50	1,220.35	2,150.14	0.00	2,150.14	81%	19%	578.88	3.53	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$24.41
1984	TRUE	Central Appraisal Interior	1	0	HW	Hallway	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.23	90%	0.08	0.13	3,632	3,632			842.62	305.09	537.54	0.00	537.54	81%	19%	144.72	0.88	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$6.10
1985	TRUE	Central Appraisal Interior	1	0	X	Exit Signs	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			105.12	105.12	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
1986	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,094	2,094	WS	Sensor: No Additional Description.	242.90	87.95	154.96	0.00	154.96	81%	19%	41.72	0.25	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$1.76
1987	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,094	2,094	WS	Sensor: No Additional Description.	242.90	87.95	154.96	0.00	154.96	81%	19%	41.72	0.25	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$1.76
1988	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
1989	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
1990	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
1991	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
1992	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
1993	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
1994	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
1995	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
1996	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
1997	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Source Quality	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
2011	TRUE	Central Appraisal Interior	1	0	CR	Conference Room	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	1,830	1,830			106.14	38.43	67.71	0.00	67.71	81%	19%	18.23	0.11	\$0.31	\$0.59	\$0.12	\$0.00	10.0	0.0	\$0.77
2012	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
2013	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
2014	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
2015	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
2016	TRUE	Central Appraisal Interior	1	0	CLAS	Classroom Already Sensored	7	AV	2X32T8EBN	7	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.41	90%	0.15	0.23	1,316	1,316	CS	Sensor: No Additional Description.	534.30	193.45	340.84	0.00	340.84	81%	19%	91.77	0.56	\$0.22	\$0.42	\$0.09	\$0.00	10.0	0.0	\$3.87
2017	TRUE	Central Appraisal Interior	1	0	CL	Classroom	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.12	90%	0.04	0.07	1,880	1,880			218.08	78.96	139.12	0.00	139.12	81%	19%	37.46	0.23	\$0.31	\$0.60	\$0.13	\$0.00	10.0	0.0	\$1.58
2018	TRUE	Central Appraisal Interior	1	0	BRAS	Break Room Already Sensored	3	AV	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	1,912	1,912	WS	Sensor: No Additional Description.	332.69	120.46	212.23	0.00	212.23	81%	19%	57.14	0.35	\$0.32	\$0.61	\$0.13	\$0.00	10.0	0.0	\$2.41
2019	TRUE	Central Appraisal Interior	1	0	OS	Office Support (copy room, coffee room, etc)	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,040	2,040			118.32	42.84	75.48	0.00	75.48	81%	19%	20.32	0.12	\$0.34	\$0.65	\$0.14	\$0.00	10.0	0.0	\$0.86
2020	TRUE	Central Appraisal Interior	1	0	STAS	Storage Already Sensored	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	840	840	WS	Sensor: No Additional Description.	48.72	17.64	31.08	0.00	31.08	81%	19%	8.37	0.05	\$0.14	\$0.27	\$0.06	\$0.00	10.0	0.0	\$0.35
2021	TRUE	Central Appraisal Interior	1	0	HW	Hallway	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,632	3,632			210.66	76.27	134.38	0.00	134.38	81%	19%	36.18	0.22	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$1.53
2022	TRUE	Central Appraisal Interior	1	0	RRAS	Restroom Already Sensored	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	2,653	2,653	WS	Sensor: No Additional Description.	153.87	55.71	98.16	0.00	98.16	81%	19%	26.43	0.16	\$0.44	\$0.85	\$0.18	\$0.00	10.0	0.0	\$1.11
2023	TRUE	Central Appraisal Interior	1	0	MEAS	Mechanical/Electrical Rooms Already Sensored	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	280	280	WS	Sensor: No Additional Description.	16.24	5.88	10.36	0.00	10.36	81%	19%	2.79	0.02	\$0.05	\$0.09	\$0.02	\$0.00	10.0	0.0	\$0.12
2024	TRUE	Central Appraisal Interior	1	0	MEAS	Mechanical/Electrical Rooms Already Sensored	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.12	50%	0.04	0.04	280	280	WS	Sensor: No Additional Description.	32.48	11.76	20.72	0.00	20.72	81%	19%	5.58	0.03	\$0.05	\$0.09	\$0.02	\$0.00	10.0	0.0	\$0.24
2025	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
2026	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
2027	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
2028	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
2029	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
2030	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
2031	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
2032	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
2033	TRUE	Central Appraisal Interior	1	0	OOAS	Open Office Already Sensored	4	AV	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	2,094	2,094	CS	Sensor: No Additional Description.	485.81	175.90	309.91	0.00	309.91	81%	19%	83.44	0.51	\$0.35	\$0.67	\$0.14	\$0.00	10.0	0.0	\$3.52
2034	TRUE	Central Appraisal Interior	1	0	OO	Open Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	2,991	2,991			173.48	62.81	110.67	0.00	110.67	81%	19%	29.79	0.18	\$0.50	\$0.96	\$0.20	\$0.00	10.0	0.0	\$1.26
2035	TRUE	Central Appraisal Exterior		0	E	Exterior	2	4P-DEC	1X32T8EBN	2	RET		1X4FTLEDTYPEB-HO	BBU	31	1	Retrofit - Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (1) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HOBBU	15	2	10%	0.06	10%	0.03	0.00	4,380	4,380			271.56	131.40	140.16	0.00	140.16	81%	19%	0.00	0.00	\$0.37	\$1.40	\$0.15	\$0.00	10.0	0.0	\$3.24
2036	TRUE	Central Appraisal Exterior		0	E	Exterior	5	4VP	1X32T8EBN	5	RET		1X4FTLEDTYPEB		31	1	Retrofit - 4' Vapor Proof Fixture, Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (1) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 1X4FTLEDTYPEB	10.5	2	10%	0.16	10%	0.05	0.01	4,380	4,380			678.90	229.95	448.95	0.00	448.95	81%	19%	0.00	0.00	\$0.37	\$1.40	\$0.15	\$0.00	10.0	0.0	\$8.10
2037	TRUE	Central Appraisal Exterior		0	E	Exterior	2	INGROUND	1X39MH	2	NR																																	

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2051	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	2	EXIT-COMBO	1X4LEDEXIT	2	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2052	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	HW	Hallway	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,179	2,179			581.85	205.93	375.91	0.00	375.91	81%	19%	101.21	0.62	\$0.54	\$0.70	\$0.22	\$0.00	10.0	0.0	\$3.07
2053	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,543	1,543			137.29	48.59	88.70	0.00	88.70	81%	19%	23.88	0.15	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$0.73
2054	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,543	1,543			274.58	97.18	177.40	0.00	177.40	81%	19%	47.76	0.29	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$1.45
2055	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	OS	Office Support (copy room, coffee room, etc)	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,224	1,224			108.94	38.56	70.38	0.00	70.38	81%	19%	18.95	0.12	\$0.31	\$0.39	\$0.12	\$0.00	10.0	0.0	\$0.58
2056	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,543	1,543			274.58	97.18	177.40	0.00	177.40	81%	19%	47.76	0.29	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$1.45
2057	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	720	720			64.08	22.68	41.40	0.00	41.40	81%	19%	11.15	0.07	\$0.18	\$0.23	\$0.07	\$0.00	10.0	0.0	\$0.34
2058	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	CR	Conference Room	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,098	1,098			97.72	34.59	63.14	0.00	63.14	81%	19%	17.00	0.10	\$0.27	\$0.35	\$0.11	\$0.00	10.0	0.0	\$0.52
2059	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	CR	Conference Room	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,098	1,098			97.72	34.59	63.14	0.00	63.14	81%	19%	17.00	0.10	\$0.27	\$0.35	\$0.11	\$0.00	10.0	0.0	\$0.52
2060	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,274	2,274			202.39	71.63	130.76	0.00	130.76	81%	19%	35.20	0.21	\$0.57	\$0.73	\$0.23	\$0.00	10.0	0.0	\$1.07
2061	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,274	2,274			202.39	71.63	130.76	0.00	130.76	81%	19%	35.20	0.21	\$0.57	\$0.73	\$0.23	\$0.00	10.0	0.0	\$1.07
2062	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	HW	Hallway	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	2,179	2,179			1,163.69	411.87	751.82	0.00	751.82	81%	19%	202.41	1.23	\$0.54	\$0.70	\$0.22	\$0.00	10.0	0.0	\$6.15
2063	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	2	EXIT-COMBO	1X4LEDEXIT	2	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2064	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,543	1,543			274.58	97.18	177.40	0.00	177.40	81%	19%	47.76	0.29	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$1.45
2065	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,543	1,543			274.58	97.18	177.40	0.00	177.40	81%	19%	47.76	0.29	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$1.45
2066	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	MPAS	Multipurpose Already Sensored	9	A	3X32T8EBN	9	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.80	90%	0.28	0.47	889	889	CS	Sensor: No Additional Description.	711.77	251.92	459.85	0.00	459.85	81%	19%	123.81	0.75	\$0.22	\$0.28	\$0.09	\$0.00	10.0	0.0	\$3.76
2067	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	2	EXIT-COMBO	1X4LEDEXIT	2	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2068	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	BR	Break room	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,639	1,639			291.67	103.23	188.44	0.00	188.44	81%	19%	50.73	0.31	\$0.41	\$0.52	\$0.16	\$0.00	10.0	0.0	\$1.54
2069	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,543	1,543			274.58	97.18	177.40	0.00	177.40	81%	19%	47.76	0.29	\$0.39	\$0.49	\$0.15	\$0.00	10.0	0.0	\$1.45
2070	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.06	90%	0.03	0.03	2,274	2,274			134.17	57.99	76.18	0.00	76.18	81%	19%	20.51	0.13	\$1.93	\$0.73	\$0.23	\$0.00	10.0	0.0	\$2.43
2071	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,274	2,274			404.77	143.26	261.51	0.00	261.51	81%	19%	70.41	0.43	\$0.57	\$0.73	\$0.23	\$0.00	10.0	0.0	\$2.14
2072	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.06	90%	0.03	0.03	2,274	2,274			134.17	57.99	76.18	0.00	76.18	81%	19%	20.51	0.13	\$1.93	\$0.73	\$0.23	\$0.00	10.0	0.0	\$2.43
2073	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,274	2,274			404.77	143.26	261.51	0.00	261.51	81%	19%	70.41	0.43	\$0.57	\$0.73	\$0.23	\$0.00	10.0	0.0	\$2.14
2074	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,179	2,179			387.90	137.29	250.61	0.00	250.61	81%	19%	67.47	0.41	\$0.54	\$0.70	\$0.22	\$0.00	10.0	0.0	\$2.05
2075	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	CLAS	Classroom Already Sensored	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	790	790	WS	Sensor: No Additional Description.	421.65	149.23	272.41	0.00	272.41	81%	19%	73.34	0.45	\$0.20	\$0.25	\$0.08	\$0.00	10.0	0.0	\$2.23
2076	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	1	EXIT-COMBO	1X4LEDEXIT	1	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2077	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	OS	Office Support (copy room, coffee room, etc)	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,224	1,224			217.87	77.11	140.76	0.00	140.76	81%	19%	37.90	0.23	\$0.31	\$0.39	\$0.12	\$0.00	10.0		

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Best Source Quality	ECM Definition	Proposed System Wattage	Proposed Source Quality	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
2091	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	1	8S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 8' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	720	720			41.76	15.12	26.64	0.00	26.64	81%	19%	7.17	0.04	\$0.12	\$0.23	\$0.05	\$0.00	10.0	0.0	\$0.30
2092	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2093	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	OO	Open Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	1,795	1,795			803.98	301.49	502.49	0.00	502.49	81%	19%	135.29	0.82	\$0.60	\$0.57	\$0.24	\$0.00	10.0	0.0	\$3.73
2094	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2095	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,543	1,543			89.47	32.39	57.08	0.00	57.08	81%	19%	15.37	0.09	\$0.26	\$0.49	\$0.10	\$0.00	10.0	0.0	\$0.65
2096	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	1	AV	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,543	1,543			89.47	32.39	57.08	0.00	57.08	81%	19%	15.37	0.09	\$0.26	\$0.49	\$0.10	\$0.00	10.0	0.0	\$0.65
2097	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,179	2,179			387.90	137.29	250.61	0.00	250.61	81%	19%	67.47	0.41	\$0.54	\$0.70	\$0.22	\$0.00	10.0	0.0	\$2.05
2098	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	HW	Hallway	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,179	2,179			775.80	274.58	501.22	0.00	501.22	81%	19%	134.94	0.82	\$0.54	\$0.70	\$0.22	\$0.00	10.0	0.0	\$4.10
2099	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2100	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	1	4S	2X34T12MB	1	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", ES lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.07	90%	0.02	0.05	720	720			51.84	15.12	36.72	0.00	36.72	81%	19%	9.89	0.06	\$0.25	\$0.26	\$0.05	\$0.00	10.0	0.0	\$0.46
2101	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	1	KL	1X40INCA	1	LAMP		1X5LEDSI		40	1	Relamp - Keyless Fixture, Incandescent, (1) 40W lamp, w/ Light Emitting Diode (LED) Screw-in Lamp, 5W, with Integrated Driver Component, 5LEDSI	5	1	90%	0.04	90%	0.01	0.03	720	720			28.80	3.60	25.20	0.00	25.20	81%	19%	6.78	0.04	\$0.41	\$0.00	\$0.10	\$0.00	5.0	0.0	\$0.31
2102	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	720	720			128.16	45.36	82.80	0.00	82.80	81%	19%	22.29	0.14	\$0.18	\$0.23	\$0.07	\$0.00	10.0	0.0	\$0.68
2103	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	1	KL	1X12CFLSI	1	LAMP		1X9LEDSI		12	1	Relamp - Keyless Fixture, Compact Fluorescent, (1) 12W screw-in lamp/base w/ permanent disk installed, any bulb shape, w/ Light Emitting Diode (LED) Screw-In Lamp, 5W, with Integrated Driver Component, 9LEDSI	9	1	90%	0.01	90%	0.01	0.00	720	720			8.64	6.48	2.16	0.00	2.16	81%	19%	0.58	0.00	\$0.33	\$0.00	\$0.17	\$0.00	5.0	0.0	\$0.15
2104	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	1	DR	1X40INCA	1	IN	DR	1X11LEDF		40	1	New/ Replacement Fixture - Drum Fixture, Incandescent, (1) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.04	90%	0.01	0.03	720	720			28.80	7.92	20.88	0.00	20.88	81%	19%	5.62	0.03	\$0.41	\$0.00	\$0.03	\$0.02	7.0	7.0	\$0.36
2105	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	BR	Break room	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	1,639	1,639			583.34	206.46	376.88	0.00	376.88	81%	19%	101.47	0.62	\$0.41	\$0.52	\$0.16	\$0.00	10.0	0.0	\$3.08
2106	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,543	1,543			178.94	64.79	114.15	0.00	114.15	81%	19%	30.73	0.19	\$0.26	\$0.49	\$0.10	\$0.00	10.0	0.0	\$1.30
2107	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	PO	Private Office	2	AV	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Volumetric Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,543	1,543			178.94	64.79	114.15	0.00	114.15	81%	19%	30.73	0.19	\$0.26	\$0.49	\$0.10	\$0.00	10.0	0.0	\$1.30
2108	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	720	720			64.08	22.68	41.40	0.00	41.40	81%	19%	11.15	0.07	\$0.18	\$0.23	\$0.07	\$0.00	10.0	0.0	\$0.34
2109	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	DR	2X40INCA	1	IN	DR	1X11LEDF		80	2	New/ Replacement Fixture - Drum Fixture, Incandescent, (2) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.08	90%	0.01	0.06	2,274	2,274			181.92	25.01	156.91	0.00	156.91	81%	19%	42.24	0.26	\$2.58	\$0.00	\$0.09	\$0.06	7.0	7.0	\$2.42
2110	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	FL	1X40INCA	1	IN	DR	1X11LEDF		40	1	New/ Replacement Fixture - Flood Fixture, Incandescent, (1) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.04	90%	0.01	0.03	2,274	2,274			90.96	25.01	65.95	0.00	65.95	81%	19%	17.75	0.11	\$1.29	\$0.00	\$0.09	\$0.06	7.0	7.0	\$1.13
2111	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	DR	2X40INCA	1	IN	DR	1X11LEDF		80	2	New/ Replacement Fixture - Drum Fixture, Incandescent, (2) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.08	90%	0.01	0.06	2,274	2,274			181.92	25.01	156.91	0.00	156.91	81%	19%	42.24	0.26	\$2.58	\$0.00	\$0.09	\$0.06	7.0	7.0	\$2.42
2112	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	RR	Restroom	1	FL	1X40INCA	1	IN	DR	1X11LEDF		40	1	New/ Replacement Fixture - Flood Fixture, Incandescent, (1) 40W lamp, w/ Drum Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 11W, with Separate or Integrated Driver Component, 11LEDF	11	1	90%	0.04	90%	0.01	0.03	2,274	2,274			90.96	25.01	65.95	0.00	65.95	81%	19%	17.75	0.11	\$1.29	\$0.00	\$0.09	\$0.06	7.0	7.0	\$1.13
2113	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	ME	Mechanical/Electrical Rooms	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.09	50%	0.03	0.03	240	240			21.36	7.56	13.80	0.00	13.80	81%	19%	3.72	0.02	\$0.06	\$0.08	\$0.02	\$0.00	10.0	0.0	\$0.11
2114	TRUE	Rosenberg Boot Camp Juvenile Exterior	1	O	E	Exterior	2	DD	1X175MV	2	IN	DD	1XLED-DD		205	1	New/ Replacement Fixture - Dusk to Dawn Street & Area Fixture (Barn Type Goose Neck), Mercury Vapor, (1) 175W lamp, w/ Dusk to Dawn Street & Area Fixture (Barn Type Goose Neck), 53W LED Dusk to Dawn Fixture, 53LEDF	53	2	10%	0.41	10%	0.11	0.03	4,380	4,380			1,795.80	464.28	1,331.52	0.00	1,331.52	81%	19%	0.00	0.00	\$1.83	\$6.13	\$1.23	\$0.81	5.0	5.0	\$11.84
2115	TRUE	Rosenberg Boot Camp Juvenile Exterior	1	O	E	Exterior	1	FL	2X65INCA	1	IN	FL-DOUBLE	1X21LEDF	PAR38	130	2	New/ Replacement Fixture - Flood Fixture, Incandescent, (2) 65W lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 22W, with Separate or Integrated Driver Component, 22LEDPAR38	22	1	10%	0.13	10%	0.02	0.01	4,380	4,380			569.40	96.36	473.04	0.00	473.04	81%	19%	0.00	0.00	\$6.62	\$0.00	\$0.36	\$0.24	7.0	7.0	\$6.02
2116	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	HW	Hallway	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,179	2,179			488.14	183.05	305.09	0.00	305.09	81%	19%	82.14	0.50	\$0.73	\$0.70	\$0.29	\$0.00	10.0	0.0	\$2.27
2117	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	HW	Hallway	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,179	2,179			488.14	183.05	305.09	0.00	305.09	81%	19%	82.14	0.50	\$0.73	\$0.70	\$0.29	\$0.00	10.0	0.0	\$2.27
2118	TRUE	Rosenberg Boot Camp Juvenile Interior	1	LOWER	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0		

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2132	TRUE	George Family Development Center Interior	1	0	LO	Lobby/Entry Vestibule	6	10RC	2X26CFL4P	6	KIT	10RC	1XLEDF-10RC		51	1	Retrofit with a Kit or Reflector - 10" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ 10" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 10IN. SET WATTAGE TO 30W. HIGH SETTING, 1X30LEDF-10RC	30	2	90%	0.31	90%	0.18	0.11	3,401	3,401			1,040.71	612.18	428.53	0.00	428.53	81%	19%	115.37	0.70	\$2.21	\$1.70	\$0.95	\$0.31	5.0	5.0	\$15.87
2133	TRUE	George Family Development Center Interior	1	0	LO	Lobby/Entry Vestibule	4	WM-CYL-DI	1X70MH	4	RET		1X17LEDSI		95	1	Retrofit - Metal Halide, (1) 70W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Screw-in Lamp, 17W, with Integrated Driver Component, 17LEDSI	17	1	90%	0.38	90%	0.07	0.28	3,401	3,401			1,292.38	231.27	1,061.11	0.00	1,061.11	81%	19%	285.68	1.74	\$4.25	\$2.72	\$1.09	\$0.00	5.0	0.0	\$23.53
2134	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2135	TRUE	George Family Development Center Interior	1	0	HW	Hallway	6	A	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	3,632	3,632			1,263.94	457.63	806.30	0.00	806.30	81%	19%	217.08	1.32	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$9.15
2136	TRUE	George Family Development Center Interior	1	0	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.17	90%	0.06	0.10	3,632	3,632			631.97	228.82	403.15	0.00	403.15	81%	19%	108.54	0.66	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$4.58
2137	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	4	EXIT-COMBO	1X4LEDEXIT	4	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.02	100%	0.02	0.00	8,760	8,760			140.16	140.16	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2138	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2139	TRUE	George Family Development Center Interior	1	0	HW	Hallway	5	A	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	3,632	3,632			1,053.28	381.36	671.92	0.00	671.92	81%	19%	180.90	1.10	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$7.63
2140	TRUE	George Family Development Center Interior	1	0	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.17	90%	0.06	0.10	3,632	3,632			631.97	228.82	403.15	0.00	403.15	81%	19%	108.54	0.66	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$4.58
2141	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2142	TRUE	George Family Development Center Interior	1	0	PO	Private Office	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,571	2,571			686.46	242.96	443.50	0.00	443.50	81%	19%	119.40	0.73	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$3.63
2143	TRUE	George Family Development Center Interior	1	0	PO	Private Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,571	2,571			1,151.81	431.93	719.88	0.00	719.88	81%	19%	193.81	1.18	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$5.35
2144	TRUE	George Family Development Center Interior	1	0	ST	Storage	4	A	2X15LEDTDW	4	NR				30	2	2x4 Layin Prismatic Fixture, LED Tube, (2) 48", 15W LED Tube, Line Voltage - No Measure Recommended	30	-1	90%	0.12	90%	0.12	0.00	1,200	1,200			144.00	144.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.72	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2145	TRUE	George Family Development Center Interior	1	0	PO	Private Office	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	2,571	2,571			863.86	323.95	539.91	0.00	539.91	81%	19%	145.36	0.89	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$4.01
2146	TRUE	George Family Development Center Interior	1	0	PO	Private Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,571	2,571			1,151.81	431.93	719.88	0.00	719.88	81%	19%	193.81	1.18	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$5.35
2147	TRUE	George Family Development Center Interior	1	0	PO	Private Office	7	6RC	1X26CFL4P	7	KIT	6RC	1XLEDF-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.20	90%	0.11	0.09	2,571	2,571			521.91	269.96	251.96	0.00	251.96	81%	19%	67.83	0.41	\$0.84	\$1.29	\$0.36	\$0.12	5.0	5.0	\$11.50
2148	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,571	2,571			575.90	215.96	359.94	0.00	359.94	81%	19%	96.91	0.59	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$2.67
2149	TRUE	George Family Development Center Interior	1	0	ST	Storage	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	1,200	1,200			268.80	100.80	168.00	0.00	168.00	81%	19%	45.23	0.28	\$0.40	\$0.38	\$0.16	\$0.00	10.0	0.0	\$1.25
2150	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.11	90%	0.04	0.06	1,200	1,200			134.40	50.40	84.00	0.00	84.00	81%	19%	22.62	0.14	\$0.40	\$0.38	\$0.16	\$0.00	10.0	0.0	\$0.62
2151	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
2152	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2153	TRUE	George Family Development Center Interior	1	0	OS	Office Support (copy room, coffee room, etc)	9	A	4X32T8EBN	9	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	1.01	90%	0.38	0.57	2,040	2,040			2,056.32	771.12	1,285.20	0.00	1,285.20	81%	19%	346.02	2.11	\$0.68	\$0.65	\$0.27	\$0.00	10.0	0.0	\$9.55
2154	TRUE	George Family Development Center Interior	1	0	ST	Storage	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	1,200	1,200			268.80	100.80	168.00	0.00	168.00	81%	19%	45.23	0.28	\$0.40	\$0.38	\$0.16	\$0.00	10.0	0.0	\$1.25
2155	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	2,571	2,571			575.90	215.96	359.94	0.00	359.94	81%	19%	96.91	0.59	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$2.67
2156	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
2157	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2158	TRUE	George Family Development Center Interior	1	0	HW	Hallway	12	6RC	1X26CFL4P	12	KIT	6RC	1XLEDF-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	90%	0.35	90%	0.18	0.15	3,632	3,632			1,263.94	653.76	610.18	0.00	610.18	81%	19%	164.28	1.00	\$1.18	\$1.82	\$0.51	\$0.17	5.0	5.0	\$27.84
2159	TRUE	George Family Development Center Interior	1	0	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48																											

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2171	TRUE	George Family Development Center Interior	1	0	RR	Restroom	3	C	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	3,790	3,790			659.46	238.77	420.69	0.00	420.69	81%	19%	113.26	0.69	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$4.78
2172	TRUE	George Family Development Center Interior	1	0	RR	Restroom	2	C	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.12	90%	0.04	0.07	3,790	3,790			439.64	159.18	280.46	0.00	280.46	81%	19%	75.51	0.46	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$3.18
2173	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2174	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	B	2X32T8UGEBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.06	90%	0.03	0.03	3,790	3,790			223.61	96.65	126.97	0.00	126.97	81%	19%	34.18	0.21	\$3.22	\$1.21	\$0.38	\$0.00	10.0	0.0	\$4.06
2175	TRUE	George Family Development Center Interior	1	0	RR	Restroom	4	C	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	3,790	3,790			879.28	318.36	560.92	0.00	560.92	81%	19%	151.02	0.92	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$6.37
2176	TRUE	George Family Development Center Interior	1	0	CL	Classroom	12	A	2X15LEDTDW	12	NR				30	2	2x4 Layin Prismatic Fixture, LED Tube, (2) 48", 15W LED Tube, Line Voltage - No Measure Recommended	30	-1	90%	0.36	90%	0.36	0.00	1,880	1,880			676.80	676.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.13	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2177	TRUE	George Family Development Center Interior	1	0	CL	Classroom	6	A	4X32T8EBN	6	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.67	90%	0.25	0.38	1,880	1,880			1,263.36	473.76	789.60	0.00	789.60	81%	19%	212.58	1.30	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$5.87
2178	TRUE	George Family Development Center Interior	1	0	CL	Classroom	6	A	2X15LEDTDW	6	NR				30	2	2x4 Layin Prismatic Fixture, LED Tube, (2) 48", 15W LED Tube, Line Voltage - No Measure Recommended	30	-1	90%	0.18	90%	0.18	0.00	1,880	1,880			338.40	338.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.13	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2179	TRUE	George Family Development Center Interior	1	0	HW	Hallway	3	A	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	3,632	3,632			631.97	228.82	403.15	0.00	403.15	81%	19%	108.54	0.66	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$4.58
2180	TRUE	George Family Development Center Interior	1	0	HW	Hallway	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.12	90%	0.04	0.07	3,632	3,632			421.31	152.54	268.77	0.00	268.77	81%	19%	72.36	0.44	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$3.05
2181	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	2	EXIT-COMBO	1X4LEDEXIT	2	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2182	TRUE	George Family Development Center Interior	1	0	ST	Storage	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.22	90%	0.08	0.13	1,200	1,200			268.80	100.80	168.00	0.00	168.00	81%	19%	45.23	0.28	\$0.40	\$0.38	\$0.16	\$0.00	10.0	0.0	\$1.25
2183	TRUE	George Family Development Center Interior	1	0	BR	Break room	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,731	2,731			1,223.49	458.81	764.68	0.00	764.68	81%	19%	205.88	1.26	\$0.91	\$0.87	\$0.36	\$0.00	10.0	0.0	\$5.68
2184	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2185	TRUE	George Family Development Center Interior	1	0	PO	Private Office	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	2,571	2,571			863.86	323.95	539.91	0.00	539.91	81%	19%	145.36	0.89	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$4.01
2186	TRUE	George Family Development Center Interior	1	0	PO	Private Office	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	2,571	2,571			863.86	323.95	539.91	0.00	539.91	81%	19%	145.36	0.89	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$4.01
2187	TRUE	George Family Development Center Interior	1	0	PO	Private Office	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	2,571	2,571			863.86	323.95	539.91	0.00	539.91	81%	19%	145.36	0.89	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$4.01
2188	TRUE	George Family Development Center Interior	1	0	PO	Private Office	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	2,571	2,571			863.86	323.95	539.91	0.00	539.91	81%	19%	145.36	0.89	\$0.86	\$0.82	\$0.34	\$0.00	10.0	0.0	\$4.01
2189	TRUE	George Family Development Center Interior	1	0	PO	Private Office	7	6RC	1X26CF14P	7	KIT	6RC	1XLED6-6RC		29	1	Retrofit with a Kit or Reflector - 5" Round Recessed Can Fixtures, Compact Fluorescent, Multi, 4-pin, (1) 25W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED6-6RC	15	2	90%	0.20	90%	0.11	0.09	2,571	2,571			521.91	269.96	251.96	0.00	251.96	81%	19%	67.83	0.41	\$0.84	\$1.29	\$0.36	\$0.12	5.0	5.0	\$11.50
2190	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	2,571	2,571			298.24	107.98	190.25	0.00	190.25	81%	19%	51.22	0.31	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$2.16
2191	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2192	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2193	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2194	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2195	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2196	TRUE	George Family Development Center Interior	1	0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2197	TRUE	George Family Development Center Interior	1	0	OS	Office Support (copy room, coffee room, etc)	3	C	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,040	2,040			354.96	128.52	226.44	0.00	226.44	81%	19%	60.96	0.37	\$0.34	\$0.65	\$0.14				

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2210	TRUE	George Family Development Center Interior	1	0	CF	Cafeteria	29	8RC-SLOPE	1X42CF14P	29	RET		1X16.SLEDPL-8YP-VERT		46	1	Retrofit - Compact Fluorescent, Multi, 4-pin, (1) 42W lamp, w/ LED plug in Lamp, 15.5W, Direct Wire, Vertical, 16.5W PL 8YP VERTICAL	15.5	2	90%	1.33	90%	0.45	0.80	2,991	2,991			3,989.99	1,344.45	2,645.54	0.00	2,645.54	81%	19%	712.26	4.34	\$1.06	\$1.50	\$0.36	\$0.00	5.0	0.0	\$63.68
2211	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	1	EXIT-COMBO	1X4LEDEXIT	1	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2212	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
2213	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
2214	TRUE	George Family Development Center Interior	1	0	BR	Break room	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	2,731	2,731			917.62	344.11	573.51	0.00	573.51	81%	19%	154.41	0.94	\$0.91	\$0.87	\$0.36	\$0.00	10.0	0.0	\$4.26
2215	TRUE	George Family Development Center Interior	1	0	CR	Conference Room	16	A	4X32T8EBN	16	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	1.79	90%	0.67	1.01	1,830	1,830			3,279.36	1,229.76	2,049.60	0.00	2,049.60	81%	19%	551.82	3.36	\$0.61	\$0.59	\$0.24	\$0.00	10.0	0.0	\$15.23
2216	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2217	TRUE	George Family Development Center Interior	1	0	ST	Storage	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEBHYBRID	31.5	2	90%	0.18	90%	0.06	0.10	1,200	1,200			213.60	75.60	138.00	0.00	138.00	81%	19%	37.15	0.23	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$1.13
2218	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
2219	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPEBHYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,200	1,200			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.56
2220	TRUE	George Family Development Center Interior	1	0	ME	Mechanical/Electrical Rooms	2	A	4X32T8EBN	2	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	50%	0.22	50%	0.08	0.07	400	400			89.60	33.60	56.00	0.00	56.00	81%	19%	15.08	0.09	\$0.13	\$0.13	\$0.05	\$0.00	10.0	0.0	\$0.42
2221	TRUE	George Family Development Center Interior	1	0	RR	Restroom	5	C	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	3,790	3,790			1,099.10	397.95	701.15	0.00	701.15	81%	19%	188.77	1.15	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$7.96
2222	TRUE	George Family Development Center Interior	1	0	RR	Restroom	5	C	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	3,790	3,790			1,099.10	397.95	701.15	0.00	701.15	81%	19%	188.77	1.15	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$7.96
2223	TRUE	George Family Development Center Interior	1	0	ST	Storage	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
2224	TRUE	George Family Development Center Interior	1	0	ME	Mechanical/Electrical Rooms	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	400	400			23.20	8.40	14.80	0.00	14.80	81%	19%	3.98	0.02	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.17
2225	TRUE	George Family Development Center Interior	1	0	BR	Break room	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.34	90%	0.13	0.19	2,731	2,731			917.62	344.11	573.51	0.00	573.51	81%	19%	154.41	0.94	\$0.91	\$0.87	\$0.36	\$0.00	10.0	0.0	\$4.26
2226	TRUE	George Family Development Center Interior	1	0	OS	Office Support (copy room, coffee room, etc)	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.45	90%	0.17	0.25	2,040	2,040			913.92	342.72	571.20	0.00	571.20	81%	19%	153.78	0.94	\$0.68	\$0.65	\$0.27	\$0.00	10.0	0.0	\$4.24
2227	TRUE	George Family Development Center Interior	1	0	HW	Hallway	2	6RC	1X26CF14P	2	KIT	6RC	1XLED-6RC		29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RC	15	2	90%	0.06	90%	0.03	0.03	3,632	3,632			210.66	108.96	101.70	0.00	101.70	81%	19%	27.38	0.17	\$1.18	\$1.82	\$0.51	\$0.17	5.0	5.0	\$4.64
2228	TRUE	George Family Development Center Interior	1	0	CL	Classroom	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	1,880	1,880			1,684.48	631.68	1,052.80	0.00	1,052.80	81%	19%	283.45	1.73	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$7.82
2229	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2230	TRUE	George Family Development Center Interior	1	0	HW	Hallway	5	A	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	3,632	3,632			1,053.28	381.36	671.92	0.00	671.92	81%	19%	180.90	1.10	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$7.63
2231	TRUE	George Family Development Center Interior	1	0	HW	Hallway	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB	BBU	58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEBBBU	21	2	90%	0.06	90%	0.02	0.03	3,632	3,632			210.66	76.27	134.38	0.00	134.38	81%	19%	36.18	0.22	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$1.53
2232	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	2	EXIT-COMBO	1X4LEDEXIT	2	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2233	TRUE	George Family Development Center Interior	1	0	CR-DIM	Conference Room Dimmer added no hour reduction	1	6RC	1X26CF14P	1	KIT	6RC	1XLED-6RC	FCJS	29	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RCFCJS	15	2	90%	0.03	90%	0.02	0.01	1,830	1,830	LED WIRELESS D	Sensor: No Additional Description.	53.07	27.45	25.62	0.00	25.62	81%	19%	6.90	0.04	\$0.59	\$0.92	\$0.26	\$0.08	5.0	5.0	\$1.17
2234	TRUE	George Family Development Center Interior	1	0	CL	Classroom	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	1,880	1,880			1,684.48	631.68	1,052.80	0.00	1,052.80	81%	19%	283.45	1.73	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$7.82
2235	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2236	TRUE	George Family Development Center Interior	1	0	CL	Classroom	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	1,880	1,880			1,684.48	631.68	1,052.80	0.00	1,052.80	81%	19%	283.45	1.73	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$7.82

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2249	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2250	TRUE	George Family Development Center Interior	1	0	CL	Classroom	17	B	2X32T8UGEBN	17	KIT	8	3X2FTLEDTYPEB		59	1	Retrofit with a kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	1.00	90%	0.43	0.51	1,880	1,880			1,885.64	814.98	1,070.66	0.00	1,070.66	81%	19%	288.25	1.76	\$1.60	\$0.60	\$0.19	\$0.00	10.0	0.0	\$34.20
2251	TRUE	George Family Development Center Interior	1	0	HW	Hallway	5	A	2X32T8EBN	5	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.29	90%	0.11	0.17	3,632	3,632			1,053.28	381.36	671.92	0.00	671.92	81%	19%	180.90	1.10	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$7.63
2252	TRUE	George Family Development Center Interior	1	0	HW	Hallway	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB	8BU	58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB8BU	21	2	90%	0.06	90%	0.02	0.03	3,632	3,632			210.66	76.27	134.38	0.00	134.38	81%	19%	36.18	0.22	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$1.53
2253	TRUE	George Family Development Center Interior	1	0	X	Exit Signs	2	EXIT-COMBO	1X4LEDXIT	2	NR				4	1	EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2254	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2255	TRUE	George Family Development Center Interior	1	0	CL	Classroom	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	1,880	1,880			1,684.48	631.68	1,052.80	0.00	1,052.80	81%	19%	283.45	1.73	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$7.82
2256	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2257	TRUE	George Family Development Center Interior	1	0	CR-DIM	Conference Room Dimmer added no hour reduction	1	6RC	1X26CFL4P	1	KIT	6RC	1XLED-6RC	FCJS	29	1	Retrofit with a kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RCFCJS	15	2	90%	0.03	90%	0.02	0.01	1,830	1,830	LED WIRELESS D	Sensor: No Additional Description.	53.07	27.45	25.62	0.00	25.62	81%	19%	6.90	0.04	\$0.59	\$0.92	\$0.26	\$0.08	5.0	5.0	\$1.17
2258	TRUE	George Family Development Center Interior	1	0	CL	Classroom	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	1,880	1,880			1,684.48	631.68	1,052.80	0.00	1,052.80	81%	19%	283.45	1.73	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$7.82
2259	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2260	TRUE	George Family Development Center Interior	1	0	CL	Classroom	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	1,880	1,880			1,684.48	631.68	1,052.80	0.00	1,052.80	81%	19%	283.45	1.73	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$7.82
2261	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2262	TRUE	George Family Development Center Interior	1	0	CR-DIM	Conference Room Dimmer added no hour reduction	1	6RC	1X26CFL4P	1	KIT	6RC	1XLED-6RC	FCJS	29	1	Retrofit with a kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RCFCJS	15	2	90%	0.03	90%	0.02	0.01	1,830	1,830	LED WIRELESS D	Sensor: No Additional Description.	53.07	27.45	25.62	0.00	25.62	81%	19%	6.90	0.04	\$0.59	\$0.92	\$0.26	\$0.08	5.0	5.0	\$1.17
2263	TRUE	George Family Development Center Interior	1	0	CL	Classroom	8	A	4X32T8EBN	8	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	90%	0.90	90%	0.34	0.50	1,880	1,880			1,684.48	631.68	1,052.80	0.00	1,052.80	81%	19%	283.45	1.73	\$0.63	\$0.60	\$0.25	\$0.00	10.0	0.0	\$7.82
2264	TRUE	George Family Development Center Interior	1	0	RR	Restroom	1	C	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 1x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2265	TRUE	George Family Development Center Exterior	1	0	E	Exterior	2	FL	1X400MH	2	IN	FL	1X145LEDF		458	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 145W, with Separate or Integrated Driver Component, 145LEDF	145	1	10%	0.92	10%	0.29	0.06	4,380	4,380			4,012.08	1,270.20	2,741.88	0.00	2,741.88	81%	19%	0.00	0.00	\$3.94	\$5.26	\$2.37	\$1.56	7.0	7.0	\$10.53
2266	TRUE	George Family Development Center Exterior		0	E	Exterior	5	POLESB	2X250MH	5	IN	POLESB	2XLED-POLESB-SMALL	SWQ	590	1	New/ Replacement Fixture - Pole-Mounted Shoebox Fixture, Metal Halide, (2) 250W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, (2) LED Shoebox Small, 54LED5WQ	108	2	10%	2.95	10%	0.54	0.24	4,380	4,380			12,921.00	2,365.20	10,555.80	0.00	10,555.80	81%	19%	0.00	0.00	\$10.51	\$8.76	\$2.21	\$1.46	5.0	5.0	\$78.04
2267	TRUE	George Family Development Center Exterior		0	E	Exterior	4	POLESB	1X250MH	4	IN	POLESB	1XLED-POLESB-SMALL	T3	295	1	New/ Replacement Fixture - Pole-Mounted Shoebox Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, LED Shoebox Small, 54LEDT3	54	2	10%	1.18	10%	0.22	0.10	4,380	4,380			5,168.40	946.08	4,222.32	0.00	4,222.32	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.10	\$0.73	5.0	5.0	\$31.22
2268	TRUE	George Family Development Center Exterior	1	0	E	Exterior	1	6RC	1X26CFL4P	1	KIT	6RC	1XLED-6RC		29	1	Retrofit with a kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RC	15	2	10%	0.03	10%	0.02	0.00	4,380	4,380			127.02	65.70	61.32	0.00	61.32	81%	19%	0.00	0.00	\$1.42	\$2.19	\$0.61	\$0.20	5.0	5.0	\$2.80
2269	TRUE	George Family Development Center Exterior	1	0	E	Exterior	2	6RC	1X26CFL4P	2	KIT	6RC	1XLED-6RC		29	1	Retrofit with a kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RC	15	2	10%	0.06	10%	0.03	0.00	4,380	4,380			254.04	131.40	122.64	0.00	122.64	81%	19%	0.00	0.00	\$1.42	\$2.19	\$0.61	\$0.20	5.0	5.0	\$5.60
2270	TRUE	George Family Development Center Exterior	1	0	E	Exterior	3	WP	1X175MH	3	IN	WPFC	1X47LEDF	MOGUL	215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDFMOGUL	47	1	10%	0.65	10%	0.14	0.05	4,380	4,380			2,825.10	617.58	2,207.52	0.00	2,207.52	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$22.45
2271	TRUE	George Family Development Center Exterior	1	0	E	Exterior	5	6RC	1X26CFL4P	5	KIT	6RC	1XLED-6RC		29	1	Retrofit with a kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (1) 26W lamp, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LED-6RC	15	2	10%	0.15	10%	0.08	0.01	4,380	4,380			635.10	328.50	306.60	0.00	306.60	81%	19%	0.00	0.00	\$1.42	\$2.19	\$0.61	\$0.20	5.0	5.0	\$13.99
2290	TRUE	Drainage Buildings Interior	1	0	LO	Lobby/Entry Vestibule	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,401	3,401			197.26	71.42	125.84	0.00	125.84	81%	19%	33.88	0.21	\$0.57	\$1.09	\$0.23	\$0.00	10.0	0.0	\$1.43
2291	TRUE	Drainage Buildings Interior	1	0	HW	Hallway	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,632	3,632			210.66	76.27	134.38	0.00	134.38	81%	19%	36.18	0.22	\$0.61	\$1.16	\$0.24	\$0.00	10.0	0.0	\$1.53
2292	TRUE	Drainage Buildings Interior	1	0	HW	Hallway	1	6RC	1X21LEDF	1	NR				21	1	6" Round Recessed Can Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 21W, with Separate or Integrated Driver Component - No Measure Recommended	21	-1	90%	0.02	90%	0.02	0.00	3,632	3,632			76.27	76.27	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.53	\$0.35	\$0.00	\$0.00	0.0	0.0	\$0.00
2293	TRUE	Drainage Buildings Interior	1	0	HW	Hallway	1	4W	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4" Wrap Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,632	3,632			210.66	76.27	134.38	0.00	134.38	81%	19%	36.18	0.22							

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2309	TRUE	Drainage Buildings Interior	1	0	X	Exit Signs	7	EXIT	1X4LEDEKIT	7	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.03	100%	-0.03	0.00	8,760	8,760			245.28	245.28	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2310	TRUE	Drainage Buildings Interior	1	0	OO	Open Office	90	A	4X15LEDTDW	90	NR				60	2	2x4 Layin Prismatic Fixture, LED Tube, (4) 48", 15W LED Tube, Line Voltage - No Measure Recommended	60	-1	90%	5.40	90%	5.40	0.00	2,991	2,991			16,151.40	16,151.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.59	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2352	TRUE	Roads & Bridge Admin Interior	1	0	LO	Lobby/Entry Vestibule	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	3,401	3,401			908.07	321.39	586.67	0.00	586.67	81%	19%	157.95	0.96	\$0.85	\$1.09	\$0.34	\$0.00	10.0	0.0	\$4.80
2353	TRUE	Roads & Bridge Admin Interior	1	0	OO	Open Office	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,991	2,991			798.60	282.65	515.95	0.00	515.95	81%	19%	138.91	0.85	\$0.75	\$0.96	\$0.30	\$0.00	10.0	0.0	\$4.22
2354	TRUE	Roads & Bridge Admin Interior	1	0	OS	Office Support (copy room, coffee room, etc)	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,040	2,040			363.12	128.52	234.60	0.00	234.60	81%	19%	63.16	0.39	\$0.51	\$0.65	\$0.20	\$0.00	10.0	0.0	\$1.92
2355	TRUE	Roads & Bridge Admin Interior	1	0	BR	Break room	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	2,731	2,731			243.06	86.03	157.03	0.00	157.03	81%	19%	42.28	0.26	\$0.68	\$0.87	\$0.27	\$0.00	10.0	0.0	\$1.28
2356	TRUE	Roads & Bridge Admin Interior	1	0	HW	Hallway	5	A	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	3,632	3,632			1,616.24	572.04	1,044.20	0.00	1,044.20	81%	19%	281.13	1.71	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$8.54
2357	TRUE	Roads & Bridge Admin Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEKIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2358	TRUE	Roads & Bridge Admin Interior	1	0	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,790	3,790			337.31	119.39	217.93	0.00	217.93	81%	19%	58.67	0.36	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$1.78
2359	TRUE	Roads & Bridge Admin Interior	1	0	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,200	1,200			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.56
2360	TRUE	Roads & Bridge Admin Interior	1	0	OS	Office Support (copy room, coffee room, etc)	12	A	3X32T8EBN2	12	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.08	90%	0.38	0.63	2,040	2,040			2,203.20	771.12	1,432.08	0.00	1,432.08	81%	19%	385.56	2.35	\$0.51	\$1.31	\$0.20	\$0.00	10.0	0.0	\$19.34
2361	TRUE	Roads & Bridge Admin Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEKIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2362	TRUE	Roads & Bridge Admin Interior	1	0	PO	Private Office	3	A	3X32T8EBN2	3	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	2,571	2,571			694.17	242.96	451.21	0.00	451.21	81%	19%	121.48	0.74	\$0.64	\$1.65	\$0.26	\$0.00	10.0	0.0	\$6.09
2363	TRUE	Roads & Bridge Admin Interior	1	0	ME	Mechanical/Electrical Rooms	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.27	50%	0.09	0.09	400	400			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.10	\$0.13	\$0.04	\$0.00	10.0	0.0	\$0.56
2364	TRUE	Roads & Bridge Admin Interior	1	0	ME	Mechanical/Electrical Rooms	1	A	2X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.09	50%	0.03	0.03	400	400			35.60	12.60	23.00	0.00	23.00	81%	19%	6.19	0.04	\$0.10	\$0.13	\$0.04	\$0.00	10.0	0.0	\$0.19
2365	TRUE	Roads & Bridge Admin Interior	1	0	ST	Storage	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,200	1,200			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.56
2366	TRUE	Roads & Bridge Admin Interior	1	0	RR	Restroom	5	A	3X32T8EBN	5	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.45	90%	0.16	0.26	3,790	3,790			1,686.55	596.93	1,089.63	0.00	1,089.63	81%	19%	293.36	1.79	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$8.91
2367	TRUE	Roads & Bridge Admin Interior	1	0	LR	Locker Room	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	3,200	3,200			1,139.20	403.20	736.00	0.00	736.00	81%	19%	198.15	1.21	\$0.80	\$1.02	\$0.32	\$0.00	10.0	0.0	\$6.02
2368	TRUE	Roads & Bridge Admin Interior	1	0	HW	Hallway	1	B	1X20LEDF	1	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.02	90%	0.02	0.00	3,632	3,632			72.64	72.64	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.51	\$0.34	\$0.00	\$0.00	0.0	0.0	\$0.00
2369	TRUE	Roads & Bridge Admin Interior	1	0	HW	Hallway	7	A	3X32T8EBN	7	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.62	90%	0.22	0.36	3,632	3,632			2,262.74	800.86	1,461.88	0.00	1,461.88	81%	19%	393.58	2.40	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$11.95
2370	TRUE	Roads & Bridge Admin Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEKIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2371	TRUE	Roads & Bridge Admin Interior	1	0	CR	Conference Room	20	A	3X32T8EBN2	20	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.80	90%	0.63	1.05	1,830	1,830			3,294.00	1,152.90	2,141.10	0.00	2,141.10	81%	19%	576.45	3.51	\$0.46	\$1.17	\$0.18	\$0.00	10.0	0.0	\$28.91
2372	TRUE	Roads & Bridge Admin Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEKIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2373	TRUE	Roads & Bridge Admin Interior	1	0	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,790	3,790			674.62	238.77	435.85	0.00	435.85	81%	19%	117.34	0.72	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$3.56
2374	TRUE	Roads & Bridge Admin Interior	1	0	RR	Restroom	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	3,790	3,790			1,011.93	358.16	653.78	0.00	653.78	81%	19%	176.02	1.07	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$5.34
2375	TRUE	Roads & Bridge Admin Interior	1	0	BR	Break room	4	A	3X32T8EBN2	4	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	2,731	2,731			983.16	344.11	639.05	0.00	639.05	81%	19%	172.05	1.05	\$0.68	\$1.75	\$0.27	\$0.00	10.0	0.0	\$8.63
2376	TRUE	Roads & Bridge Admin Interior	1	0	HW	Hallway	2	A	3X32T8EBN2	2	RET		3X4FTLEDTYPEB		90	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, (2) Instant Start Ballasts, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.11	3,632	3,632			653.76	228.82	424.94	0.00	424.94	81%	19%	114.41	0.70	\$0.91	\$2.32	\$0.36	\$0.00	10.0	0.0	\$5.74
2377	TRUE	Roads & Bridge Admin Interior	1	0	ST	Storage	2	A	3X32T8EBN2	2	RET		3X																															

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2392	TRUE	Roads & Bridge Admin Interior	1	0	X	Exit Signs	2	EXIT	1X4LEDEXIT	2	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.01	100%	0.01	0.00	8,760	8,760			70.08	70.08	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2393	TRUE	Roads & Bridge Admin Interior	1	0	OS	Office Support (copy room, coffee room, etc)	3	4I	2X32T8EBN	3	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.17	90%	0.06	0.10	2,040	2,040			354.96	128.52	226.44	0.00	226.44	81%	19%	60.96	0.37	\$0.34	\$0.65	\$0.14	\$0.00	10.0	0.0	\$2.57
2394	TRUE	Roads & Bridge Admin Interior	1	0	OD	Open Office	8	B	2X32T8UGEBN	8	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.47	90%	0.20	0.24	2,991	2,991			1,411.75	610.16	801.59	0.00	801.59	81%	19%	215.81	1.32	\$2.54	\$0.96	\$0.30	\$0.00	10.0	0.0	\$25.60
2395	TRUE	Roads & Bridge Admin Interior	1	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2396	TRUE	Roads & Bridge Admin Interior	1	0	ST	Storage	1	HB	1X250MH	1	IN	HB-ROUND	KLDEF-HB-ROUND-MEDIUM		295	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDF	153	2	90%	0.30	90%	0.15	0.13	1,200	1,200			354.00	183.60	170.40	0.00	170.40	81%	19%	45.88	0.28	\$1.44	\$1.20	\$0.86	\$0.56	5.0	5.0	\$1.22
2397	TRUE	Roads & Bridge Admin Interior	2	0	ST	Storage	22	4I	2X32T8EBN	22	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	1.28	90%	0.46	0.73	1,200	1,200			1,531.20	554.40	976.80	0.00	976.80	81%	19%	262.98	1.60	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$11.09
2398	TRUE	Roads & Bridge Admin Interior	2	0	X	Exit Signs	1	EXIT	1X4LEDEXIT	1	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			35.04	35.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2399	TRUE	Roads & Bridge Admin Interior	1	0	OS	Office Support (copy room, coffee room, etc)	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	2,040	2,040			1,089.36	385.56	703.80	0.00	703.80	81%	19%	189.48	1.16	\$0.51	\$0.65	\$0.20	\$0.00	10.0	0.0	\$5.75
2400	TRUE	Roads & Bridge Admin Interior	1	0	OS	Office Support (copy room, coffee room, etc)	2	B	2X32T8UGEBN	2	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	90%	0.12	90%	0.05	0.06	2,040	2,040			240.72	104.04	136.68	0.00	136.68	81%	19%	36.80	0.22	\$1.73	\$0.65	\$0.20	\$0.00	10.0	0.0	\$4.37
2401	TRUE	Roads & Bridge Admin Interior	1	0	LQ	Living Quarters/Bunk Rooms	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,200	1,200			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.56
2402	TRUE	Roads & Bridge Admin Interior	1	0	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,790	3,790			674.62	238.77	435.85	0.00	435.85	81%	19%	117.34	0.72	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$3.56
2403	TRUE	Roads & Bridge Admin Interior	1	0	RR	Restroom	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	3,790	3,790			337.31	119.39	217.93	0.00	217.93	81%	19%	58.67	0.36	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$1.78
2404	TRUE	Roads & Bridge Admin Interior	1	0	ST	Storage	1	RE	1X20LEDF	1	NR				20	1	Recessed Enclosed Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.02	90%	0.02	0.00	1,200	1,200			24.00	24.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.17	\$0.11	\$0.00	\$0.00	0.0	0.0	\$0.00
2405	TRUE	Roads & Bridge Admin Interior	1	0	LQ	Living Quarters/Bunk Rooms	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.09	90%	0.03	0.05	1,200	1,200			106.80	37.80	69.00	0.00	69.00	81%	19%	18.58	0.11	\$0.30	\$0.38	\$0.12	\$0.00	10.0	0.0	\$0.56
2406	TRUE	Roads & Bridge Admin Interior	1	0	ST	Storage	1	RE	1X20LEDF	1	NR				20	1	Recessed Enclosed Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	90%	0.02	90%	0.02	0.00	1,200	1,200			24.00	24.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.17	\$0.11	\$0.00	\$0.00	0.0	0.0	\$0.00
2407	TRUE	Roads & Bridge Admin Exterior	1	0	E	Exterior	5	WP	1X250MH	5	IN	WP	1X80LEDF		295	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	10%	1.48	10%	0.40	0.11	4,380	4,380			6,460.50	1,752.00	4,708.50	0.00	4,708.50	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.31	\$0.86	7.0	7.0	\$37.33
2408	TRUE	Roads & Bridge Admin Exterior	1	0	E	Exterior	1	WP	1X250MH	1	IN	WP	1X80LEDF		295	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	10%	0.30	10%	0.08	0.02	4,380	4,380			1,292.10	350.40	941.70	0.00	941.70	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.31	\$0.86	7.0	7.0	\$7.47
2409	TRUE	Roads & Bridge Admin Exterior	1	0	E	Exterior	6	WP	1X250MH	6	IN	WP	1X80LEDF		295	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	10%	1.77	10%	0.48	0.13	4,380	4,380			7,752.60	2,102.40	5,650.20	0.00	5,650.20	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.31	\$0.86	7.0	7.0	\$44.79
2410	TRUE	Roads & Bridge Admin Exterior	1	0	E	Exterior	8	WP	1X175MH	8	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	1.72	10%	0.38	0.13	4,380	4,380			7,533.60	1,646.88	5,886.72	0.00	5,886.72	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$59.88
2411	TRUE	Roads & Bridge Admin Exterior	1	0	E	Exterior	2	FL	1X60LEDF	2	NR				60	1	Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 60W, with Separate or Integrated Driver Component - No Measure Recommended	60	-1	10%	0.12	10%	0.12	0.00	4,380	4,380			525.60	525.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.84	\$1.21	\$0.00	\$0.00	0.0	0.0	\$0.00
2412	TRUE	Roads & Bridge Admin Interior	1	0	WS	Workshop	2	HB	1X250MH	2	IN	HB-ROUND	KLDEF-HB-ROUND-MEDIUM		295	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDF	153	2	90%	0.59	90%	0.31	0.26	1,301	1,301			767.59	398.11	369.48	0.00	369.48	81%	19%	99.48	0.61	\$1.56	\$1.30	\$0.93	\$0.61	5.0	5.0	\$2.64
2413	TRUE	Roads & Bridge Admin Interior		0	ST	Storage	2	HB	1X250MH	2	IN	HB-ROUND	KLDEF-HB-ROUND-MEDIUM		295	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDF	153	2	90%	0.59	90%	0.31	0.26	1,200	1,200			708.00	367.20	340.80	0.00	340.80	81%	19%	91.75	0.56	\$1.44	\$1.20	\$0.86	\$0.56	5.0	5.0	\$2.44
2414	TRUE	Roads & Bridge Admin Exterior		0	E	Exterior	5	WPFC	1X175MH	5	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	1.08	10%	0.24	0.08	4,380	4,380			4,708.50	1,029.30	3,679.20	0.00	3,679.20	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$37.42
2415	TRUE	Roads & Bridge Admin Interior		0	WS	Workshop	2	HB	1X250MH	2	IN	HB-ROUND	KLDEF-HB-ROUND-MEDIUM		295	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDF	153	2	90%	0.59	90%	0.31	0.26	1,301	1,301			767.59	398.11	369.48	0.00	369.48	81%	19%	99.48	0.61	\$1.56	\$1.30	\$0.93	\$0.61	5.0	5.0	\$2.64
2416	TRUE	Roads & Bridge Admin Exterior		0	E	Exterior	2	WP	1X175MH	2	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.43	10%	0.09	0.03	4,380	4,380			1,883.40	411.72	1,471.68	0.00	1,471.68	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$14.97
2417	TRUE	Roads & Bridge Admin Interior		0	ST	Storage	4	4I	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.23	90%	0.08	0.13	1,200	1,200			278.40	100.80	177.60	0.00	177.60	81%	19%	47.82	0.29	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$2.02
2418	TRUE	Roads & Bridge Admin Interior		0	ST	Storage	6	4I	2X32T8EBN	6	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Industrial Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.35	90%	0.13	0.20	1,200	1,200			417.60	151.20	266.40	0.00	266.40	81%	19%	71.72	0.44	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$3.02
2419	TRUE	Roads & Bridge Admin Exterior		0	E	Exterior	22	WP	1X250MH	22	IN	WP	1X80LEDF		295	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	10%	6.49	10%	1.76	0.47	4,380	4,380			28,426.20	7,708.80	20,717.40	0.00	20,717.40	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.31				

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2434	TRUE	5th St. Boys & Girls Community Center Interior		0	ST	Storage	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,200	1,200			139.20	50.40	88.80	0.00	88.80	81%	19%	23.91	0.15	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$1.01
2435	TRUE	5th St. Boys & Girls Community Center Interior		0	KT	Kitchen	3	A	3X32T8EBN	3	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.27	90%	0.09	0.16	1,800	1,800			480.60	170.10	310.50	0.00	310.50	81%	19%	83.60	0.51	\$0.45	\$0.58	\$0.18	\$0.00	10.0	0.0	\$2.54
2436	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,790	3,790			674.62	238.77	435.85	0.00	435.85	81%	19%	117.34	0.72	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$3.56
2437	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2438	TRUE	5th St. Boys & Girls Community Center Interior		0	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50
2439	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,790	3,790			674.62	238.77	435.85	0.00	435.85	81%	19%	117.34	0.72	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$3.56
2440	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.06	90%	0.02	0.03	3,790	3,790			219.82	79.59	140.23	0.00	140.23	81%	19%	37.75	0.23	\$0.63	\$1.21	\$0.25	\$0.00	10.0	0.0	\$1.59
2441	TRUE	5th St. Boys & Girls Community Center Interior		0	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,632	3,632			646.50	228.82	417.68	0.00	417.68	81%	19%	112.45	0.69	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$3.41
2442	TRUE	5th St. Boys & Girls Community Center Interior		0	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,632	3,632			646.50	228.82	417.68	0.00	417.68	81%	19%	112.45	0.69	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$3.41
2443	TRUE	5th St. Boys & Girls Community Center Interior		0	HW	Hallway	3	EXIT	2X10INCEXIT	3	IN	EXIT	1X4LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided, LED4W	4	1	90%	0.06	90%	0.01	0.04	3,632	3,632			217.92	43.58	174.34	0.00	174.34	81%	19%	46.94	0.29	\$0.36	\$0.00	\$0.69	\$0.00	5.0	0.0	(\$0.98)
2444	TRUE	5th St. Boys & Girls Community Center Interior		0	MP	Multipurpose	16	A	3X32T8EBN	16	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	1.42	90%	0.50	0.83	2,115	2,115			3,011.76	1,065.96	1,945.80	0.00	1,945.80	81%	19%	523.87	3.19	\$0.53	\$0.68	\$0.21	\$0.00	10.0	0.0	\$15.90
2445	TRUE	5th St. Boys & Girls Community Center Interior		0	HW	Hallway	4	A	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.36	90%	0.13	0.21	3,632	3,632			1,292.99	457.63	835.36	0.00	835.36	81%	19%	224.90	1.37	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$6.83
2446	TRUE	5th St. Boys & Girls Community Center Interior		0	HW	Hallway	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,632	3,632			646.50	228.82	417.68	0.00	417.68	81%	19%	112.45	0.69	\$0.91	\$1.16	\$0.36	\$0.00	10.0	0.0	\$3.41
2447	TRUE	5th St. Boys & Girls Community Center Interior		0	HW	Hallway	2	EXIT	2X10INCEXIT	2	IN	EXIT	1X4LEDEXIT		20	1	New/ Replacement Fixture - Exit Sign (Red), EXIT Incandescent, (2) 10W lamps, w/ Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided, LED4W	4	1	90%	0.04	90%	0.01	0.03	3,632	3,632			145.28	29.06	116.22	0.00	116.22	81%	19%	31.29	0.19	\$0.36	\$0.00	\$0.69	\$0.00	5.0	0.0	(\$0.66)
2448	TRUE	5th St. Boys & Girls Community Center Interior		0	CL	Classroom	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	1,880	1,880			1,003.92	355.32	648.60	0.00	648.60	81%	19%	174.62	1.06	\$0.47	\$0.60	\$0.19	\$0.00	10.0	0.0	\$5.30
2449	TRUE	5th St. Boys & Girls Community Center Interior		0	CL	Classroom	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.53	90%	0.19	0.31	1,880	1,880			1,003.92	355.32	648.60	0.00	648.60	81%	19%	174.62	1.06	\$0.47	\$0.60	\$0.19	\$0.00	10.0	0.0	\$5.30
2450	TRUE	5th St. Boys & Girls Community Center Interior		0	ST	Storage	2	4S	2X32T8EBN	2	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	90%	0.12	90%	0.04	0.07	1,200	1,200			139.20	50.40	88.80	0.00	88.80	81%	19%	23.91	0.15	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$1.01
2451	TRUE	5th St. Boys & Girls Community Center Interior		0	ME	Mechanical/Electrical Rooms	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	50%	0.06	50%	0.02	0.02	400	400			23.20	8.40	14.80	0.00	14.80	81%	19%	3.98	0.02	\$0.07	\$0.13	\$0.03	\$0.00	10.0	0.0	\$0.17
2452	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,790	3,790			674.62	238.77	435.85	0.00	435.85	81%	19%	117.34	0.72	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$3.56
2453	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	1	2S	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2' Strip Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	90%	0.03	90%	0.02	0.01	3,790	3,790			125.07	64.43	60.64	0.00	60.64	81%	19%	16.33	0.10	\$0.79	\$1.06	\$0.25	\$0.00	10.0	0.0	\$1.60
2454	TRUE	5th St. Boys & Girls Community Center Interior		0	ST	Storage	1	6RC	2X26CFL4P	1	KIT	6RC	1XLEDF-6RC		51	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, Multi, 4-pin, (2) 26W lamps, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X1SLEDF-6RC	15	2	90%	0.05	90%	0.02	0.03	1,200	1,200			61.20	18.00	43.20	0.00	43.20	81%	19%	11.63	0.07	\$0.78	\$0.60	\$0.17	\$0.06	5.0	5.0	\$1.16
2455	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	3,790	3,790			674.62	238.77	435.85	0.00	435.85	81%	19%	117.34	0.72	\$0.95	\$1.21	\$0.38	\$0.00	10.0	0.0	\$3.56
2456	TRUE	5th St. Boys & Girls Community Center Interior		0	RR	Restroom	1	2S	2X17T8EBN	1	RET		2X2FTLEDTYPEB		33	1	Retrofit - 2' Strip Fixture, Fluorescent, (2) 24", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 2X2FTLEDTYPEB	17	2	90%	0.03	90%	0.02	0.01	3,790	3,790			125.07	64.43	60.64	0.00	60.64	81%	19%	16.33	0.10	\$0.79	\$1.06	\$0.25	\$0.00	10.0	0.0	\$1.60
2457	TRUE	5th St. Boys & Girls Community Center Interior		0	PO	Private Office	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	90%	0.18	90%	0.06	0.10	2,571	2,571			457.64	161.97	295.67	0.00	295.67	81%	19%	79.60	0.49	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$2.42
2458	TRUE	5th St. Boys & Girls Community Center Interior		0	ME	Mechanical/Electrical Rooms	2	A	3X32T8EBN	2	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	50%	0.18	50%	0.06	0.06	400	400			71.20	25.20	46.00	0.00	46.00	81%	19%	12.38	0.08	\$0.10	\$0.13	\$0.04	\$0.00	10.0	0.0	\$0.38
2459	TRUE	5th St. Boys & Girls Community Center Interior		0	GYM	Gymnasium	16	HB	1X400MH	16	IN	HB	1XLEDF-HB		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Highbay Fixture, 172W LED High Bay, 172LED	172	2	90%	7.33	90%	2.75	4.12	2,720	2,720			19,932.16	7,485.44	12,446.72	0.00	12,446.72	81%	19%	3,351.04	20.43	\$2.45	\$3.26	\$2.18	\$1.44	5.0	5.0	\$33.43
2460	TRUE	5th St. Boys & Girls Community Center Exterior		0	GYM	Gymnasium	3	EXIT	1X4LEDEXIT	3	NR				4	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 4W lamp, Single Sided - No Measure Recommended	4	-1	90%	0.01</																							

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings		
2473	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	1	WALL-SB	1X400MH	1	IN	WP	1XB0LEDF		458	1	New/ Replacement Fixture - Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	10%	0.46	10%	0.08	0.04	4,380	4,380			2,006.04	350.40	1,655.64	0.00	1,655.64	81%	19%	0.00	0.00	\$3.94	\$5.26	\$1.31	\$0.86	7.0	7.0	\$7.03	
2474	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	2	WALL-SB	1X400MH	2	IN	WP	1XB0LEDF		458	1	New/ Replacement Fixture - Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	10%	0.92	10%	0.16	0.08	4,380	4,380			4,012.08	700.80	3,311.28	0.00	3,311.28	81%	19%	0.00	0.00	\$3.94	\$5.26	\$1.31	\$0.86	7.0	7.0	\$14.05	
2475	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	6	4RC	1X75INCA	6	KIT	4RC	1XLEDF-4RC		75	1	Retrofit with a Kit or Reflector - Incandescent, (1) 75W lamp, w/ LED Recessed Can Retrofit Kit 4IN. SET WATTAGE TO 12W. HIGH SETTING, 1X12LEDF-4RC	12	2	10%	0.45	10%	0.07	0.04	4,380	4,380			1,971.00	315.36	1,655.64	0.00	1,655.64	81%	19%	0.00	0.00	\$3.31	\$0.00	\$0.49	\$0.16	5.0	5.0	\$15.94	
2476	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	6	6RC	1X100MH	6	KIT	6RC	1XLEDF-6RC		128	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Metal Halide, (1) 100W lamp, Magnetic ballast, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	10%	0.77	10%	0.09	0.07	4,380	4,380			3,363.84	394.20	2,969.64	0.00	2,969.64	81%	19%	0.00	0.00	\$4.39	\$3.50	\$0.61	\$0.20	5.0	5.0	\$42.49	
2477	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	1	WP	1X32CFL4P	1	IN	WPFC	1X27LEDF		35	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Compact Fluorescent, Multi, 4-pin, (1) 32W lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 27W, with Separate or Integrated Driver Component, 27LEDF	27	1	10%	0.04	10%	0.03	0.00	4,380	4,380			153.30	118.26	35.04	0.00	35.04	81%	19%	0.00	0.00	\$1.64	\$2.19	\$0.44	\$0.29	7.0	7.0	\$3.10	
2478	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	6	WP	1X32CFL4P	6	IN	WPFC	1X27LEDF		35	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Compact Fluorescent, Multi, 4-pin, (1) 32W lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 27W, with Separate or Integrated Driver Component, 27LEDF	27	1	10%	0.21	10%	0.16	0.00	4,380	4,380			919.80	709.56	210.24	0.00	210.24	81%	19%	0.00	0.00	\$1.64	\$2.19	\$0.44	\$0.29	7.0	7.0	\$18.60	
2479	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	6	WP	2X32CFL4P	6	IN	WPFC	1X47LEDF		70	2	New/ Replacement Fixture - Exterior Wall Pack Fixture, Compact Fluorescent, Multi, 4-pin, (2) 32W lamp, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	10%	0.42	10%	0.28	0.01	4,380	4,380			1,839.60	1,235.16	604.44	0.00	604.44	81%	19%	0.00	0.00	\$3.29	\$2.19	\$0.77	\$0.51	7.0	7.0	\$25.20	
2480	TRUE	5th St. Boys & Girls Community Center Exterior		0	E	Exterior	3	POLESB	1X400MH	3	IN	POLESB	1XLEDF-POLESB-MEDIUM	T3	458	1	New/ Replacement Fixture - Pole-Mounted Shoebox Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, LED Shoebox Medium, 74LEDFT3	74	2	10%	1.37	10%	0.22	0.12	4,380	4,380			6,018.12	972.36	5,045.76	0.00	5,045.76	81%	19%	0.00	0.00	\$3.94	\$5.26	\$1.10	\$0.73	5.0	5.0	\$22.10	
2482	TRUE	Central Appraisal Interior		0	NONE	No Hours	10			10	ADD					0	-1	Misc. Equipment - , w/ , BBU 4' TLED	0	-1	100%	0.00	100%	0.00	0.00	0	0			0.00	0.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2483	TRUE	George Family Development Center Interior		0	NONE	No Hours	30			30	ADD					0	-1	Misc. Equipment - , w/ , BBU 4' TLED	0	-1	100%	0.00	100%	0.00	0.00	0	0			0.00	0.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2484	TRUE	Justice Center Interior		HIGHER	NONE	No Hours	20			20	ADD					0	-1	Misc. Equipment - , w/ , BBU 4' TLED	0	-1	100%	0.00	100%	0.00	0.00	0	0			0.00	0.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2485	TRUE	Juvenile Probation Interior		0	NONE	No Hours	10			10	ADD					0	-1	Misc. Equipment - , w/ , BBU 4' TLED	0	-1	100%	0.00	100%	0.00	0.00	0	0			0.00	0.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2486	TRUE	Drainage Buildings Interior		0	NONE	No Hours	58			58	ADD					0	-1	Misc. Equipment - , w/ , BBU 4' TLED	0	-1	100%	0.00	100%	0.00	0.00	0	0			0.00	0.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2487	TRUE	Fort Bend Hobby Boys & Girls Interior		0	NONE	No Hours	8			8	ADD					0	-1	Misc. Equipment - , w/ , BBU 4' TLED	0	-1	100%	0.00	100%	0.00	0.00	0	0			0.00	0.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2488	TRUE	Central Appraisal Exterior		0	E	Exterior	1	POLESB	2X400MH	1	IN	POLESB	EDF-POLESB-MEDIUM-LA	480V	916	1	New/ Replacement Fixture - Pole-Mounted Shoebox Fixture, Metal Halide, (2) 400W lamp, Magnetic ballast, w/ Pole-Mounted Shoebox Fixture, (2) LED Shoebox Medium-Large, 112LEDF480V	224	2	100%	0.92	100%	0.22	0.69	4,380	4,380			4,012.08	981.12	3,030.96	0.00	3,030.96	81%	19%	0.00	0.00	\$7.88	\$10.51	\$2.21	\$1.46	5.0	5.0	\$14.73	
2489	TRUE	Juvenile Court Exterior		0	E	Exterior	1	FL	4X400MH	1	IN	FL	4X145LEDF		1832	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (4) 400W lamps, Magnetic ballasts, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), (4) 145W, with Separate or Integrated Driver Component, 145LEDF	580	2	100%	1.83	100%	0.58	1.25	4,380	4,380			8,024.16	2,540.40	5,483.76	0.00	5,483.76	81%	19%	0.00	0.00	\$15.77	\$21.02	\$11.86	\$7.82	5.0	5.0	\$17.12	
2490	TRUE	Juvenile Court Exterior		0	E	Exterior	10	WP	1X175MH	10	IN	WPFC	1X47LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	100%	2.15	100%	0.47	1.68	4,380	4,380			9,417.00	2,058.60	7,358.40	0.00	7,358.40	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$74.85	
2491	TRUE	Juvenile Court Exterior		0	E	Exterior	5	6RC	1X100MH	5	KIT	6RC	1XLEDF-6RC		128	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Metal Halide, (1) 100W lamp, Magnetic ballast, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	100%	0.64	100%	0.08	0.57	4,380	4,380			2,803.20	328.50	2,474.70	0.00	2,474.70	81%	19%	0.00	0.00	\$4.39	\$3.50	\$0.61	\$0.20	5.0	5.0	\$35.41	
2492	TRUE	Juvenile Court Interior		0	LO	Lobby/Entry Vestibule	1	A	3X32T8EBN	1	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.09	100%	0.03	0.06	3,401	3,401			302.69	107.13	195.56	0.00	195.56	81%	19%	52.65	0.32	\$0.85	\$1.09	\$0.34	\$0.00	10.0	0.0	\$1.60	
2493	TRUE	Juvenile Court Interior		0	LO	Lobby/Entry Vestibule	1	EXIT	1X3LEDEXIT	1	NR				3	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 3W lamp, Single Sided - No Measure Recommended	3	-1	100%	0.00	100%	0.00	0.00	3,401	3,401			10.20	10.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.97	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00	
2494	TRUE	Juvenile Court Interior		0	LO	Lobby/Entry Vestibule	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.53	100%	0.19	0.35	3,401	3,401			1,816.13	642.79	1,173.35	0.00	1,173.35	81%	19%	315.90	1.93	\$0.85	\$1.09	\$0.34	\$0.00	10.0	0.0	\$9.59	
2495	TRUE	Juvenile Court Interior		0	RR	Restroom	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	100%	0.06	100%	0.03	0.03	3,790	3,790			223.61	96.65	126.97	0.00	126.97	81%	19%	34.18	0.21	\$3.22	\$1.21	\$0.38	\$0.00	10.0	0.0	\$4.06	
2496	TRUE	Juvenile Court Interior		0	RR	Restroom	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.45	100%	0.17	0.28	3,790	3,790			1,697.92	636.72	1,061.20	0.00	1,061.20	81%	19%	285.71	1.74	\$1.26	\$1.21	\$0.51	\$0.00	10.0	0.0	\$7.88	
2497	TRUE	Juvenile Court Interior		0	ST	Storage	1	4S	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.06	100%	0.02	0.04	1,200	1,200			69.60	25.20	44.40	0.00	44.40	81%	19%	11.95	0.07	\$0.20	\$0.38	\$0.08	\$0.00	10.0	0.0	\$0.50	
2498	TRUE	Juvenile Court Interior		0	RR	Restroom	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.45	100%	0.17	0.28	3,790	3,790			1,697.92	636.72	1,061.20	0.00	1,061.20	81%	19%	285.71	1.74	\$1.26	\$1.21	\$0.51	\$0.00	10.0	0.0	\$7.88	
2499	TRUE	Juvenile Court Interior		0	RR	Restroom	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	100%	0.06	100%	0.03	0.03	3,790	3,790			223.61	96.65	126.97	0.00	126.97	81%	19%	34.18	0.21	\$3.22	\$1.21	\$0.38	\$0.00	10.0	0.0	\$4.06	
2500	TRUE	Juvenile Court Interior		0	HW	Hallway	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.11	100%	0.04	0.07	3,632	3,632			406.78	152.54	254.24	0.00	254.24	81%	19%	68.45	0.42	\$1.21	\$1.16	\$0.48	\$0.00	10.0	0.0	\$1.89	
2501	TRUE	Juvenile Court Interior		0	CR	Conference Room	7	A	4X32T8EBN	7	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.78	100%	0.29	0.49	1,830	1,830			1,434.72	538.02	896.70	0.00	896.70	81%	19%	241.42	1.47	\$0.61	\$0.59	\$0.24	\$0.00	10.0	0.0	\$6.66	
2502	TRUE	Juvenile Court Interior		0	CR	Conference Room	1	B	2X32T8U6EBN	1	KIT	B	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube,																												

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Best Source Quality	ECM Definition	Proposed System Wattage	Proposed Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings	
2516	TRUE	Juvenile Court Interior		0	OO	Open Office	4	A	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.45	100%	0.17	0.28	2,991	2,991			1,339.97	502.49	837.48	0.00	837.48	81%	19%	225.48	1.37	\$1.00	\$0.96	\$0.40	\$0.00	10.0	0.0	\$6.22
2517	TRUE	Juvenile Court Interior		0	OO	Open Office	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.11	100%	0.04	0.07	2,991	2,991			334.99	125.62	209.37	0.00	209.37	81%	19%	56.37	0.34	\$1.00	\$0.96	\$0.40	\$0.00	10.0	0.0	\$1.56
2518	TRUE	Juvenile Court Interior		0	RR	Restroom	1	B	2X32T8UG6BN	1	KIT	8	3X2FTLEDTYPEB		59	1	Retrofit with a Kit or Reflector - 2x2 Layin Prismatic Fixture, Fluorescent, (2) U-Tube, T-8 lamps, Instant Start Ballast, w/ 2x2 Layin Prismatic Fixture, LED Tube, (3) 24", 8.5W LED Tube, Line Voltage Type B Direct Wire, 3X2FTLEDTYPEB	25.5	2	100%	0.06	100%	0.03	0.03	3,790	3,790			223.61	96.65	126.97	0.00	126.97	81%	19%	34.18	0.21	\$3.22	\$1.21	\$0.38	\$0.00	10.0	0.0	\$4.06
2519	TRUE	Juvenile Court Interior		0	PO	Private Office	6	A	3X32T8EBN	6	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.53	100%	0.19	0.35	2,571	2,571			1,372.91	485.92	887.00	0.00	887.00	81%	19%	238.81	1.46	\$0.64	\$0.82	\$0.26	\$0.00	10.0	0.0	\$7.25
2520	TRUE	Juvenile Court Interior		0	OO	Open Office	3	A	4X32T8EBN	3	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.34	100%	0.13	0.21	2,991	2,991			1,004.98	376.87	628.11	0.00	628.11	81%	19%	169.11	1.03	\$1.00	\$0.96	\$0.40	\$0.00	10.0	0.0	\$4.67
2521	TRUE	Juvenile Court Interior		0	X	Exit Signs	1	EXIT	1X3LEDEXIT	1	NR				3	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 3W lamp, Single Sided - No Measure Recommended	3	-1	100%	0.00	100%	0.00	0.00	8,760	8,760			26.28	26.28	0.00	0.00	0.00	81%	19%	0.00	0.00	\$2.50	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2522	TRUE	Juvenile Court Interior		0	OO	Open Office	4	C	3X32T8EBN	4	RET		3X4FTLEDTYPEB		89	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (3) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 3X4FTLEDTYPE HYBRID	31.5	2	100%	0.36	100%	0.13	0.23	2,991	2,991			1,064.80	376.87	687.93	0.00	687.93	81%	19%	185.21	1.13	\$0.75	\$0.96	\$0.30	\$0.00	10.0	0.0	\$5.62
2523	TRUE	Juvenile Court Interior		0	OO	Open Office	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.11	100%	0.04	0.07	2,991	2,991			334.99	125.62	209.37	0.00	209.37	81%	19%	56.37	0.34	\$1.00	\$0.96	\$0.40	\$0.00	10.0	0.0	\$1.56
2524	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	4	HB	1X400MH	4	IN	HB	1XLED-FB		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Highbay Fixture, 172W LED High Bay, 172LEDF	172	2	100%	1.83	100%	0.69	1.14	4,380	4,380			8,024.16	3,013.44	5,010.72	0.00	5,010.72	81%	19%	0.00	0.00	\$3.94	\$5.26	\$3.52	\$2.32	5.0	5.0	\$13.46
2525	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	1	WP	1X250MH	1	IN	WP	1X80LED-F		295	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	100%	0.30	100%	0.08	0.22	4,380	4,380			1,292.10	350.40	941.70	0.00	941.70	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.31	\$0.86	7.0	7.0	\$7.47
2526	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	1	FL	1X175MH	1	IN	FL	1X51LED-F		215	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 51W, with Separate or Integrated Driver Component, 51LEDF	51	1	100%	0.22	100%	0.05	0.16	4,380	4,380			941.70	223.38	718.32	0.00	718.32	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.83	\$0.55	7.0	7.0	\$7.38
2527	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	4	WP	1X250MH	4	IN	WP	1X80LED-F		295	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	100%	1.18	100%	0.32	0.86	4,380	4,380			5,168.40	1,401.60	3,766.80	0.00	3,766.80	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.31	\$0.86	7.0	7.0	\$29.86
2528	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	14	WP	1X175MH	14	IN	WPFC	1X47LED-F		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Light Emitting Diode (LED) Luminaire (Multiple LEDs), 47W, with Separate or Integrated Driver Component, 47LEDF	47	1	100%	3.01	100%	0.66	2.35	4,380	4,380			13,183.80	2,882.04	10,301.76	0.00	10,301.76	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.77	\$0.51	7.0	7.0	\$104.79
2529	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	2	HB	1X50LED-F	2	IN	WP	1X80LED-F		50	1	New/ Replacement Fixture - Highbay Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 50W, with Separate or Integrated Driver Component, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	100%	0.10	100%	0.16	-0.06	4,380	4,380			438.00	700.80	(262.80)	0.00	(262.80)	81%	19%	0.00	0.00	\$1.53	\$1.01	\$1.31	\$0.86	7.0	7.0	\$0.75
2530	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	2	HB	1X50LED-F	2	NR				50	1	Highbay Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 50W, with Separate or Integrated Driver Component - No Measure Recommended	50	-1	100%	0.10	100%	0.10	0.00	4,380	4,380			438.00	438.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.53	\$1.01	\$0.00	\$0.00	0.0	0.0	\$0.00
2531	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	3	WP	1X20LED-F	3	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.06	100%	0.06	0.00	4,380	4,380			262.80	262.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
2532	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	2	HB	1X400MH	2	IN	HB	1XLED-FB		458	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Highbay Fixture, 172W LED High Bay, 172LEDF	172	2	100%	0.92	100%	0.34	0.57	4,380	4,380			4,012.08	1,506.72	2,505.36	0.00	2,505.36	81%	19%	0.00	0.00	\$3.94	\$5.26	\$3.52	\$2.32	5.0	5.0	\$6.73
2533	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	1	KL	1X75INCA	1	LAMP		1X15LEDSI		75	1	Relamp - Keyless Fixture, Incandescent, (1) 75W lamp, w/ Light Emitting Diode (LED) Screw-in Lamp, 15W, with Integrated Driver Component, 15LEDSI	15	1	100%	0.08	100%	0.02	0.06	4,380	4,380			328.50	65.70	262.80	0.00	262.80	81%	19%	0.00	0.00	\$3.31	\$0.00	\$1.75	\$0.00	5.0	0.0	\$1.56
2534	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	2	WP	1X20LED-F	2	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.04	100%	0.04	0.00	4,380	4,380			175.20	175.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
2535	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	1	DD	1X175MH	1	IN	DD	1XLED-FDD		215	1	New/ Replacement Fixture - Dusk to Dawn Street & Area Fixture (Barn Type Goose Neck), Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Dusk to Dawn Street & Area Fixture (Barn Type Goose Neck), 53W LED Dusk to Dawn Fixture, 53LEDF	53	2	100%	0.22	100%	0.05	0.16	4,380	4,380			941.70	232.14	709.56	0.00	709.56	81%	19%	0.00	0.00	\$5.69	\$3.07	\$1.23	\$0.81	5.0	5.0	\$6.73
2536	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	4	VP	4X32T8EBN	4	RET		4X4FTLEDTYPEB		112	1	Retrofit - Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.45	100%	0.17	0.28	4,380	4,380			1,962.24	735.84	1,226.40	0.00	1,226.40	81%	19%	0.00	0.00	\$1.46	\$1.40	\$0.58	\$0.00	10.0	0.0	\$9.11
2537	TRUE	Roads & Bridge (Pane Lane) Interior		0	ST	Storage	2	FL	1X20LED-F	2	NR				20	1	Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.04	100%	0.04	0.00	1,200	1,200			48.00	48.00	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.17	\$0.11	\$0.00	\$0.00	0.0	0.0	\$0.00
2538	TRUE	Roads & Bridge (Pane Lane) Interior		0	ST	Storage	2	DD	1X175MH	2	IN	DD	1XLED-FDD		215	1	New/ Replacement Fixture - Dusk to Dawn Street & Area Fixture (Barn Type Goose Neck), Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Dusk to Dawn Street & Area Fixture (Barn Type Goose Neck), 53W LED Dusk to Dawn Fixture, 53LEDF	53	2	100%	0.43	100%	0.11	0.32	1,200	1,200			516.00	127.20	388.80	0.00	388.80	81%	19%	104.68	0.64	\$1.56	\$0.84	\$0.34	\$0.22	5.0	5.0	\$3.68
2539	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	12	WP	1X20LED-F	12	NR				20	1	Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.24	100%	0.24	0.00	4,380	4,380			1,051.20	1,051.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.61	\$0.40	\$0.00	\$0.00	0.0	0.0	\$0.00
2540	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	2	BS	2X95T12HOMB	2	KIT	BS	4X4FTLEDTYPEB-HO		227	1	Retrofit with a Kit or Reflector - 8' Strip Fixture, Fluorescent, (2) 96", ES HO lamps, w/ 8' Strip Fixture, LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	100%	0.45	100%	0.12	0.33	4,380	4,380			1,988.52	525.60	1,462.92	0.00	1,462.92	81%	19%	0.00	0.00	\$4.02	\$3.50	\$0.58	\$0.00	10.0	0.0	\$13.87
2541	TRUE	Roads & Bridge (Pane Lane) Exterior		0	E	Exterior	1	WP	1X250MH	1	IN	WP	1X80LED-F		295	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 80W, with Separate or Integrated Driver Component, 80LEDF	80	1	100%	0.30	100%	0.08	0.22	4,380	4,380			1,292.10	350.40	941.70	0.00	941.70	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.31	\$0.86	7.0	7.0	\$7.47
2542	TRUE	Roads & Bridge (Pane Lane) Interior		0	WS	Workshop	4	4S	2X32T8EBN	4	RET		2X4FTLEDTYPEB		58	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.23	100%	0.08	0.15	1,301	1,301			301.83	109.28	192.55	0.00	192.55	81%	19%	51.84	0.32	\$0.22	\$0.42	\$0.09	\$0.00	10.0	0.0	\$2.19
2543	TRUE	Roads & Bridge (Pane Lane) Interior		0	WS	Workshop	3	4S	2X34T12MB	3	RET		2X4FTLEDTYPEB		72	1	Retrofit - 4' Strip Fixture, Fluorescent, (2) 48", ES lamp, w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.22	100%	0.06	0.15	1,301	1,301			281.02	81.96	199.05	0.00	199.05	81%	19%	5								

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Use and Area Type in Scope?	Facility Name	Floor	Master Schedule Identification	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Source Quality	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
2562	TRUE	Roads & Bridge (Pane Lane) Interior		0	HW	Hallway	3	A	4X10LEDT	3	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.13	100%	0.13	0.00	3,632	3,632			457.63	457.63	0.00	0.00	0.00	81%	19%	0.00	0.00	\$6.97	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2563	TRUE	Roads & Bridge (Pane Lane) Interior		0	HW	Hallway	1	EXIT	1X3LEDEXIT	1	NR				3	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 3W lamp, Single Sided - No Measure Recommended	3	-1	100%	0.00	100%	0.00	0.00	3,632	3,632			10.90	10.90	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.04	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2564	TRUE	Roads & Bridge (Pane Lane) Interior		0	LO	Lobby/Entry Vestibule	1	EXIT	1X3LEDEXIT	1	NR				3	1	Exit Sign (Red), EXIT Light Emitting Diode, (1) 3W lamp, Single Sided - No Measure Recommended	3	-1	100%	0.00	100%	0.00	0.00	3,401	3,401			10.20	10.20	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.97	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2565	TRUE	Roads & Bridge (Pane Lane) Interior		0	LO	Lobby/Entry Vestibule	10	A	4X10LEDT	10	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.42	100%	0.42	0.00	3,401	3,401			1,428.42	1,428.42	0.00	0.00	0.00	81%	19%	0.00	0.00	\$6.53	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2566	TRUE	Roads & Bridge (Pane Lane) Interior		0	CR	Conference Room	6	A	4X10LEDT	6	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.25	100%	0.25	0.00	1,830	1,830			461.16	461.16	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.51	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2567	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	8	B	1X20LEDF	8	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.16	100%	0.16	0.00	2,571	2,571			411.36	411.36	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.36	\$0.24	\$0.00	\$0.00	0.0	0.0	\$0.00
2568	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	1	A	2X32T8EBN	1	RET		2X4FTLEDTYPEB		58	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (2) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 2X4FTLEDTYPEB	21	2	100%	0.06	100%	0.02	0.04	2,571	2,571			149.12	53.99	95.13	0.00	95.13	81%	19%	25.61	0.16	\$0.43	\$0.82	\$0.17	\$0.00	10.0	0.0	\$1.08
2569	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	2,571	2,571			215.96	215.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2570	TRUE	Roads & Bridge (Pane Lane) Interior		0	OO	Open Office	6	A	4X10LEDT	6	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.25	100%	0.25	0.00	2,991	2,991			753.73	753.73	0.00	0.00	0.00	81%	19%	0.00	0.00	\$5.74	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2571	TRUE	Roads & Bridge (Pane Lane) Interior		0	OO	Open Office	1	A	4X32T8EBN	1	RET		4X4FTLEDTYPEB		112	1	Retrofit - 2x4 Layin Prismatic Fixture, Fluorescent, (4) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95), w/ LED Tube, (4) 48", 10W LED Tube, Line Voltage Type B Direct Wire, 4X4FTLEDTYPEB	42	2	100%	0.11	100%	0.04	0.07	2,991	2,991			334.99	125.62	209.37	0.00	209.37	81%	19%	56.37	0.34	\$1.00	\$0.96	\$0.40	\$0.00	10.0	0.0	\$1.56
2572	TRUE	Roads & Bridge (Pane Lane) Interior		0	OS	Office Support (copy room, coffee room, etc)	3	A	4X10LEDT	3	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.13	100%	0.13	0.00	2,040	2,040			257.04	257.04	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.92	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2573	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	2,571	2,571			215.96	215.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2574	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	2,571	2,571			215.96	215.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2575	TRUE	Roads & Bridge (Pane Lane) Interior		0	ME	Mechanical/Electrical Rooms	1	KL	1X100NCA	1	LAMP		1X15LEDSI		100	1	Relamp - Keyless Fixture, Incandescent, (1) 100W lamp, w/ Light Emitting Diode (LED) Screw-In Lamp, 15W, with Integrated Driver Component, 15LEDSI	15	1	100%	0.10	100%	0.02	0.09	400	400			40.00	6.00	34.00	0.00	34.00	81%	19%	9.15	0.06	\$0.04	\$0.00	\$0.16	\$0.00	5.0	0.0	(\$0.12)
2576	TRUE	Roads & Bridge (Pane Lane) Interior		0	BR	Break room	6	A	4X10LEDT	6	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.25	100%	0.25	0.00	2,731	2,731			688.21	688.21	0.00	0.00	0.00	81%	19%	0.00	0.00	\$5.24	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2577	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	2,571	2,571			215.96	215.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2578	TRUE	Roads & Bridge (Pane Lane) Interior		0	CR	Conference Room	13	A	4X10LEDT	13	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.55	100%	0.55	0.00	1,830	1,830			999.18	999.18	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.51	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2579	TRUE	Roads & Bridge (Pane Lane) Interior		0	RR	Restroom	2	4W	2X10LEDT	2	NR				21	1	4" Wrap Fixture, LED Tube, (2) 24", 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	21	-1	100%	0.04	100%	0.04	0.00	3,790	3,790			159.18	159.18	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.64	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2580	TRUE	Roads & Bridge (Pane Lane) Interior		0	RR	Restroom	1	A	4X10LEDT	1	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.04	100%	0.04	0.00	3,790	3,790			159.18	159.18	0.00	0.00	0.00	81%	19%	0.00	0.00	\$7.28	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2581	TRUE	Roads & Bridge (Pane Lane) Interior		0	RR	Restroom	1	B	1X20LEDF	1	NR				20	1	2x2 Layin Prismatic Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 20W, with Separate or Integrated Driver Component - No Measure Recommended	20	-1	100%	0.02	100%	0.02	0.00	3,790	3,790			75.80	75.80	0.00	0.00	0.00	81%	19%	0.00	0.00	\$0.53	\$0.35	\$0.00	\$0.00	0.0	0.0	\$0.00
2582	TRUE	Roads & Bridge (Pane Lane) Interior		0	RR	Restroom	1	4W	2X10LEDT	1	NR				21	1	4" Wrap Fixture, LED Tube, (2) 24", 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	21	-1	100%	0.02	100%	0.02	0.00	3,790	3,790			79.59	79.59	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.64	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2583	TRUE	Roads & Bridge (Pane Lane) Interior		0	RR	Restroom	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	3,790	3,790			318.36	318.36	0.00	0.00	0.00	81%	19%	0.00	0.00	\$7.28	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2584	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	3	A	4X10LEDT	3	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.13	100%	0.13	0.00	2,571	2,571			323.95	323.95	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2585	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	2,571	2,571			215.96	215.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2586	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	2,571	2,571			215.96	215.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2587	TRUE	Roads & Bridge (Pane Lane) Interior		0	PO	Private Office	2	A	4X10LEDT	2	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.08	100%	0.08	0.00	2,571	2,571			215.96	215.96	0.00	0.00	0.00	81%	19%	0.00	0.00	\$4.94	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2588	TRUE	Roads & Bridge (Pane Lane) Interior		0	CR	Conference Room	3	A	4X10LEDT	3	NR				42	1	2x4 Layin Prismatic Fixture, LED Tube, (4) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	42	-1	100%	0.13	100%	0.13	0.00	1,830	1,830			230.58	230.58	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.51	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2589	TRUE	Roads & Bridge (Pane Lane) Interior		0	E	Exterior	3	BS	2X95T12HOMB	3	KIT	BS	4X4FTLEDTYPEB-HO		227	1	Retrofit with a Kit or Reflector - 8" Strip Fixture, Fluorescent, (2) 96", ES HO lamps, w/ 8" Strip Fixture, LED Tube, (4) 48", 15W High Output LED Tube, Line Voltage Type B Direct Wire, 4FTLEDTYPEB-HO	60	2	100%	0.68	100%	0.18	0.50	4,380	4,380			2,982.78	788.40	2,194.38	0.00	2,194.38	81%	19%	590.79	3.60	\$4.02	\$3.50	\$0.58	\$0.00	10.0	0.0	\$20.81
2590	TRUE	Roads & Bridge (Pane Lane) Interior		0	E	Exterior	2	6RC	1X18CFLSI	2	KIT	6RC	1XLEDF-6RC		18	1	Retrofit with a Kit or Reflector - 6" Round Recessed Can Fixture, Compact Fluorescent, (1) 18W screw-in lamp/base w/ permanent disk installed, any bulb shape, w/ 6" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 6IN. SET WATTAGE TO 15W. HIGH SETTING, 1X15LEDF-6RC	15	2	100%	0.04	100%	0.03	0.01	4,380	4,380			157.68	131.40	26.28	0.00	26.28	81%	19%	7.08	0.04	\$4.02	\$0.00	\$0.61	\$0.20	5.0	5.0	\$6.40
2591	TRUE	Roads & Bridge (Pane Lane) Interior		0	E	Exterior	1	KL	NO LAMP	1	LAMP		1X9LEDSI		0	2</																												

Attachment 5 - FIM 1 Lighting Scope and Savings

Line	Line and Area Type in Scope?	Facility Name	Floor	Master Schedule Identifications	Usage Group (Code)	Room Type (Usage Group Description)	Existing Fix Qty	Existing Fixture Type	Existing Component Code	Proposed Fix Qty	Proposed Strategy Code, Final	Proposed Fixture Code, Final	Proposed Component Code, Final	Modifier	Exist System Wattage	Exist Source Quality	ECM Definition	Proposed System Wattage	Proposed Source Quality	Existing Coincidence Factor	Existing kW	Proposed Coincidence Factor	Proposed kW	Total kW Saved	Existing Burn Hours	Proposed Burn Hours	Control Type	Sensor Description	Annual Existing kWh	Annual Proposed kWh	Annual Saved kWh (No Sensor)	Annual Controls Saved kWh	Annual kWh Saved (Total)	Pct Cooling Weeks	Pct Heating Weeks	HVAC Saved kWh (Lighting)	Lighting System Penalty (Therms)	Annualized Existing Lamp Material Cost/Fixture	Annualized Existing Ballast Material Cost/Fixture	Annualized Proposed Lamp Materials Cost/Fixture	Annualized Proposed Ballast Materials Cost/Fixture	Proposed Lamp Warranty Period (Yrs)	Proposed Ballast Warranty Period (Yrs)	Average Annual Material Savings
2615	TRUE	Roads & Bridge (Dairy Ashford) Interior		0	PO	Private Office	3	A	3X10LEDT	3	NR				32	1	2x4 Layin Prismatic Fixture, LED Tube, (3) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	32	-1	100%	0.10	100%	0.10	0.00	2,571	2,571			246.82	246.82	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.70	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2616	TRUE	Roads & Bridge (Dairy Ashford) Interior		0	PO	Private Office	3	A	3X10LEDT	3	NR				32	1	2x4 Layin Prismatic Fixture, LED Tube, (3) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	32	-1	100%	0.10	100%	0.10	0.00	2,571	2,571			246.82	246.82	0.00	0.00	0.00	81%	19%	0.00	0.00	\$3.70	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2617	TRUE	Roads & Bridge (Dairy Ashford) Interior		0	CR	Conference Room	11	8S	2X10LEDT	11	NR				21	1	8' Strip Fixture, LED Tube, (2) 24", 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	21	-1	100%	0.23	100%	0.23	0.00	1,830	1,830			422.73	422.73	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.76	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2618	TRUE	Roads & Bridge (Dairy Ashford) Interior		0	ST	Storage	1	A	3X10LEDT	1	NR				32	1	2x4 Layin Prismatic Fixture, LED Tube, (3) 24" 10W LED Tube, Energy Focus or Similar (Integrated Driver, Non-dimming, 5 Yr warranty) - No Measure Recommended	32	-1	100%	0.03	100%	0.03	0.00	1,200	1,200			38.40	38.40	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.73	\$0.00	\$0.00	\$0.00	0.0	0.0	\$0.00
2619	TRUE	Kitty Hollow Park Exterior		0	E	Exterior	8	POLEFL	1X400MH	8	IN	POLEFL	1X145LEDF	YOKE	458	1	New/ Replacement Fixture - Pole-Mounted Flood Fixture, Metal Halide, (1) 400W lamp, Magnetic ballast, w/ Pole-Mounted Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 145W, with Separate or Integrated Driver Component, 145LEDFYOKE	145	1	100%	3.66	100%	1.16	2.50	4,380	4,380			16,048.32	5,080.80	10,967.52	0.00	10,967.52	81%	19%	0.00	0.00	\$3.94	\$5.26	\$2.37	\$1.56	7.0	7.0	\$42.11
2620	TRUE	Kitty Hollow Park Exterior		0	E	Exterior	1	POLEFL	2X400MH	1	IN	POLEFL	2X145LEDF	YOKE	916	1	New/ Replacement Fixture - Pole-Mounted Flood Fixture, Metal Halide, (2) 400W lamp, Magnetic ballast, w/ Pole-Mounted Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), (2) 145W, with Separate or Integrated Driver Component, 145LEDFYOKE	290	2	100%	0.92	100%	0.29	0.63	4,380	4,380			4,012.08	1,270.20	2,741.88	0.00	2,741.88	81%	19%	0.00	0.00	\$7.88	\$10.51	\$5.93	\$3.91	5.0	5.0	\$8.56
2621	TRUE	Kitty Hollow Park Exterior		0	E	Exterior	8	HB	1X250MH	8	IN	HB-ROUND	XLEDF-HB-ROUND-MEDIUM		295	1	New/ Replacement Fixture - Highbay Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ 153W LED Round High bay, 153LEDF	153	2	100%	2.36	100%	1.22	1.14	4,380	4,380			10,336.80	5,361.12	4,975.68	0.00	4,975.68	81%	19%	0.00	0.00	\$5.26	\$4.38	\$3.13	\$2.06	5.0	5.0	\$35.57
2622	TRUE	Kitty Hollow Park Exterior		0	E	Exterior	8	4VP	1X40LEDF	8	NR				40	1	4' Vapor Proof Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 40W, with Separate or Integrated Driver Component - No Measure Recommended	40	-1	100%	0.32	100%	0.32	0.00	4,380	4,380			1,401.60	1,401.60	0.00	0.00	0.00	81%	19%	0.00	0.00	\$1.23	\$0.81	\$0.00	\$0.00	0.0	0.0	\$0.00
2623	TRUE	Kitty Hollow Park Exterior		0	E	Exterior	2	WP	1X175MH	2	IN	WP	1X49LEDF		215	1	New/ Replacement Fixture - Exterior Wall Pack Fixture, Metal Halide, (1) 175W lamp, Magnetic ballast, w/ Exterior Wall Pack Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 49W, with Separate or Integrated Driver Component, 49LEDF	49	1	100%	0.43	100%	0.10	0.33	4,380	4,380			1,883.40	429.24	1,454.16	0.00	1,454.16	81%	19%	0.00	0.00	\$5.69	\$3.07	\$0.80	\$0.53	7.0	7.0	\$14.86
2624	TRUE	Kitty Hollow Park Exterior		0	E	Exterior	3	FL	1X250MH	3	IN	FL	1X85LEDF		295	1	New/ Replacement Fixture - Flood Fixture, Metal Halide, (1) 250W lamp, Magnetic ballast, w/ Flood Fixture, Light Emitting Diode (LED) Luminaire (Multiple LEDs), 85W, with Separate or Integrated Driver Component, 85LEDF	85	1	100%	0.89	100%	0.26	0.63	4,380	4,380			3,876.30	1,116.90	2,759.40	0.00	2,759.40	81%	19%	0.00	0.00	\$5.26	\$4.38	\$1.39	\$0.92	7.0	7.0	\$21.99
2625	TRUE	Sienna Annex Exterior		0	E	Exterior	2	8RC	1X150HP5	2	KIT	8RC	1XLEDF-8RC		188	1	Retrofit with a kit or Reflector - 8" Round Recessed Can Fixture, High Pressure Sodium, (1) 150W lamp, w/ 8" Round Recessed Can Fixture, LED Recessed Can Retrofit Kit 8IN. SET WATTAGE TO 19W. HIGH SETTING, 1X19LEDF-8RC	19	2	100%	0.38	100%	0.04	0.34	4,380	4,380			1,646.88	166.44	1,480.44	0.00	1,480.44	81%	19%	0.00	0.00	\$1.83	\$4.93	\$0.74	\$0.24	5.0	5.0	\$11.55

Attachment 5 - FIM 2 Chiller Plant Savings

Fort Bend County Jail East Tower Chiller Sequence Savings

Utility Rates		
2022 \$/kWh		\$ 0.04236
2022 \$/kVA		\$ 12.92
Item		kWh
2022 Utility		3,326,614
Plant kWh Baseline		1,311,524
Plant kWh Proposed		1,049,423
Plant % of Total Utility Bill		39.4%
Plant Savings		262,101
Utility % savings		7.9%
Plant % savings		20.0%
Dollar Savings		\$ 11,103.15

Base

		kWh					kW/Ton							
Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Chlr kW
Jan	72,564	28,786	3,539	5,751	387	38,464	Jan	72,564	0.3967	0.0488	0.0793	0.0053	0.5301	125
Feb	88,123	31,991	3,418	5,006	383	40,797	Feb	88,123	0.3630	0.0388	0.0568	0.0043	0.4630	150
Mar	120,864	67,457	6,570	8,925	893	83,844	Mar	120,864	0.5581	0.0544	0.0738	0.0074	0.6937	183
Apr	130,573	88,801	8,243	10,728	1,769	109,541	Apr	130,573	0.6801	0.0631	0.0822	0.0135	0.8389	183
May	154,862	110,046	9,269	11,085	3,535	133,935	May	154,862	0.7106	0.0599	0.0716	0.0228	0.8649	215
Jun	165,501	125,891	9,619	10,728	6,645	152,883	Jun	165,501	0.7607	0.0581	0.0648	0.0401	0.9238	282
Jul	174,028	135,690	10,065	11,085	8,044	164,885	Jul	174,028	0.7797	0.0578	0.0637	0.0462	0.9475	274
Aug	171,085	129,780	9,936	11,085	7,435	158,236	Aug	171,085	0.7586	0.0581	0.0648	0.0435	0.9249	262
Sep	163,037	121,923	9,507	10,728	5,386	147,543	Sep	163,037	0.7478	0.0583	0.0658	0.0330	0.9050	277
Oct	139,190	95,516	8,674	11,085	2,470	117,745	Oct	139,190	0.6862	0.0623	0.0796	0.0177	0.8459	197
Nov	108,180	69,742	7,226	10,296	1,012	88,276	Nov	108,180	0.6447	0.0668	0.0952	0.0094	0.8160	149
Dec	95,184	58,427	6,461	9,729	758	75,375	Dec	95,184	0.6138	0.0679	0.1022	0.0080	0.7919	284
Totals	1,583,191	1,064,049	92,527	116,231	38,717	1,311,524	Annual	1,583,191	0.6721	0.0584	0.0734	0.0245	0.8284	2,582

Proposed

		kWh							kW/Ton						
Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Chlr kW	
Jan	72,564	25,198	881	2,112	343	28,533	Jan	72,564	0.3472	0.0121	0.0291	0.0047	0.3932	113	
Feb	88,123	28,525	984	1,839	298	31,646	Feb	88,123	0.3237	0.0112	0.0209	0.0034	0.3591	136	
Mar	120,864	60,613	2,117	3,278	540	66,548	Mar	120,864	0.5015	0.0175	0.0271	0.0045	0.5506	166	
Apr	130,573	80,048	2,810	3,940	776	87,574	Apr	130,573	0.6131	0.0215	0.0302	0.0059	0.6707	166	
May	154,862	99,194	3,714	4,072	1,515	108,495	May	154,862	0.6405	0.0240	0.0263	0.0098	0.7006	195	
Jun	165,501	111,415	4,589	3,940	3,860	123,804	Jun	165,501	0.6732	0.0277	0.0238	0.0233	0.7481	236	
Jul	174,028	119,248	4,939	4,072	5,510	133,768	Jul	174,028	0.6852	0.0284	0.0234	0.0317	0.7687	230	
Aug	171,085	115,022	4,692	4,072	4,179	127,963	Aug	171,085	0.6723	0.0274	0.0238	0.0244	0.7480	222	
Sep	163,037	108,587	4,368	3,940	3,015	119,910	Sep	163,037	0.6660	0.0268	0.0242	0.0185	0.7355	235	
Oct	139,190	86,092	3,060	4,072	1,026	94,250	Oct	139,190	0.6185	0.0220	0.0293	0.0074	0.6771	168	
Nov	108,180	62,450	2,144	3,781	636	69,012	Nov	108,180	0.5773	0.0198	0.0350	0.0059	0.6379	135	
Dec	95,184	51,882	1,879	3,574	585	57,920	Dec	95,184	0.5451	0.0197	0.0375	0.0061	0.6085	255	
Totals	1,583,191	948,274	36,177	42,691	22,282	1,049,423	Annual	1,583,191	0.5990	0.0229	0.0270	0.0141	0.6629	2,257	

Saving Summary

		kWh							kW/Ton					
Run #	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Run #	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	CH kW
Base	1,583,191	1,064,049	92,527	116,231	38,717	1,311,524	Base	1,583,191	0.6721	0.0584	0.0734	0.0245	0.8284	2,582
#1	1,583,191	948,274	36,177	42,691	22,282	1,049,423	#1	1,583,191	0.5990	0.0229	0.0270	0.0141	0.6629	2,257

Attachment 5 - FIM 2 Chiller Plant Savings

Fort Bend County Jail West Tower Chiller Sequence Savings

Utility Rates		
2022 \$/kWh		\$ 0.04250
2022 \$/kVA		\$ 11.95
Item		kWh
2022 Utility		3,705,092
Plant kWh Baseline		1,430,068
Plant kWh Proposed		992,400
Plant % of Total Utility Bill		38.6%
Plant Savings		437,668
Utility % savings		11.8%
Plant % savings		30.6%
Dollar Savings		\$ 18,600.16

Base

		kWh							kW/Ton						
Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Chlr kW	
Jan	49,529	34,139	1,333	5,001	863	41,337	Jan	49,529	0.6893	0.0269	0.1010	0.0174	0.8346	154	
Feb	57,935	38,846	1,233	4,353	1,019	45,451	Feb	57,935	0.6705	0.0213	0.0751	0.0176	0.7845	181	
Mar	121,993	81,710	2,206	7,672	2,620	94,209	Mar	121,993	0.6698	0.0181	0.0629	0.0215	0.7722	197	
Apr	159,589	108,476	2,650	9,167	4,967	125,261	Apr	159,589	0.6797	0.0166	0.0574	0.0311	0.7849	224	
May	189,276	129,319	2,483	9,028	5,809	146,639	May	189,276	0.6832	0.0131	0.0477	0.0307	0.7747	245	
Jun	202,279	141,909	2,266	8,497	8,449	161,121	Jun	202,279	0.7015	0.0112	0.0420	0.0418	0.7965	250	
Jul	212,701	152,885	2,334	8,762	10,643	174,623	Jul	212,701	0.7188	0.0110	0.0412	0.0500	0.8210	262	
Aug	209,104	148,066	2,346	8,786	8,597	167,795	Aug	209,104	0.7081	0.0112	0.0420	0.0411	0.8025	250	
Sep	199,267	138,218	2,300	8,552	7,153	156,223	Sep	199,267	0.6936	0.0115	0.0429	0.0359	0.7840	254	
Oct	170,122	116,512	2,660	9,341	5,739	134,252	Oct	170,122	0.6849	0.0156	0.0549	0.0337	0.7892	233	
Nov	128,337	85,613	2,584	8,953	3,283	100,433	Nov	128,337	0.6671	0.0201	0.0698	0.0256	0.7826	192	
Dec	105,137	69,996	2,359	8,430	1,940	82,725	Dec	105,137	0.6658	0.0224	0.0802	0.0185	0.7868	255	
Totals	1,805,268	1,245,687	26,754	96,544	61,083	1,430,068	Annual	1,805,268	0.6900	0.0148	0.0535	0.0338	0.7922	2,697	

Proposed

		kWh							kW/Ton						
Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Month	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Chlr kW	
Jan	49,529	13,403	667	1,876	2,503	18,448	Jan	49,529	0.2706	0.0135	0.0379	0.0505	0.3725	86	
Feb	57,935	15,972	617	1,633	2,227	20,449	Feb	57,935	0.2757	0.0106	0.0282	0.0384	0.3530	95	
Mar	121,993	37,333	1,160	3,179	5,635	47,307	Mar	121,993	0.3060	0.0095	0.0261	0.0462	0.3878	136	
Apr	159,589	61,122	1,428	3,986	9,982	76,518	Apr	159,589	0.3830	0.0090	0.0250	0.0625	0.4795	166	
May	189,276	83,003	1,635	5,458	13,701	103,798	May	189,276	0.4385	0.0086	0.0288	0.0724	0.5484	198	
Jun	202,279	110,969	1,670	6,004	14,846	133,488	Jun	202,279	0.5486	0.0083	0.0297	0.0734	0.6599	240	
Jul	212,701	125,451	1,734	6,260	15,462	148,908	Jul	212,701	0.5898	0.0082	0.0294	0.0727	0.7001	246	
Aug	209,104	117,922	1,725	6,187	15,305	141,138	Aug	209,104	0.5639	0.0082	0.0296	0.0732	0.6750	237	
Sep	199,267	100,215	1,652	5,840	14,492	122,198	Sep	199,267	0.5029	0.0083	0.0293	0.0727	0.6132	244	
Oct	170,122	71,172	1,522	4,516	11,316	88,526	Oct	170,122	0.4184	0.0089	0.0265	0.0665	0.5204	184	
Nov	128,337	41,177	1,292	3,359	7,293	53,121	Nov	128,337	0.3209	0.0101	0.0262	0.0568	0.4139	140	
Dec	105,137	28,855	1,199	3,265	5,183	38,501	Dec	105,137	0.2744	0.0114	0.0311	0.0493	0.3662	117	
Totals	1,805,268	806,594	16,301	51,562	117,943	992,400	Annual	1,805,268	0.4468	0.0090	0.0286	0.0653	0.5497	2,089	

Saving Summary

		kWh							kW/Ton					
Run #	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	Run #	Ton-hrs	Chlr	Pchwp	Cwp	Clg Twr	Totals	CH kW
Base	1,805,268	1,245,687	26,754	96,544	61,083	1,430,068	Base	1,805,268	0.6900	0.0148	0.0535	0.0338	0.7922	2,697
#1	1,805,268	806,594	16,301	51,562	117,943	992,400	1	1,805,268	0.4468	0.0090	0.0286	0.0653	0.5497	2,089

Attachment 5 - FIM 2 Chiller_ Sequence**Fort Bend County Jail East Tower Chiller Plant Sequence****East Tower Chiller Sequence of Operation:****1. System Description:**

The Fort Bend County Jail East Tower chilled water (CHW) system consists of two 300-ton Carrier chillers with variable speed drives (CH-1, CH-2). These chillers are piped in the typical parallel evaporator and condenser configuration.

Primary Chilled Water Pump (PCHWP) PCHWP-1 & PCHWP-2 are piped in parallel and variable flow configuration. Each pump is rated to provide full flow for each chiller. Under normal operation a single PCHWP shall operate with a single chiller.

The Secondary Chilled Water Pump (SCHWP) has two 1050 GPM VFD-driven, secondary chilled water pumps (SCHWP) piped to a common header. Currently one pump is the lead pump, and the second pump provides back-up. The Tower has an existing differential pressure transmitter (DPT). The DPT is part the control loop used to control the VFDs on the SCHWP.

The CHW system is piped in a variable primary variable secondary configuration, with a CHW minimum flow bypass line across the chillers and pumps to maintain minimum flow through the operating chiller(s). Each chiller evaporator and condenser shall be equipped with a isolation valve complete with actuator.

The condenser water (CW) system consists of two single cell 900 GPM cooling towers. Each of the two cells has an individual sump connected with an equalizing pipe. Each cell has a cooling tower fan motor with a VFD. There are two 900 GPM, VFD-driven CW pumps piped to a common header, so that any CW pump or group of pumps, based on energy/maintenance cost optimization algorithms, shall be capable of running with any chiller and CT combination. The inlet to each CT cell shall be equipped with a 2-position isolation control valve, complete with actuator.

2. Typical Chiller Start Sequence:

The Building Automation System (BAS) shall Current Limit the operating chiller to 60% (adj.), enable the next chiller in sequence via BACnet once the chiller has been enabled, the BAS shall monitor the chiller PCHWP command relay. Once the BAS has been notified that the PCHWP is required, the BAS shall command the Chilled Water Valve (CHWV) fully open. Once the BAS has confirmed the CHWV has opened via an end switch, the BAS shall enable the PCWP VFD.

Once the chilled water system has been enabled the BAS shall monitor the chiller condenser water pump (CDWP) command relay. When the BAS has been notified by the chiller that the CDWP is required, the BAS shall command the Condenser Water Valve (CDWV) fully open. Once the BAS has confirmed the CDWV has opened via end switch, the BAS shall enable the CDWP VFD.

Upon confirmation of chilled water flow and condenser water flow, the chiller panel shall initiate a start sequence. The lead chiller Current Limit shall be released to existing pre-startup value. The chiller panel shall monitor chiller safeties, and control chiller to maintain BAS provided set-point and current limit.

3. Chiller Add Sequence:

The minimum number of VSD-driven chillers will operate to stay within the optimal Part-Load Ratio (PLR) range, 30-80% (adj.). The PLR shall be adjusted in real time based on changes in CW supply temperature or CHW set-point changes. This relationship shall be obtained from the chiller manufacturer for the specific models present in the chiller plant. As the operating chillers' PLR rises above See Formula below (adj. by chiller algorithm), an additional chiller shall be added. The chiller optimization program shall determine this PLR value, using data gathered directly from the chiller control-panel interface, the system supply and return temperatures, and system.

Use the following Linear Formula $y = mX + b$ where $m = .008$ (adj), $X =$ Entering Condenser Water, $b = .2371$ (adj) to calculate %Load to generate an add request.

Attachment 5 - FIM 2 Chiller_ Sequence**Fort Bend County Jail East Tower Chiller Plant Sequence**

If the CHWS temperature rises 3°F (adj.) above the set-point for an adjustable period (typ. 20 minutes) (adj) an Add command shall be issued.

If the flow rate through the chiller(s) exceeds its maximum flow value (CH-1 & CH-2 1,395 GPM CH-4 1,600 GPM) for an adjustable period (typ. 20 minutes) (adj).

Once the BAS has determined an additional chiller is required a 15 minute (adj) Add timer shall start, if the Add command is removed the Add timer shall be reset to 15 minutes (adj). Once the Add timer has expired, the next chiller in the sequence shall be enabled. A maximum of 2 chillers shall be allowed to operate at any one time.

Maximum % Load = 95% (adj).

Minimum % Load = 65% (adj).

4. Chiller Subtract Sequence:

The subtract sequence is similar to the Add Sequence. In all cases a minimum of one chiller shall be operating at all times.

Use the following Linear Formula $y = mX + b$ where $m = .0033$ (adj), $X = \text{Entering Condenser Water}$, $b = .861$ (adj) to calculate %Load to subtract a chiller.

If the minimum flow bypass valve (MFBPV) is not fully closed a subtract command shall be issued.

Once the BAS has determined a chiller is not required, a 15 minute (adj) Subtract timer shall start. If the Subtract command is removed, the Subtract timer shall be reset to 15 minutes (adj). Once the Subtract timer has expired, the next chiller in the sequence shall be disabled. A minimum of 1 chiller shall be operating at all times.

Maximum % Load = 38% (adj).

Minimum % Load = 26% (adj).

5. PCHWP Sequence

Flow in the SCHW system shall be totalized and the PCHWPs shall modulate to match primary flow to the total SCHW system flow. Chiller maximum and minimum flow are shown below. When flow drops below the chiller minimum flow, the minimum flow bypass valve shall modulate to maintain required minimum flow. Tune loop to avoid rapid changes in primary flow.

6. SCHWP Sequence:

These pumps are designed as lead/backup and shall be rotated by the plant operator.

Secondary CHW pump speed shall be controlled to maintain the specified building-loop differential pressure set-points, as recommended by the balancing contractor.

This sequence may be enabled/disabled by the plant operators. The building differential pressure sensor's set-point shall be reset when appropriate. The rate at which the building-loop differential-pressure set-point can be changed will be limited. Every 5 minutes (adj.), the set-point may be increased by 2 psi (adj.) or lowered by 1 psi (adj.), as needed to maintain one AHU CHW valve in a near fully open position. The minimum number of secondary CHW pumps shall operate to remain within the optimal flow (typ. 50-75%), head, and pump-efficiency range, as determined by the BAS program from evaluation of the specific models' pump curves. Building-loop differential-pressure error shall be considered when adding secondary CHW pumps. To ensure stable system flow, the rate at which CHW pump speed may change shall be limited to 10% per minute (adj.). To ensure stable and reliable operation, the plant CHW loop differential-pressure sensor's set-point shall be reset to achieve the desired building-loop differential-pressure sensor's set-point.

Attachment 5 - FIM 2 Chiller Sequence**Fort Bend County Jail East Tower Chiller Plant Sequence****7. Cooling tower sequence:**

This cooling tower sequence uses a slightly modified Near-Optimal Control of Cooling Towers for Chilled Water Systems 1990 developed by J.E. Braun Ph.D., P.E. and G.T. Diderrich Ph.D. In addition, parts of the Cooling Tower Sequence as listed in this document came from 2016 ASHRAE HVAC Systems and Equipment; Chapter 40. The ASHRAE article includes references to the document listed above, plus several other items. In addition, the ASHRAE article mentioned above is an excellent source for cooling tower information.

This sequence document relates to control of condenser water temperature (CDW-t) by adjusting cooling tower air flow. This allows for heat transfer from the warmer CDW-t to the cooler outdoor air OA wet bulb temperature (wB) in the cooling tower. The prime mover of air flow in the cooling tower is natural draft/ventilation and cooling tower (CT) fans. There are many different configurations of CTs on the market, this sequence primarily applies to direct contact induced draft, crossflow and forced draft cooling towers. While this sequence may well be applicable to other CT types, other types were not studied for use in this sequence. Please refer to the ASHRAE article mentioned above for sequences used in other CT types.

This sequence will vary the amount of air flow used to transfer heat from the CDW to the OA.

- A. As the CDW-t temperature decreases below the minimum CDW-t set point (CDW-SP-Min) (user adj.) The number of enabled CT cells shall be decreased to the minimum number of cells allowed. This minimum number of CT cells is limited by maximum CT CDW flow as specified by the CT manufacture and physical number of CT cells (typically a single cell).
- B. Upon a further decrease in the CDW-t the CT bypass (CT-BYP) valve(s) shall start to modulate to divert CDW away from the heat transfer material of the CT. The output to the (CT-BYP) valve(s) shall be determined via a Proportional Integral Derivative (PID) control loop.
- C. As CDW-t increases above the CDW-SP-MIN the PID loop shall modulate the CT-BYP valve(s) to the full CT position.
- D. Once the CT-BYP valve(s) is in the full CT position and the CDW-t has increased above the CDW-SP-Min plus a minimum differential (min-diff), (user adj) the sequence shall enable the additional CT cells. The maximum number of CT cells that may be enabled at any time is limited by the physical number of CT cells available. In addition, the maximum number of CT cells that may be enabled will be limited by the CT cell minimum water flow as specified by CT manufacture.
- E. Once the maximum number of available/allowable CT cell(s) has been enabled, the CT fans for all enabled CT cells shall be enabled at minimum speed 25% (user adj.)
- F. CT fan(s) speed are set based on operating chiller(s) design, operating chiller(s) actual load, CT design capacity and CT actual load. All loads are measured in tons of refrigeration.
- G. See Table 1 above for the number of CT cell(s) enable for each chiller enabled.
 - a. To calculate CT fan(s) speed: If the CDW-t is less than CDW Set Point Maximum (CDW-SP-Max),(user adj.) – maximum differential (max-diff), (user adj.) then us **Formula 1** as shown below.
 - b. If CDW-t is above the CDW-SP-Max (user adj.) the fan speed shall ramp from the output of **Formula 1** to 100 percent when the CDW-t increases to CDW-SP-Max (user adj.) + max-diff, (user adj.).

Attachment 5 - FIM 2 Chiller_ Sequence**Fort Bend County Jail East Tower Chiller Plant Sequence****Formula 1**

If $PLR \geq .25$

$$\% Out = 1 - C_2 * (C_1 - PLR)$$

Else

$$\% Out = 4 * PLR * (1 - C_2 * [C_1 - .25])$$

Limit minimum output to Minimum Fan Speed Control Point .25 (user adj.)

Limit maximum output to Maximum Fan Speed Control Point 1 (user adj.)

Where:

C_1 = See Table 2

C_2 = See Table 2

$$PLR = \frac{Plant_{act.cap}}{Plant_{des.Cap}}$$

Where:

$Plant_{act.cap}$ = Current chiller(s) operating load in tons

$Plant_{des.cap}$ = See Table 2

Table 2:

Operating Chillers	Tower Cells Enabled	C_1	C_2	$Plant_{des.cap}$
CH-1 OR CH-2	1	0.903941	0.737511	300
	2	1.278366	0.521499	
CH1 AND CH-2	2	1.114965	0.597926	600
	2	1.287451	0.517819	
	2	1.232771	0.540787	

Attachment 5 - FIM 2 Chiller_ Sequence**Fort Bend County Jail East Tower Chiller Plant Sequence****West Tower Chiller Sequence of Operation:****1. System Description:**

Fort Bend County Jail West Tower chilled water (CHW) system consists of two 2018/5-year-old 300-ton YMC2 (CH-1, CH-2) chillers. The evaporators of the chillers are piped in a series configuration and the condensers are piped in a parallel configuration. CH-2 is the upstream chiller with CH-1 being the downstream chiller. The Chiller design are the same for both chillers (unusual for a series plant).

Primary Chilled Water Pump (PCHWP) PCHWP-1 & PCHWP-2 are piped in parallel and variable flow configuration. Each pump is rated to provide full flow for the chiller. Under normal operation only a single PCHWP shall operate when the plant is operating.

The SCHWS has two 280 GPM VFD-driven, secondary chilled water pumps (SCHWP) piped to a common header. Currently one pump is the lead pump, and the second pump provides back-up. The Tower has an existing differential pressure transmitter (DPT). The DPT is part the control loop used to control the VFDs on the SCHWP.

The CHW system is piped in a series configuration variable primary variable secondary configuration, with a CHW minimum flow bypass line across the chillers and pumps to maintain minimum flow through the operating chiller(s). Each chiller evaporator and condenser shall be equipped with a isolation valve complete with actuator.

The condenser water (CW) system consists of two single cell 840 GPM, cooling towers. Each of the two cells has an individual sump connected with an equalizing pipe. Each cell has a cooling tower fan motor with a VFD. There are two 840 GPM, VFD-driven CW pumps piped to a common header, so that any CW pump or group of pumps, based on energy/maintenance cost optimization algorithms, shall be capable of running with any chiller and CT combination. The inlet and outlet to each CT cell shall be equipped with a 2-position isolation control valve, complete with actuator.

2. Typical Chiller Start Sequence:

The Building Automation System (BAS) shall Current Limit the operating chiller to 60% (adj.), enable the next chiller in sequence via BACnet once the chiller has been enabled, the BAS shall monitor the chiller PCHWP command relay. Once the BAS has been notified that the PCHWP is required, the BAS shall command the Chilled Water Valve (CHWV) fully open. Once the BAS has confirmed the CHWV has opened via an end switch, the BAS shall enable the PCWP VFD.

Once the chilled water system has been enabled the BAS shall monitor the chiller condenser water pump (CDWP) command relay. When the BAS has been notified by the chiller that the CDWP is required, the BAS shall command the Condenser Water Valve (CDWV) fully open. Once the BAS has confirmed the CDWV has opened via end switch, the BAS shall enable the CDWP VFD.

Upon confirmation of chilled water flow and condenser water flow, the chiller panel shall initiate a start sequence. The lead chiller Current Limit shall be released to existing pre-startup value. The chiller panel shall monitor chiller safeties, and control chiller to maintain BAS provided set-point and current limit.

3. Chiller Add Sequence:

The system is designed to operate using a single chiller. If the Part Load Ratio (PLR) range, 30-80% (adj.). The PLR shall be adjusted in real time based on changes in CHW supply temperature or CHW set-point changes. This relationship shall be obtained from the chiller manufacturer for the specific models present in the chiller plant. As the operating chillers' PLR rises above See Formula below (adj. by chiller algorithm), an additional chiller shall be added. The chiller optimization program shall determine this PLR value, using data gathered directly from the chiller control-panel interface, the system supply and return temperatures, and system.

Attachment 5 - FIM 2 Chiller Sequence**Fort Bend County Jail East Tower Chiller Plant Sequence**

Use the following Linear Formula $y = mX + b$ where $m = .008$ (adj), X = Entering Condenser Water, $b = .2371$ (adj) to calculate %Load to generate an add request.

If the CHWS temperature rises 3°F (adj.) above the set-point for an adjustable period (typ. 20 minutes) (adj) an Add command shall be issued.

If the flow rate through the chiller(s) exceeds its maximum flow value (CH-1 & CH-2 1,395 GPM CH-4 1,600 GPM) for an adjustable period (typ. 20 minutes) (adj).

Once the BAS has determined an additional chiller is required a 15 minute (adj) Add timer shall start, if the Add command is removed the Add timer shall be reset to 15 minutes (adj). Once the Add timer has expired, the next chiller in the sequence shall be enabled. A maximum of 2 chillers shall be allowed to operate at any one time.

Maximum % Load = 95% (adj).

Minimum % Load = 65% (adj).

4. Chiller Subtract Sequence:

The subtract sequence is similar to the Add Sequence. In all cases a minimum of one chiller shall be operating at all times.

Use the following Linear Formula $y = mX + b$ where $m = .0033$ (adj), X = Entering Condenser Water, $b = .861$ (adj) to calculate %Load to subtract a chiller.

If the minimum flow bypass valve (MFBPV) is not fully closed a subtract command shall be issued.

Once the BAS has determined a chiller is not required, a 15 minute (adj) Subtract timer shall start. If the Subtract command is removed, the Subtract timer shall be reset to 15 minutes (adj). Once the Subtract timer has expired, the next chiller in the sequence shall be disabled. A minimum of 1 chiller shall be operating at all times.

Maximum % Load = 38% (adj).

Minimum % Load = 26% (adj).

5. PCHWP Sequence

Flow in the SCHW system shall be totalized and the PCHWP(s) shall modulate to match primary flow to the total SCHW system flow. Chiller maximum and minimum flow are provided by the chiller manufacturer. When flow drops below the chiller minimum flow, the minimum flow bypass valve shall modulate to maintain required minimum flow. Tune loop to avoid rapid changes in primary flow.

6. SCHWP Sequence:

Secondary CHW pump speed shall be controlled to maintain the specified building-loop differential pressure set-points, as recommended by the balancing contractor.

This sequence may be enabled/disabled by the plant operators. The building differential pressure sensor's set-point shall be reset when appropriate. The rate at which the building-loop differential-pressure set-point can be changed will be limited. Every 5 minutes (adj.), the set-point may be increased by 2 psi (adj.) or lowered by 1 psi (adj.), as needed to maintain one AHU CHW valve in a near fully open position. The minimum number of secondary CHW pumps shall operate to remain within the optimal flow (typ. 50-75%), head, and pump-efficiency range, as determined by the BAS program from evaluation of the specific models' pump curves. Building-loop differential-pressure error shall be considered when adding secondary CHW pumps. To ensure stable system flow, the rate at which CHW pump speed may change shall be limited to 10% per minute (adj.). To ensure stable and reliable operation, the plant CHW loop differential-pressure sensor's set-point shall be reset to achieve the desired building-loop differential-pressure sensor's set-point.

Attachment 5 - FIM 2 Chiller_ Sequence**Fort Bend County Jail East Tower Chiller Plant Sequence****7. Cooling tower sequence:**

This cooling tower sequence uses a slightly modified Near-Optimal Control of Cooling Towers for Chilled Water Systems 1990 developed by J.E. Braun Ph.D., P.E. and G.T. Diderrich Ph.D. In addition, parts of the Cooling Tower Sequence as listed in this document came from 2016 ASHRAE HVAC Systems and Equipment; Chapter 40. The ASHRAE article includes references to the document listed above, plus several other items. In addition, the ASHRAE article mentioned above is an excellent source for cooling tower information.

This sequence document relates to control of condenser water temperature (CDW-t) by adjusting cooling tower air flow. This allows for heat transfer from the warmer CDW-t to the cooler outdoor air OA wet bulb temperature (WB) in the cooling tower. The prime mover of air flow in the cooling tower is natural draft/ventilation and cooling tower (CT) fans. There are many different configurations of CTs on the market, this sequence primarily applies to direct contact induced draft, crossflow and forced draft cooling towers. While this sequence may well be applicable to other CT types, other types were not studied for use in this sequence. Please refer to the ASHRAE article mentioned above for sequences used in other CT types.

This sequence will vary the amount of air flow used to transfer heat from the CDW to the OA.

- A. As the CDW-t temperature decreases below the minimum CDW-t set point (CDW-SP-Min) (user adj.) The number of enabled CT cells shall be decreased to the minimum number of cells allowed. This minimum number of CT cells is limited by maximum CT CDW flow as specified by the CT manufacture and physical number of CT cells (typically a single cell).
- B. Upon a further decrease in the CDW-t the CT bypass (CT-BYP) valve(s) shall start to modulate to divert CDW away from the heat transfer material of the CT. The output to the (CT-BYP) valve(s) shall be determined via a Proportional Integral Derivative (PID) control loop.
- C. As CDW-t increases above the CDW-SP-MIN the PID loop shall modulate the CT-BYP valve(s) to the full CT position.
- D. Once the CT-BYP valve(s) is in the full CT position and the CDW-t has increased above the CDW-SP-Min plus a minimum differential (min-diff), (user adj) the sequence shall enable the additional CT cells. The maximum number of CT cells that may be enabled at any time is limited by the physical number of CT cells available. In addition, the maximum number of CT cells that may be enabled will be limited by the CT cell minimum water flow as specified by CT manufacture.
- E. Once the maximum number of available/allowable CT cell(s) has been enabled, the CT fans for all enabled CT cells shall be enabled at minimum speed 25% (user adj.)
- F. CT fan(s) speed are set based on operating chiller(s) design, operating chiller(s) actual load, CT design capacity and CT actual load. All loads are measured in tons of refrigeration.
- G. See Table 1 above for the number of CT cell(s) enable for each chiller enabled.
 - a. To calculate CT fan(s) speed: If the CDW-t is less than CDW Set Point Maximum (CDW-SP-Max),(user adj.) – maximum differential (max-diff), (user adj.) then us **Formula 1** as shown below.
 - b. If CDW-t is above the CDW-SP-Max (user adj.) the fan speed shall ramp from the output of **Formula 1** to 100 percent when the CDW-t increases to CDW-SP-Max (user adj.) + max-diff, (user adj.).

Attachment 5 - FIM 2 Chiller_ Sequence

Fort Bend County Jail East Tower Chiller Plant Sequence

Formula 1

If $PLR \geq .25$

$$\% Out = 1 - C_2 * (C_1 - PLR)$$

Else

$$\% Out = 4 * PLR * (1 - C_2 * [C_1 - .25])$$

Limit minimum output to Minimum Fan Speed Control Point .25 (user adj.)

Limit maximum output to Maximum Fan Speed Control Point 1 (user adj.)

Where:

C_1 = See Table 2

C_2 = See Table 2

$$PLR = \frac{Plant_{act.cap}}{Plant_{des.Cap}}$$

Where:

$Plant_{act.cap}$ = Current chiller(s) operating load in tons

$Plant_{des.cap}$ = See Table 2

Table 2:

Operating Chillers	Tower Cells Enabled	C_1	C_2	$Plant_{des.cap}$
CH-1 OR CH-2	1	0.903941	0.737511	300
	2	1.278366	0.521499	
CH1 AND CH-2	2	1.114965	0.597926	600
	2	1.287451	0.517819	
	2	1.232771	0.540787	

Attachment 5 - FIM 3.0 DX Details

Equipment Audited to be Replaced			Existing		Proposed		Note
Location	Type	Tag	Manufacturer	model	Manufacturer	Model	
5th St. Boys & Girls Community Center	Split Systems (DX)	295	Carrier	38AKS024-510			Replace Equipment
		296	Trane	TTA120A300FA	Johnson Controls	J10YCC00A2AAB6	Remove and replace security rack
							Rebuild AHU platform
							Install new housekeeping pad
		297	Trane	TTA180B300FA	Johnson Controls	J15YDC00A2AAB6	Remove and replace security rack
							Relocate electrical disconnect to left side of unit
							Add new housekeeping pad at condenser
Auto Theft	Split Systems (DX)	164	Trane	2TTA048A4000AA	Johnson Controls	J07YEC00A4AAB5	Electrical disconnect - Replace existing at condenser
		166	Trane	2TTA036A4000AA	Johnson Controls	J07YEC00A4AAB5	Replace Lineset
							Electrical disconnect - Replace existing at condenser
							Change from 2-condensers to 1-dual stage condenser,
		168	Trane	2TTA036A4000AA	Johnson Controls	TCD2B60S31S	Replace lineset
							Change from 2-condensers to 1-dual stage condenser,
							Electrical disconnect - Replace Existing at Condenser
CSCD Fresno	BARD	281	National Coil Company	V436310A1FDS-NB			Replace Equipment
Drainage Buildings	Split Systems (DX)	238	Trane	2A7B2036A1000AA	Johnson Controls	RAC15036B21S	Electrical disconnect - Replace existing at condenser
							Electrical disconnect - Replace existing at ahu
George Family Development Center	RTU (DX)	105	Trane	YCD120C4L0	Johnson Controls	ZYG12E4C3AB1C114A3	Add new gas regulator
							Add new electrical disconnect at condenser
		106	Trane	YCD18B4LOHB	Johnson Controls	AD15N1CP4L1CAB36B2	Add new electrical disconnect at condenser
							Add new gas regulator
		108	Trane	YCD090C4L	Johnson Controls	ZYG08E4B3AB1C114A4	Add new electrical disconnect at condenser
							Add new gas regulator
	Split Systems (DX)	109	Trane	YSC072A4E	Johnson Controls	ZYGA7E4B1AB1C114A2	Add new gas regulator
							Add new electrical disconnect at condenser
		111	Trane	TTA036C40CA0	Johnson Controls	TCD2B36S41S	Replace Equipment
		113	Trane	TTR025C100A2	Johnson Controls	RAC13424B21S	Replace Equipment
		115	Trane	RAUCC254CM03	Johnson Controls	J25YCC00A4AAB5	Replace line set
		116	Trane	TTA072C400A0	Johnson Controls	J07YEC00A4AAB5	
		118	Trane	TTA048C400A0	Johnson Controls	TCD2B48S41S	Replace Equipment
		119	Trane	TTA036C400A0	Johnson Controls	TCD2B36S41S	Replace Equipment
		120	Trane	TTA030C400A0	Johnson Controls	TCD2B36S41S	Replace Equipment
Hobby Boys and Girls	RTU (DX)	287	Carrier	50TTF014601BA	Johnson Controls	ZJ150E36R4B1BCA2A2	Replace Equipment
IDC Shop (Road & Bridge)	Split System - Mini	294	Mitsubishi	MXZ-3B24NA	Johnson Controls	LS243HLV3	Replace Equipment
	Split Systems (DX)	292	Goodman	CLJ36-1A	Johnson Controls	RAC14330B21S	Add new electrical disconnect at condenser
		293	Trane	4TTB3060D1000AA			Replace Equipment
Jake Dove Juvenile	Split Systems (DX)	269	Lennox		Johnson Controls	TCD2B60S31S	Replace Equipment
		270	Lennox		Johnson Controls	TCD2B60S31S	Replace Equipment
		271	Lennox		Johnson Controls	TCD2B60S31S	Replace Equipment
		272	Lennox		Johnson Controls	RAC15036B21S	Relocate electrical disconnect next to AHU unit
							Replace condensation water pump

Attachment 5 - FIM 3.0 DX Details

Equipment Audited to be Replaced			Existing		Proposed		Note
Juvenile Court	Split Systems (DX)	161	Trane	TTA150B400DA	Johnson Controls	J12YDC00A4AAB5	Replace existing electrical disconnect at condenser
							Install expansion valves (Dual circuit unit)
		162	Trane	TTA060B400A1	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser
		163	Trane	TTA072C400A0	Johnson Controls	J07YEC00A4AAB5	Disconnect - Replace existing at condenser
Juvenile Detention	RTU (DX)	178	Rheem	RSNA-B024JK 000	Johnson Controls	PCG4A240502X4	Replace existing electrical disconnect at condenser
		184	Carrier	48HJD006	Johnson Controls	ZYG06E4C1AB1A114A4	Add new gas regulator
		186	Trane	TSC06004A	Johnson Controls	ZYE06A4B1AB1A114A4	Add New electrical disconnect at AHU
Juvenile Probation	Split Systems (DX)	148	Goodman	GSC130604AC	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser
							Replace equipment stand at AHU
		149	Goodman	GSC130604AC	Johnson Controls	TCD2B60S31S	Replace equipment stand
							Replace existing electrical disconnect at condenser
		151	Goodman	CKL60-4L	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser
Kitty Hollow - House	Package Unit (DX)	265	Carrier	50HJ005341	Johnson Controls	ZYE06A2C1AB1A114A4	Add new electrical disconnect at condenser
	Split Systems (DX)	266	Carrier	24ABS336A300	Johnson Controls	RAC15036B21S	Add new electrical disconnect at condenser
							Reinstall security fence
Kitty Hollow Park	Split Systems (DX)	261	Trane	2A7C0048A\$000AA	Johnson Controls	TCD2B48S41S	Replace existing electrical disconnect at condenser
							Remove and replace security fence
		263			Johnson Controls	RAC14360B21S	Reinstall security fence
							Replace existing electrical disconnect at condenser
		264	Trane	2A7A3030A1000AA	Johnson Controls	RAC14330B21S	Replace Equipment
Morton St (Facilities)	Package Unit (DX)	103	Heil	PA5542AKA/PAPA42GA	Johnson Controls	RAC14342B21S	Replace housekeeping pad
	Split Systems (DX)	100	York		Johnson Controls	RAC14360B21S	Replace Equipment
		102	Carrier	24ACB460A310	Johnson Controls	RAC14360B21S	Replace Equipment
Mustang Community Center	Split Systems (DX)	276	Trane	2TTB0060A1000AA	Johnson Controls	RAC13460B21S	Replace Equipment
		277	Trane	2TTB0060A1000AA	Johnson Controls	RAC13460B21S	Replace Equipment
Narcotics / Patrol Building	Split System - Mini	153	FUJITSU	AOU18CL	Johnson Controls	LS181HSV5	Replace line sets
Needville Annex JP	Split Systems (DX)	250	Trane	TTA090A300DA	Johnson Controls	J07YEC00A2AAB5	Raise condenser 12" to avoid electrical coming out of slab
							Replace electrical disconnect at condenser
		251	Trane	TTA090A300DA	Johnson Controls	J07YEC00A2AAB5	Replace electrical disconnect at condenser
							Raise condenser 12" to avoid electrical coming out of slab
		252	Trane	TTA090A300DA	Johnson Controls	J07YEC00A2AAB5	Replace electrical disconnect at condenser
Recycling Center	Split Systems (DX)	241	Lennox	12ACB48-5P	Johnson Controls	RAC15048B21S	Add new electrical disconnect to AHU
Road and Bridge - (Needville)	Split Systems (DX)	254	Trane	TTA120B300FA	Johnson Controls	J10YDC00A2AAB5	Relocate t-stat to office
							Replace existing electrical disconnect at condenser
		255	Trane	2TTA048A3000A	Johnson Controls	TCD2B48S41S	Replace existing electrical disconnect at condenser
		256	Trane	2TTA060A3000A	Johnson Controls	TCD2B60S31S	Replace existing electrical disconnect at condenser
		257	Trane	2TTA036A3000A	Johnson Controls	TCD2B36S31S	Replace existing electrical disconnect at condenser
Roads & Bridge (Beechnut)	Split Systems (DX)	121	Trane	2A7C0060A4000AA	Johnson Controls	TCD2B60S31S	Relocate disconnect at AHU
							Replace existing electrical disconnect at condenser
		123	Goodman	???03017D	Johnson Controls	RAC14342B21S	Add new electrical disconnect at AHU
							Replace plenum box
Roads & Bridge (Dairy Ashford)	RTU (DX)	288	Trane	2A7A2036A1000AA	Johnson Controls	RAC15036B21S	Add new housekeeping pad
							Add new electrical disconnect at AHU

Attachment 5 - FIM 3.0 DX Details

Equipment Audited to be Replaced			Existing		Proposed		Note
							Build new plenum box, supply and return
	Split Systems (DX)	291	Trane	2A7A2030A1000AA	TBD	TBD	Disconnect - Replace existing electrical disconnect at condenser
							Relocate disconnect at condenser
							Rebuild plenum
							Install new duct hangers and remove air restrictions
Roads & Bridge (Pane Lane)	BARD	133	Bard		TBD	TBD	Add new electrical disconnect at AHU
	Split Systems (DX)	126	Trane	2A7A206A10	Johnson Controls	RAC13460B21S	Add divider board between units
							Replace return grill
							Add new electrical disconnect at AHU
							Add new pan
		127	Trane	2A7B3024A1000AA	Johnson Controls	RAC14330B21S	Add new electrical disconnect at AHU
							Add new housekeeping pad
		128	York	?IDA060S25A	Johnson Controls	TCD2B60S31S	Add new housekeeping pad
	Add new drain pan						
131	Trane	2A7B3036A1000AA	Johnson Controls	RAC15036B21S	Add new electrical disconnect at AHU		
Rosenberg Boot Camp Juvenile	Split Systems (DX)	246	Trane	2A7A2036A1000AA	Johnson Controls	RAC15036B21S	Add new electrical disconnect at AHU
		247	Trane	2A7A2036A1000AA	Johnson Controls	RAC15036B21S	Add new electrical disconnect at AHU
		248			Johnson Controls	RAC15036B21S	Add new electrical disconnect at AHU
							Demo and rebuild wall
							Replace pan
Vehicle Maintenance	Split Systems (DX)	169	Trane	2TTA072A3000AA	Johnson Controls	J07YEC00A2AAB5	Rebuild frame to accept new AHU
							New house keeping pad
		170	Trane	2A7C0072A3000AA	Johnson Controls	J07YEC00A2AAB5	New housekeeping pad
							Add gas regulator
							Use existing line set
Vocational Building	Split Systems (DX)	171	Carrier	24ABB360	Johnson Controls	TCD2B36S31S	Replace Equipment

Attachment 5 - FIM 3.0 DX Savings

FIM 3.0 Energy Savings Summary

Site	BASELINE			POST-RETROFIT			SAVINGS				
	Demand kW (Baseline)	Cooling kWh (Baseline)	Total kWh (Baseline)	Demand kW (Proposed)	Cooling kWh (Proposed)	Total kWh (Proposed)	Demand Saving kW	Cooling kWh (Saving)	Total Saving kWh	kW \$ (Saving)	kWh \$ (Saving)
Facilities Morton St.	15	6,320	6,320	8	3,487	3,487	7	2,833	2,833	\$417	\$289
Roads & Bridge (Beechnut)	35	41,508	41,508	20	24,161	24,161	15	17,347	17,347	\$836	\$1,549
Roads & Bridge Pane Lane	19	29,406	29,406	11	16,012	16,012	9	13,394	13,394	\$506	\$1,069
Juvenile Probation	16	31,183	31,183	10	18,768	18,768	6	12,415	12,415	\$373	\$1,116
Narcotics / Patrol Building	-	-	-	-	-	-	-	-	-	\$0	\$0
Juvenile Court	29	35,783	35,783	16	20,224	20,224	12	15,559	15,559	\$732	\$1,370
Auto Theft	12	24,135	24,135	7	14,001	14,001	5	10,134	10,134	\$299	\$803
Vehicle Maintenance	11	39,076	39,076	8	28,574	28,574	3	10,502	10,502	\$176	\$964
Vocational Building	4	11,285	11,285	2	6,108	6,108	2	5,177	5,177	\$96	\$473
Juvenile Detention	14	21,838	21,838	8	12,659	12,659	6	9,180	9,180	\$337	\$702
Medic 1	2	4,995	4,995	1	2,676	2,676	1	2,319	2,319	\$48	\$174
Animal Services Building	2	2,764	2,764	1	1,481	1,481	1	1,283	1,283	\$48	\$104
Drainage Buildings	4	12,068	12,068	2	6,401	6,401	2	5,667	5,667	\$91	\$602
Recycling Center	5	17,022	17,022	3	9,405	9,405	2	7,617	7,617	\$122	\$690
Rosenberg Boot Camp Juvenile	11	10,661	10,661	6	5,655	5,655	5	5,006	5,006	\$289	\$459
R&B Needville / Annex JP	21	17,683	17,683	15	12,473	12,473	6	5,209	5,209	\$355	\$387
Kitty Hollow Park	18	31,074	31,074	11	19,339	19,339	7	11,735	11,735	\$412	\$925
Jake Dove Juvenile	13	4,358	4,358	8	2,512	2,512	6	1,846	1,846	\$344	\$198
Mustang Community Center	12	8,151	8,151	7	4,599	4,599	5	3,552	3,552	\$287	\$403
CSCD Fresno	-	-	-	-	-	-	-	-	-	\$0	\$0
Roads & Bridge Dairy Ashford	3	13,503	13,503	2	8,674	8,674	1	4,829	4,829	\$59	\$434
IDC Shop (Road & Bridge)	-	-	-	-	-	-	-	-	-	\$0	\$0
5th St. Boys & Girls Community Center	2	6,494	6,494	1	3,312	3,312	1	3,182	3,182	\$412	\$2,165

Attachment 5 - FIM 3.0 DX Savings

FIM 3.0 Energy Saving Summary																			
GENERAL DATA																			
Site	JCI Tag	Manuf.	Model	Serial	Elec	Manuf. Year	Age	UnitType	Refrig	Cooling Tons	Heat Type	Heat Cap2	Demand Diversity Factor	Cooling Diversity Factor	Heating Diversity Factor	Cooling EFLH	Heating EFLH	Cooling Setback Factor	Heating Setback Factor
Facilities Morton St.	100	York	0	0	/	1996	27	Split Systems (DX)	0	4	GH	48	0.65	0.25	0.4	1111	64	1.00	1.00
Facilities Morton St.	101	Ducan	4AC16L60P-50A	1922D06671	208/230/1	2022	1	Split Systems (DX)	410A	5	EH	10	0.65	0.25	0.4	1111	64	1.00	1.00
Facilities Morton St.	102	Carrier	24ACB460A310	3409E03535	208/230/1	2009	14	Split Systems (DX)	410A	5	EH	10	0.65	0.25	0.4	1111	64	1.00	1.00
Facilities Morton St.	103	Heil	PA5542AKA/PAPA42GA	L992259	208/230/1	1995	28	Package Unit (DX)	R22	3.5	EH	7	0.65	0.25	0.4	1111	64	1.00	1.00
Roads & Bridge (Beechnut)	121	Trane	2A7C0060A4000AA	32744SE3F	460/3	2003	20	Split Systems (DX)	R22	5		60	0.65	0.70	0.4	1097	99	1.00	1.00
Roads & Bridge (Beechnut)	123	Goodman	???03017D	073151319	208/230/?	2007	16	Split Systems (DX)	R22	2.5		30	0.65	0.70	0.4	1097	99	1.00	1.00
Roads & Bridge (Beechnut)	124	Armstrong Air	APCE13A36P-2A	1614J06178	/	2014	9	Package Unit (DX)	R410A	3		36	0.65	0.70	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	125	Ducane	13ACDL-048-230-3	1914H29211	208/230/3	2012	11	Split Systems (DX)	R22	4	EH	8	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	126	Trane	2A7A206A10	23020AX	208/230/1	2002	21	Split Systems (DX)	R22	5	EH	10	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	127	Trane	2A7B3024A1000AA	61210Y85F	208/230/1	2006	17	Split Systems (DX)	R22	2	EH	4	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	128	York	?IDA060S25A	EDBM119414	208/230/3	1993	30	Split Systems (DX)	R22	5	EH	10	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	129	Allied	4SCU13LC160T-1	1619E03648	208/230/3	2016	7	Split Systems (DX)	R410A	5	EH	10	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	130	Trane	MIDA0018506A	EBAM0389900	208/230/1	1992	31	Split Systems (DX)	R22	1.5	EH	3	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	131	Trane	2A7B3036A1000AA	9191M533F	208/230/1	2009	14	Split Systems (DX)	R22	3	EH	6	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	132	Rheem	RA1436AJINA	W332055703	208/230/1	2020	3	Split Systems (DX)	R410A	3	EH	6	0.65	0.90	0.4	1097	99	1.00	1.00
Roads & Bridge Pane Lane	134	Lennox	KCA048S4DN29	5613L04961	208/230/1	2013	10	BARD (Package)	R410A	4	EH	8	0.65	0.90	0.4	1097	99	1.00	1.00
Juvenile Probation	148	Goodman	GSC130604AC	804066	460/3	2008	15	Package Unit (DX)	R22	5	EH	10	0.65	0.90	0.4	1390	115	1.00	1.00
Juvenile Probation	149	Goodman	GSC130604AC	0706020775	460/3	2007	16	Split Systems (DX)	R22	5	EH	10	0.65	0.90	0.4	1390	115	1.00	1.00
Juvenile Probation	150	Lennox	TSA090S\$SN1G	5615G05907	460/3	2015	8	Split Systems (DX)	R410A	7.5	EH	15	0.65	0.90	0.4	1390	115	1.00	1.00
Juvenile Probation	151	Goodman	CKL60-4L	5047798	/	2005	18	Split Systems (DX)	R22	5	EH	10	0.65	0.90	0.4	1390	115	1.00	1.00
Juvenile Probation	152	Allied	4SCU13LC160F	1618D16435	460/3	2018	5	Split Systems (DX)	R410A	5	EH	10	0.65	0.90	0.4	1390	115	1.00	1.00
Narcotics / Patrol Building	153	FUJITSU	AOU18CL	DCNIC0928	/	2013	10	Split Systems (DX)	R410A	1.5	EH	3	0.65	0.50	0.4	1105	46	1.00	1.00
Narcotics / Patrol Building	154	Ducane	4AC14L60P-7A	1916B03734	208/230/1	2016	7	Split System - Mini	R410A	5	EH	10	0.65	0.50	0.4	1105	46	1.00	1.00
Narcotics / Patrol Building	155	Ducane	4AC14L60P-7A	1915D59713	208/230/1	2015	8	Split Systems (DX)	R410A	5	EH	10	0.65	0.50	0.4	1105	46	1.00	1.00
Narcotics / Patrol Building	156	Ducane	13ACDL-060-230-03	1914G37528	230/1	2013	10	Split Systems (DX)	R22	5	EH	10	0.65	0.50	0.4	1105	46	1.00	1.00
Narcotics / Patrol Building	157	York	GCGD060S21S2B	W1D2689246	208/230/1	2012	11	Split Systems (DX)	R22	5	EH	10	0.65	0.50	0.4	1105	46	1.00	1.00
Narcotics / Patrol Building	158	Ducane	4AC14L60P-7A	1916B03728	230/1	2016	7	Split Systems (DX)	R410A	5	EH	10	0.65	0.50	0.4	1105	46	1.00	1.00
Narcotics / Patrol Building	159	Pane	PA13NR04800GAJAA	2111X68020	208/230/1	2011	12	Split Systems (DX)	R22	4	EH	8	0.65	0.50	0.4	1105	46	1.00	1.00
Narcotics / Patrol Building	160	Ducane	4AC14L60P-7A	1922C85560	208/230/1	2022	1	Split Systems (DX)	R410A	3	EH	6	0.65	0.50	0.4	1105	46	1.00	1.00
Juvenile Court	161	Trane	TTA150B400DA	2134N9LAD	460/3	2002	21	Split Systems (DX)	R22	12.5	EH	25	0.65	0.40	0.4	2027	169	1.00	1.00
Juvenile Court	162	Trane	TTA060B400A1	2141X1F4F	460/3	2002	21	Split Systems (DX)	R22	5	EH	10	0.65	0.40	0.4	2027	169	1.00	1.00
Juvenile Court	163	Trane	TTA072C400A0	N4332N6FF	460/3	1996	27	Split Systems (DX)	R22	6		72	0.65	0.40	0.4	2027	169	1.00	1.00
Auto Theft	164	Trane	2TTA048A4000AA	2332WNC3F	460/3	2002	21	Split Systems (DX)	R22	4		48	0.65	1.20	0.4	1111	64	1.00	1.00
Auto Theft	166	Trane	2TTA036A4000AA	3392NH33F	460/3	2003	20	Split Systems (DX)	R22	3	EH	6	0.65	1.20	0.4	1111	64	1.00	1.00
Auto Theft	168	Trane	2TTA036A4000AA	3392NNH33F	460/3	2003	20	Split Systems (DX)	R22	3		36	0.65	1.20	0.4	1111	64	1.00	1.00
Vehicle Maintenance	169	Trane	2TTA072A3000AA	832514J2F	230/3	2008	15	Split Systems (DX)	R22	6		72	0.65	2.00	0.4	1111	64	1.00	1.00
Vehicle Maintenance	170	Trane	2A7C0072A3000AA	6331Y092F	230/3	2006	17	Split Systems (DX)	R22	6		72	0.65	2.00	0.4	1111	64	1.00	1.00
Vocational Building	171	Carrier	24ABB360	1315E223	208/230/3	2005	18	Split Systems (DX)	410A	3		36	0.65	1.00	0.4	2078	278	1.00	1.00
Juvenile Detention	172	Lennox	ZGB060S4BM1G	5621C03418	460/3	2021	2	Split Systems (DX)	R410A	4.75		57	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	173	Lennox	ZGB092S4BS1G	5615M04661	460/3	2015	8	RTU (DX)	R410A	7.2		86	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	174	Lennox	ZGA092S4BS1G	5615E13602	460/3	2015	8	RTU (DX)	R410A	7.2		86	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	175	Carrier	48TCDA05	0411G20	460/3	2011	12	RTU (DX)	410A	4		48	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	176	York	D3N2030N05606C	W1B3487826	208/230/1	2013	10	RTU (DX)	R410A	2.5		30	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	177	York	GCGD18S21S2XB	W1C1808230	208/230/1	2011	12	RTU (DX)	R22	1.5		18	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	178	Rheem	RSNA-B024JK 000	7288F210706503	208/230/1	2007	16	Split Systems (DX)	R22	2		24	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	179	Carrier	48TCD14A2A6A0AAO	3111G20	/	2011	12	RTU (DX)	R410A	12.5		150	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	180	Carrier	48TCD0D08A2A6A0AAO	2011G30477	460/3	2011	12	RTU (DX)	R410A	7.5		90	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	181	Carrier	48TCD0D09A2A6A0AAO	2011G40564	460/3	2011	12	RTU (DX)	R410A	8.5		102	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	182	Carrier	48TCD0D12A2A6A0AAO	3211G10300	460/3	2011	12	RTU (DX)	R410A	10		120	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	183	Carrier	48TCOA06A	0811G30	460/3	2011	12	RTU (DX)	R410A	5		60	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	184	Carrier	48HJD006	4009G20198	460/1	2008	15	RTU (DX)	R22	5		60	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	185	Carrier	48TCD14A2A6A0AAO	1411G20512	460/3	2011	12	RTU (DX)	R410A	12.5		150	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	186	Trane	TSC06004A	205101175L	460/3	2002	21	RTU (DX)	R22	5		60	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	187	Carrier	38UDA14A0AA0AAO	1017C94947	460/3	2017	6	RTU (DX)	R410A	12.5		150	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	188	Trane	TTA09044AA01AS	223216252TA	460/3	2022	1	Split Systems (DX)	R410A	7.5		90	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	189	Allied	ELS090S4AT1G	5622B03249	460/3	2022	1	Split Systems (DX)	R410A	7.5		90	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	190	York	YC180C00A4AA2A	N1H2084441	460/3	2012	11	Split Systems (DX)	R410A	15		180	0.65	0.50	0.4	2078	278	1.00	1.00
Juvenile Detention	191	Carrier	38AUDA16AOA6AOA0AO	2417P31201	460/3	2017	6	Split Systems (DX)	R410A	15		180	0.65	0.50	0.4	2078	278	1.00	1.00
Medic 1	223	Trane	4TTA3060D4000BA	10102W322F	460/3	2010	13	Split Systems (DX)	R410A	5		60	0.65	0.90	0.4	2078	278	1.00	1.00

Attachment 5 - FIM 3.0 DX Savings

GENERAL DATA																			
Site	JCI Tag	Manuf.	Model	Serial	Elec	Manuf. Year	Age	UnitType	Refrig	Cooling Tons	Heat Type	Heat Cap2	Demand Diversity Factor	Cooling Diversity Factor	Heating Diversity Factor	Cooling EFLH	Heating EFLH	Cooling Setback Factor	Heating Setback Factor
Medic 1	224	Trane	4TTA4048A4000AA	10163WHY5F	460/3	2010	13	Split Systems (DX)	R410A	4		48	0.65	0.90	0.4	2078	278	1.00	1.00
Medic 1	225	Trane	4TTA3060D4000BA	10102WKK2F	460/3	2010	13	Split Systems (DX)	R410A	5		60	0.65	0.90	0.4	2078	278	1.00	1.00
Medic 1	226	Trane	4TTA3060A4000BA	10102XAF2F	460/3	2010	13	Split Systems (DX)	R410A	5		60	0.65	0.90	0.4	2078	278	1.00	1.00
Medic 1	227	Trane	4TTA3030A4000BA	10161UNP3F	460/3	2010	13	Split Systems (DX)	R410A	2.5		30	0.65	0.90	0.4	2078	278	1.00	1.00
Medic 1	228	Trane	4TTA4048A4000AA	10163W7T5F	460/3	2010	13	Split Systems (DX)	R410A	4		48	0.65	0.90	0.4	2078	278	1.00	1.00
Medic 1	229	Fujitsu	AOU18RLX	CQN004091	208/230/1	1996	27	Split Systems (DX)	R410A	1.5		18	0.65	0.90	0.4	2078	278	1.00	1.00
Animal Services Building	230	Goodman	GSX140181LC	1803264769	208/230/1	2018	5	Split Systems (DX)	R410A	1.5		18	0.65	0.70	0.4	1478	89	1.00	1.00
Animal Services Building	231	Goodman	GSX140301KC	180922264	208/230/1	2018	5	Split Systems (DX)	R410A	2.5		30	0.65	0.70	0.4	1478	89	1.00	1.00
Animal Services Building	232	Goodman	GSX140241LC	181244302	208/230/1	2018	5	Split Systems (DX)	R410A	2		24	0.65	0.70	0.4	1478	89	1.00	1.00
Animal Services Building	233	York	YC090C00A2AAA2A	0	208/230/1	2013	10	Split Systems (DX)	R410A	7.5		90	0.65	0.70	0.4	1478	89	1.00	1.00
Animal Services Building	234	Mitsubishi	PUZ-H18NHA2	8ZU0962A	208/230/1	1996	27	Split Systems (DX)	410A	1.5		18	0.65	0.70	0.4	1478	89	1.00	1.00
Animal Services Building	235	York	4TTA3060D3000AA	11394LKB2F	208/230/3	2011	12	Split System - Mini	R410A	5		60	0.65	0.70	0.4	1478	89	1.00	1.00
Animal Services Building	236	York	4TTA3060D3000AA	0	208/230/3	2011	12	Split Systems (DX)	R410A	5		60	0.65	0.70	0.4	1478	89	1.00	1.00
Drainage Buildings	237	Carrier	24ABC648A310	3810E09821	208/230/1	2010	13	Split Systems (DX)	R410A	4		48	0.65	2.00	0.4	1111	64	1.00	1.00
Drainage Buildings	238	Trane	2A7B2036A1000AA	35133BF3F	2088/230/1	2003	20	Split Systems (DX)	R22	3		36	0.65	2.00	0.4	1111	64	1.00	1.00
Drainage Buildings	240	Armstrong Air	4SCU14LE159P-4	1617A04653	208/230/1	2017	6	Split Systems (DX)	R410A	4		48	0.65	2.00	0.4	1111	64	1.00	1.00
Recycling Center	241	Lennox	12ACB48-5P	5801B 18110	208/230/1	2001	22	Split Systems (DX)	R22	4		48	0.65	2.00	0.4	1176	70	1.00	1.00
Rosenberg Boot Camp Juvenile	242	Trane	4TTB3030D1000AA	1121NKU5F	208/230/1	2011	12	Split Systems (DX)	R410A	2.5		30	0.65	0.50	0.4	1309	102	1.00	1.00
Rosenberg Boot Camp Juvenile	243	Trane	4TTB3048D1000AA	11215P3P4F	208/230/1	2011	12	Split Systems (DX)	R410A	4		48	0.65	0.50	0.4	1309	102	1.00	1.00
Rosenberg Boot Camp Juvenile	244	Trane	4TTB3060D1000AA	11173PB85F	208/230/1	2011	12	Split Systems (DX)	R410A	5		60	0.65	0.50	0.2	1309	102	1.00	1.00
Rosenberg Boot Camp Juvenile	245	Trane	4TTB3036D1000AA	111145FD3F	208/230/1	2011	12	Split Systems (DX)	R410A	3		36	0.65	0.50	0.2	1309	102	1.00	1.00
Rosenberg Boot Camp Juvenile	246	Trane	2A7A2036A1000AA	3151PSR3F	208/230/1	2003	20	Split Systems (DX)	R22	3		36	0.65	0.50	0.2	1309	102	1.00	1.00
Rosenberg Boot Camp Juvenile	247	Trane	2A7A2036A1000AA	3151PGR3F	208/230/1	2003	20	Split Systems (DX)	R22	3		36	0.65	0.50	0.2	1309	102	1.00	1.00
Rosenberg Boot Camp Juvenile	248	0	0	0	/	2003	20	Split Systems (DX)	0	3		36	0.65	0.50	0.2	1309	102	1.00	1.00
Rosenberg Boot Camp Juvenile	249	York	YHJD36S41S4A	WIE281117	208/230/1	2012	11	Split Systems (DX)	R410A	3		36	0.65	0.50	0.2	1309	102	1.00	1.00
Roads & Bridge (Beechnut)	250	Trane	TTA090A300DA	Z201SK3AH	208/230/3	2001	22	Split Systems (DX)	R22	7.5		90	0.65	0.70	0.2	1097	99	1.00	1.00
Roads & Bridge (Beechnut)	251	Trane	TTA090A300DA	Z201STSOAH	208/230/3	2001	22	Split Systems (DX)	R22	7.5		90	0.65	0.70	0.2	1097	99	1.00	1.00
Roads & Bridge (Beechnut)	252	Trane	TTA090A300DA	Z201SE3AH	208/230/3	2001	22	Split Systems (DX)	R22	7.5		90	0.65	0.70	0.2	1097	99	1.00	1.00
R&B Needville / Annex JP	253	Trane	4TTB32024D1000AA	10403TOD3F	208/230/1	2010	13	Split Systems (DX)	R410A	2		24	0.65	0.50	0.2	1097	99	1.00	1.00
R&B Needville / Annex JP	254	Trane	TTA120B300FA	8412YSEAD	208/230/3	2008	15	Split Systems (DX)	R22	10		120	0.65	0.50	0.2	1097	99	1.00	1.00
R&B Needville / Annex JP	255	Trane	2TTA048A3000A	83238CB4F	208/230/3	2008	15	Split Systems (DX)	R22	4		48	0.65	0.50	0.2	1097	99	1.00	1.00
R&B Needville / Annex JP	256	Trane	2TTA060A3000A	8492TW34F	208/230/3	2008	15	Split Systems (DX)	R22	5		60	0.65	0.50	0.2	1097	99	1.00	1.00
R&B Needville / Annex JP	257	Trane	2TTA036A3000A	8325YT33F	208/230/3	2008	15	Split Systems (DX)	R22	3		36	0.65	0.50	0.2	1097	99	1.00	1.00
R&B Needville / Annex JP	258	Carrier	38MAQB09	0415V4149	115/1	2015	8	Split Systems (DX)	R410A	0.75		9	0.65	0.50	0.2	1097	99	1.00	1.00
Kitty Hollow Park	261	Trane	2A7C0048A\$000AA	6133XUH3F	460/3	2006	17	Split System - Mini	R22	4		48	0.65	1.00	0.2	1111	64	1.00	1.00
Kitty Hollow Park	263	0	0	0	/	2006	17	Split Systems (DX)	0	4		48	0.65	1.00	0.2	1111	64	1.00	1.00
Kitty Hollow Park	264	Trane	2A7A3030A1000AA	627KRM5F	208/230/1	2006	17	Split Systems (DX)	R22	2.5		30	0.65	1.00	0.2	1111	64	1.00	1.00
Kitty Hollow Park	265	Carrier	50HJ005341	1309G40314	208/230/1	2009	14	Split Systems (DX)	R22	4		48	0.65	1.00	0.2	1111	64	1.00	1.00
Kitty Hollow Park	266	Carrier	24ABS336A300	2109E12380	208/230/1	2009	14	Package Unit (DX)	R22	3		36	0.65	1.00	0.2	1111	64	1.00	1.00
Jake Dove Juvenile	267	Ducane	4AC13L36P-7A	1914D35806	208/230/1	2014	9	Split Systems (DX)	R410A	3		36	0.65	0.10	0.2	2124	181	1.00	1.00
Jake Dove Juvenile	269	Lennox	0	0	/	2008	15	Split Systems (DX)	R22	3		36	0.65	0.10	0.2	2124	181	1.00	1.00
Jake Dove Juvenile	270	Lennox	0	0	/	2008	15	Split Systems (DX)	0	3		36	0.65	0.10	0.2	2124	181	1.00	1.00
Jake Dove Juvenile	271	Lennox	0	0	/	2008	15	Split Systems (DX)	0	3		36	0.65	0.10	0.2	2124	181	1.00	1.00
Jake Dove Juvenile	272	Lennox	0	0	/	2008	15	Split Systems (DX)	0	3		36	0.65	0.10	0.2	2124	181	1.00	1.00
Mustang Community Center	274	Ducane	4AC13L60P-7A	1914D11094	208/230/1	2014	9	Split Systems (DX)	R410A	3		36	0.65	0.80	0.2	563	41	1.00	1.00
Mustang Community Center	275	Ducane	4AC13L60P-7A	1914A36059	208/230/1	2014	9	Split Systems (DX)	R410A	3		36	0.65	0.80	0.2	563	41	1.00	1.00
Mustang Community Center	276	Trane	2TTB0060A1000AA	40925RM3F	230/1	2004	19	Split Systems (DX)	R22	5		60	0.65	0.80	0.4	563	41	1.00	1.00
Mustang Community Center	277	Trane	2TTB0060A1000AA	402565U3F	230/1	2004	19	Split Systems (DX)	R22	5		60	0.65	0.80	0.4	563	41	1.00	1.00
Mustang Community Center	278	Armstrong	4SCU14LE159P-4	1617B13454	230/1	2017	6	Split Systems (DX)	R410A	5		60	0.65	0.80	0.4	563	41	1.00	1.00
CSCD Fresno	279	Lennox	KCB092S4B1Y	5618E09465	208/230/3	2018	5	Split Systems (DX)	R410A	7.2		86	0.65	1.00	0.4	1170	84	1.00	1.00
CSCD Fresno	280	Lennox	KCA09QS4BN3Y	5614B01502	208/230/3	2014	9	Split Systems (DX)	R410A	7.5		90	0.65	1.00	0.4	1170	84	1.00	1.00
CSCD Fresno	282	Lennox	ZCA092S4BN1G	5617D02045	460/3	2017	6	Package Unit (DX)	R410A	7.2		86	0.65	1.00	0.4	1170	84	1.00	1.00
Roads & Bridge Dairy Ashford	289	Ducane	4AC16L36P-050A	1921J)56)3	208/230/1	2021	2	Package Unit (DX)	R410A	3		36	0.65	2.80	0.4	1097	99	1.00	1.00
Roads & Bridge Dairy Ashford	290	Armstrong	4SCU14LE136P-7	1617B13275	208/230/1	2017	6	RTU (DX)	R410A	3		36	0.65	2.80	0.4	1097	99	1.00	1.00
Roads & Bridge Dairy Ashford	292	Goodman	CLJ36-1A	110484583	208/230/1	2006	17	Split Systems (DX)	R22	3		36	0.65	2.80	0.4	1097	99	1.00	1.00
IDC Shop (Road & Bridge)	293	Trane	4TTB3060D1000AA	111810CM5F	208/230/1	2011	12	Split Systems (DX)	R410A	5		60	0.65	0.90	0.4	1111	64	1.00	1.00
IDC Shop (Road & Bridge)	294	Mitsubishi	MXZ-3B24NA	22902917	208/230/1	2011	12	Split Systems (DX)	R410A	2		24	0.65	0.90	0.4	1111	64	1.00	1.00
5th St. Boys & Girls Community Center	295	Carrier	38AKS024-510	0302F31581	208/230/3	2003	20	Split Systems (DX)	R22	2		24	0.65	1.00	0.4	1794	150	1.00	1.00
5th St. Boys & Girls Community Center	296	Trane	TTA120A300FA	7393YSLAD	208/230/3	2007	16	Split Systems (DX)	R22	10.0		120	0.65	1.00	0.4	1794	150	1.00	1.00
5th St. Boys & Girls Community Center	297	Trane	TTA180B300FA	7322172AD	208/230/3	2007	16	Split Systems (DX)	R22	15.0		180	0.65	1.00	0.4	1794	150	1.00	1.00

Attachment 5 - FIM 3.0 DX Savings

FIM 3.0 Energy Saving Summary																				
Site	JCI Tag	PRE-RETROFIT								POST-RETROFIT								SAVINGS		
		Condition	Cooling EER	Unitary Heating Eff3	Demand kW	Cooling kWh	Heating kWh	Total kWh	Heating Therms	Replace?	Condition2	Cooling EER3	Unitary Heating Eff34	Demand kW	Cooling kWh5	Heating kWh6	Total kWh7	Demand kW saving	Cooling kWh Saving	Saving kWh
Facilities Morton St.	100	Poor	5.8	0.72	5.4	2307	0	2307	17	Yes	New	11.8	0.8	2.7	1135	0	1135	2.7	1172	1172
Facilities Morton St.	101	Good	11.6	1.00	3.4	1442	255	1697	0	No	Good	11.6	1.0	3.4	1442	255	1697	0.0	0	0
Facilities Morton St.	102	Fair	8.4	1.00	4.7	1994	255	2249	0	Yes	New	11.8	1.0	3.3	1419	255	1674	1.3	575	575
Facilities Morton St.	103	Poor	5.8	1.00	4.7	2019	179	2197	0	Yes	New	12.5	1.0	2.2	933	179	1112	2.5	1085	1085
Roads & Bridge (Beechnut)	121	Poor	6.6	7.37	5.9	6950	0	6950	0	Yes	New	12.0	10.2	3.3	3840	0	3840	2.6	3110	3110
Roads & Bridge (Beechnut)	123	Poor	7.0	7.37	2.8	3282	0	3282	0	Yes	New	12.8	10.2	1.5	1807	0	1807	1.2	1475	1475
Roads & Bridge (Beechnut)	124	Poor	8.4	7.37	2.8	3280	0	3280	0	No	Poor	8.4	7.4	2.8	3280	0	3280	0.0	0	0
Roads & Bridge Pane Lane	125	Fair	8.9	1.00	3.5	5337	316	5653	0	No	Fair	8.9	1.0	3.5	5337	316	5653	0.0	0	0
Roads & Bridge Pane Lane	126	Poor	6.6	1.00	5.9	8936	395	9330	0	Yes	New	11.8	1.0	3.3	5042	395	5437	2.6	3894	3894
Roads & Bridge Pane Lane	127	Fair	8.2	1.00	1.9	2894	158	3051	0	Yes	New	13.0	1.0	1.2	1823	158	1981	0.7	1071	1071
Roads & Bridge Pane Lane	128	Poor	5.8	1.00	6.7	10250	395	10645	0	Yes	New	12.0	1.0	3.3	4937	395	5332	3.5	5313	5313
Roads & Bridge Pane Lane	129	Good	10.9	1.00	3.6	5445	395	5840	0	No	Good	10.9	1.0	3.6	5445	395	5840	0.0	0	0
Roads & Bridge Pane Lane	130	Poor	5.8	1.00	2.0	3075	118	3193	0	Yes	New	12.5	1.0	0.9	1422	118	1540	1.1	1653	1653
Roads & Bridge Pane Lane	131	Fair	8.4	1.00	2.8	4252	237	4489	0	Yes	New	12.8	1.0	1.8	2788	237	3025	1.0	1464	1464
Roads & Bridge Pane Lane	132	Excellent	10.7	1.00	2.2	3338	237	3574	0	No	Excellent	10.7	1.0	2.2	3338	237	3574	0.0	0	0
Roads & Bridge Pane Lane	134	Fair	9.1	1.00	3.4	5231	316	5547	0	No	Fair	9.1	1.0	3.4	5231	316	5547	0.0	0	0
Juvenile Probation	148	Poor	7.0	1.00	5.6	10694	462	11155	0	Yes	New	12.0	1.0	3.3	6256	462	6717	2.3	4438	4438
Juvenile Probation	149	Fair	8.2	1.00	4.8	9166	462	9628	0	Yes	New	12.0	1.0	3.3	6256	462	6717	1.5	2910	2910
Juvenile Probation	150	Fair	9.9	1.00	5.9	11340	692	12032	0	No	Fair	9.9	1.0	5.9	11340	692	12032	0.0	0	0
Juvenile Probation	151	Poor	6.6	1.00	5.9	11323	462	11784	0	Yes	New	12.0	1.0	3.3	6256	462	6717	2.6	5067	5067
Juvenile Probation	152	Good	11.1	1.00	3.5	6763	462	7225	0	No	Good	11.1	1.0	3.5	6763	462	7225	0.0	0	0
Narcotics / Patrol Building	153	Poor	8.2	1.00	1.4	1216	55	1271	0	No	Poor	8.2	1.0	1.4	1216	55	1271	0.0	0	0
Narcotics / Patrol Building	154	Fair	10.1	1.00	3.8	3273	184	3457	0	No	Fair	10.1	1.0	3.8	3273	184	3457	0.0	0	0
Narcotics / Patrol Building	155	Fair	9.9	1.00	3.9	3339	184	3522	0	No	Fair	9.9	1.0	3.9	3339	184	3522	0.0	0	0
Narcotics / Patrol Building	156	Fair	9.1	1.00	4.3	3659	184	3843	0	No	Fair	9.1	1.0	4.3	3659	184	3843	0.0	0	0
Narcotics / Patrol Building	157	Fair	8.9	1.00	4.4	3734	184	3917	0	No	Fair	8.9	1.0	4.4	3734	184	3917	0.0	0	0
Narcotics / Patrol Building	158	Good	10.9	1.00	3.6	3047	184	3231	0	No	Good	10.9	1.0	3.6	3047	184	3231	0.0	0	0
Narcotics / Patrol Building	159	Poor	7.7	1.00	4.1	3445	147	3592	0	No	Poor	7.7	1.0	4.1	3445	147	3592	0.0	0	0
Narcotics / Patrol Building	160	Good	11.6	1.00	2.0	1721	110	1831	0	No	Good	11.6	1.0	2.0	1721	110	1831	0.0	0	0
Juvenile Court	161	Poor	6.6	1.00	14.7	18345	1687	20032	0	Yes	New	11.1	1.0	8.8	10957	1687	12644	5.9	7388	7388
Juvenile Court	162	Poor	6.6	1.00	5.9	7338	675	8013	0	Yes	New	12.0	1.0	3.3	4054	675	4729	2.6	3284	3284
Juvenile Court	163	Poor	5.8	7.37	8.1	10100	0	10100	0	Yes	New	11.2	10.2	4.2	5213	0	5213	3.9	4888	4888
Auto Theft	164	Poor	6.6	7.37	4.7	9654	0	9654	0	Yes	New	11.2	10.2	2.8	5715	0	5715	1.9	3939	3939
Auto Theft	166	Poor	6.6	1.00	3.5	7241	153	7394	0	Yes	New	11.2	1.0	2.1	4286	153	4439	1.4	2954	2954
Auto Theft	168	Poor	6.6	7.37	3.5	7241	0	7241	0	Yes	New	12.0	10.2	2.0	4000	0	4000	1.6	3240	3240
Vehicle Maintenance	169	Fair	8.2	10.22	5.7	19538	0	19538	0	Yes	New	11.2	10.2	4.2	14287	0	14287	1.5	5251	5251
Vehicle Maintenance	170	Fair	8.2	10.22	5.7	19538	0	19538	0	Yes	New	11.2	10.2	4.2	14287	0	14287	1.5	5251	5251
Vocational Building	171	Poor	6.6	7.37	3.5	11285	0	11285	0	Yes	New	12.3	10.2	1.9	6108	0	6108	1.6	5177	5177
Juvenile Detention	172	Good	11.4	8.69	3.2	5178	0	5178	0	No	Good	11.4	8.7	3.2	5178	0	5178	0.0	0	0
Juvenile Detention	173	Good	10.8	8.69	5.2	8298	0	8298	0	No	Good	10.8	8.7	5.2	8298	0	8298	0.0	0	0
Juvenile Detention	174	Good	10.8	8.69	5.2	8298	0	8298	0	No	Good	10.8	8.7	5.2	8298	0	8298	0.0	0	0
Juvenile Detention	175	Poor	7.7	7.37	4.1	6478	0	6478	0	No	Poor	7.7	7.4	4.1	6478	0	6478	0.0	0	0
Juvenile Detention	176	Fair	9.1	10.22	2.2	3441	0	3441	0	No	Fair	9.1	10.2	2.2	3441	0	3441	0.0	0	0
Juvenile Detention	177	Poor	7.7	7.37	1.5	2429	0	2429	0	No	Poor	7.7	7.4	1.5	2429	0	2429	0.0	0	0
Juvenile Detention	178	Poor	7.0	7.37	2.2	3553	0	3553	0	Yes	New	11.0	10.2	1.4	2267	0	2267	0.8	1285	1285
Juvenile Detention	179	Poor	7.7	7.37	12.7	20243	0	20243	0	No	Poor	7.7	7.4	12.7	20243	0	20243	0.0	0	0
Juvenile Detention	180	Poor	7.7	7.37	7.6	12146	0	12146	0	No	Poor	7.7	7.4	7.6	12146	0	12146	0.0	0	0
Juvenile Detention	181	Poor	7.7	7.37	8.6	13765	0	13765	0	No	Poor	7.7	7.4	8.6	13765	0	13765	0.0	0	0
Juvenile Detention	182	Poor	7.7	7.37	10.1	16195	0	16195	0	No	Poor	7.7	7.4	10.1	16195	0	16195	0.0	0	0
Juvenile Detention	183	Poor	7.7	7.37	5.1	8097	0	8097	0	No	Poor	7.7	7.4	5.1	8097	0	8097	0.0	0	0
Juvenile Detention	184	Poor	7.0	7.37	5.6	8882	0	8882	0	Yes	New	12.0	10.2	3.3	5196	0	5196	2.3	3686	3686
Juvenile Detention	185	Poor	7.7	7.37	12.7	20243	0	20243	0	No	Poor	7.7	7.4	12.7	20243	0	20243	0.0	0	0
Juvenile Detention	186	Poor	6.6	7.37	5.9	9404	0	9404	0	Yes	New	12.0	10.2	3.3	5196	0	5196	2.6	4208	4208
Juvenile Detention	187	Good	11.0	8.69	8.9	14183	0	14183	0	No	Good	11.0	8.7	8.9	14183	0	14183	0.0	0	0
Juvenile Detention	188	Good	11.6	8.69	5.1	8090	0	8090	0	No	Good	11.6	8.7	5.1	8090	0	8090	0.0	0	0
Juvenile Detention	189	Good	11.6	8.69	5.1	8090	0	8090	0	No	Good	11.6	8.7	5.1	8090	0	8090	0.0	0	0
Juvenile Detention	190	Good	9.9	8.69	11.8	18837	0	18837	0	No	Good	9.9	8.7	11.8	18837	0	18837	0.0	0	0
Juvenile Detention	191	Good	11.0	8.69	10.6	17020	0	17020	0	No	Good	11.0	8.7	10.6	17020	0	17020	0.0	0	0
Medic 1	223	Fair	8.5	10.22	4.6	13157	0	13157	0	No	Fair	8.5	10.2	4.6	13157	0	13157	0.0	0	0

Attachment 5 - FIM 3.0 DX Savings

		PRE-RETROFIT								POST-RETROFIT								SAVINGS		
Site	JCI Tag	Condition	Cooling EER	Unitary Heating Eff3	Demand kW	Cooling kWh	Heating kWh	Total kWh	Heating Therms	Replace?	Condition2	Cooling EER3	Unitary Heating Eff34	Demand kW	Cooling kWh5	Heating kWh6	Total kWh7	Demand kW saving	Cooling kWh Saving	Saving kWh
Medic 1	224	Fair	8.5	10.22	3.7	10526	0	10526	0	No	Fair	8.5	10.2	3.7	10526	0	10526	0.0	0	0
Medic 1	225	Fair	8.5	10.22	4.6	13157	0	13157	0	No	Fair	8.5	10.2	4.6	13157	0	13157	0.0	0	0
Medic 1	226	Fair	8.5	10.22	4.6	13157	0	13157	0	No	Fair	8.5	10.2	4.6	13157	0	13157	0.0	0	0
Medic 1	227	Fair	8.5	10.22	2.3	6578	0	6578	0	No	Fair	8.5	10.2	2.3	6578	0	6578	0.0	0	0
Medic 1	228	Fair	8.5	10.22	3.7	10526	0	10526	0	No	Fair	8.5	10.2	3.7	10526	0	10526	0.0	0	0
Medic 1	229	Fair	6.7	10.22	1.7	4995	0	4995	0	Yes	New	12.6	10.2	0.9	2676	0	2676	0.8	2319	2319
Animal Services Building	230	Good	11.1	8.69	1.1	1678	0	1678	0	No	Good	11.1	8.7	1.1	1678	0	1678	0.0	0	0
Animal Services Building	231	Good	11.1	8.69	1.8	2797	0	2797	0	No	Good	11.1	8.7	1.8	2797	0	2797	0.0	0	0
Animal Services Building	232	Good	11.1	8.69	1.4	2237	0	2237	0	No	Good	11.1	8.7	1.4	2237	0	2237	0.0	0	0
Animal Services Building	233	Good	10.0	8.69	5.8	9285	0	9285	0	No	Good	10.0	8.7	5.8	9285	0	9285	0.0	0	0
Animal Services Building	234	Fair	6.7	10.22	1.7	2764	0	2764	0	Yes	New	12.6	10.2	0.9	1481	0	1481	0.8	1283	1283
Animal Services Building	235	Fair	8.7	10.22	4.5	7136	0	7136	0	No	Fair	8.7	10.2	4.5	7136	0	7136	0.0	0	0
Animal Services Building	236	Fair	8.7	10.22	4.5	7136	0	7136	0	No	Fair	8.7	10.2	4.5	7136	0	7136	0.0	0	0
Drainage Buildings	237	Fair	8.5	10.22	3.7	12506	0	12506	0	No	Fair	8.5	10.2	3.7	12506	0	12506	0.0	0	0
Drainage Buildings	238	Poor	6.6	7.37	3.5	12068	0	12068	0	Yes	New	12.5	10.2	1.9	6401	0	6401	1.7	5667	5667
Drainage Buildings	240	Good	11.0	8.69	2.8	9707	0	9707	0	No	Good	11.0	8.7	2.8	9707	0	9707	0.0	0	0
Recycling Center	241	Poor	6.6	7.37	4.7	17022	0	17022	0	Yes	New	12.0	10.2	2.6	9405	0	9405	2.1	7617	7617
Rosenberg Boot Camp Juvenile	242	Fair	8.7	10.22	2.2	2257	0	2257	0	No	Fair	8.7	10.2	2.2	2257	0	2257	0.0	0	0
Rosenberg Boot Camp Juvenile	243	Fair	8.7	10.22	3.6	3611	0	3611	0	No	Fair	8.7	10.2	3.6	3611	0	3611	0.0	0	0
Rosenberg Boot Camp Juvenile	244	Fair	8.7	10.22	4.5	4514	0	4514	0	No	Fair	8.7	10.2	4.5	4514	0	4514	0.0	0	0
Rosenberg Boot Camp Juvenile	245	Fair	8.7	10.22	2.7	2708	0	2708	0	No	Fair	8.7	10.2	2.7	2708	0	2708	0.0	0	0
Rosenberg Boot Camp Juvenile	246	Poor	6.6	7.37	3.5	3554	0	3554	0	Yes	New	12.5	10.2	1.9	1885	0	1885	1.7	1669	1669
Rosenberg Boot Camp Juvenile	247	Poor	6.6	7.37	3.5	3554	0	3554	0	Yes	New	12.5	10.2	1.9	1885	0	1885	1.7	1669	1669
Rosenberg Boot Camp Juvenile	248	Poor	6.6	7.37	3.5	3554	0	3554	0	Yes	New	12.5	10.2	1.9	1885	0	1885	1.7	1669	1669
Rosenberg Boot Camp Juvenile	249	Poor	7.9	7.37	3.0	2971	0	2971	0	No	Poor	7.9	7.4	3.0	2971	0	2971	0.0	0	0
Roads & Bridge (Beechnut)	250	Poor	6.6	7.37	8.8	10425	0	10425	0	Yes	New	11.2	10.2	5.2	6171	0	6171	3.6	4254	4254
Roads & Bridge (Beechnut)	251	Poor	6.6	7.37	8.8	10425	0	10425	0	Yes	New	11.2	10.2	5.2	6171	0	6171	3.6	4254	4254
Roads & Bridge (Beechnut)	252	Poor	6.6	7.37	8.8	10425	0	10425	0	Yes	New	11.2	10.2	5.2	6171	0	6171	3.6	4254	4254
R&B Needville / Annex JP	253	Fair	8.5	10.22	1.8	1543	0	1543	0	No	Fair	8.5	10.2	1.8	1543	0	1543	0.0	0	0
R&B Needville / Annex JP	254	Fair	8.2	10.22	9.5	8038	0	8038	0	Yes	New	11.2	10.2	7.0	5877	0	5877	2.6	2160	2160
R&B Needville / Annex JP	255	Fair	8.2	10.22	3.8	3215	0	3215	0	Yes	New	11.8	10.2	2.7	2241	0	2241	1.2	974	974
R&B Needville / Annex JP	256	Fair	8.2	10.22	4.8	4019	0	4019	0	Yes	New	12.0	10.2	3.3	2743	0	2743	1.5	1276	1276
R&B Needville / Annex JP	257	Fair	8.2	10.22	2.9	2411	0	2411	0	Yes	New	12.3	10.2	1.9	1612	0	1612	0.9	799	799
R&B Needville / Annex JP	258	Good	10.8	8.69	0.5	458	0	458	0	No	Good	10.8	8.7	0.5	458	0	458	0.0	0	0
Kitty Hollow Park	261	Fair	8.2	10.22	3.8	6513	0	6513	0	Yes	New	11.8	10.2	2.7	4539	0	4539	1.2	1973	1973
Kitty Hollow Park	263	Poor	7.0	7.37	4.4	7598	0	7598	0	Yes	New	11.8	10.2	2.7	4539	0	4539	1.8	3059	3059
Kitty Hollow Park	264	Fair	8.2	10.22	2.4	4070	0	4070	0	Yes	New	12.8	10.2	1.5	2615	0	2615	0.9	1456	1456
Kitty Hollow Park	265	Poor	7.2	7.37	4.3	7367	0	7367	0	Yes	New	12.0	10.2	2.6	4445	0	4445	1.7	2922	2922
Kitty Hollow Park	266	Poor	7.2	7.37	3.2	5525	0	5525	0	Yes	New	12.5	10.2	1.9	3200	0	3200	1.4	2325	2325
Jake Dove Juvenile	267	Good	10.1	8.69	2.3	755	0	755	0	No	Good	10.1	8.7	2.3	755	0	755	0.0	0	0
Jake Dove Juvenile	269	Poor	7.0	7.37	3.3	1089	0	1089	0	Yes	New	12.0	10.2	2.0	637	0	637	1.4	452	452
Jake Dove Juvenile	270	Poor	7.0	7.37	3.3	1089	0	1089	0	Yes	New	12.0	10.2	2.0	637	0	637	1.4	452	452
Jake Dove Juvenile	271	Poor	7.0	7.37	3.3	1089	0	1089	0	Yes	New	12.0	10.2	2.0	637	0	637	1.4	452	452
Jake Dove Juvenile	272	Poor	7.0	7.37	3.3	1089	0	1089	0	Yes	New	12.8	10.2	1.8	600	0	600	1.5	490	490
Mustang Community Center	274	Fair	9.3	10.22	2.5	1753	0	1753	0	No	Fair	9.3	10.2	2.5	1753	0	1753	0.0	0	0
Mustang Community Center	275	Fair	9.3	10.22	2.5	1753	0	1753	0	No	Fair	9.3	10.2	2.5	1753	0	1753	0.0	0	0
Mustang Community Center	276	Poor	6.6	7.37	5.9	4076	0	4076	0	Yes	New	11.8	10.2	3.3	2300	0	2300	2.6	1776	1776
Mustang Community Center	277	Poor	6.6	7.37	5.9	4076	0	4076	0	Yes	New	11.8	10.2	3.3	2300	0	2300	2.6	1776	1776
Mustang Community Center	278	Good	11.0	8.69	3.5	2459	0	2459	0	No	Good	11.0	8.7	3.5	2459	0	2459	0.0	0	0
CSCD Fresno	279	Poor	10.0	7.37	5.6	10042	0	10042	0	No	Poor	10.0	7.4	5.6	10042	0	10042	0.0	0	0
CSCD Fresno	280	Poor	8.4	7.37	6.9	12491	0	12491	0	No	Poor	8.4	7.4	6.9	12491	0	12491	0.0	0	0
CSCD Fresno	282	Good	11.0	8.69	5.1	9155	0	9155	0	No	Good	11.0	8.7	5.1	9155	0	9155	0.0	0	0
Roads & Bridge Dairy Ashford	289	Good	11.4	8.69	2.0	9667	0	9667	0	No	Good	11.4	8.7	2.0	9667	0	9667	0.0	0	0
Roads & Bridge Dairy Ashford	290	Good	11.0	8.69	2.1	10063	0	10063	0	No	Good	11.0	8.7	2.1	10063	0	10063	0.0	0	0
Roads & Bridge Dairy Ashford	292	Fair	8.2	10.22	2.9	13503	0	13503	0	Yes	New	12.8	10.2	1.8	8674	0	8674	1.0	4829	4829
IDC Shop (Road & Bridge)	293	Fair	8.7	10.22	4.5	6897	0	6897	0	No	Fair	8.7	10.2	4.5	6897	0	6897	0.0	0	0
IDC Shop (Road & Bridge)	294	Fair	8.7	10.22	1.8	2759	0	2759	0	No	Fair	8.7	10.2	1.8	2759	0	2759	0.0	0	0
5th St. Boys & Girls Community Center	295	Poor	6.6	7.37	2.4	6494	0	6494	0	Yes	New	13.0	10.2	1.2	3312	0	3312	1.2	3182	3182
5th St. Boys & Girls Community Center	296	Fair	8.2	10.22	9.5	26285	0	26285	0	Yes	New	11.2	10.2	7.0	19221	0	19221	2.6	7064	7064
5th St. Boys & Girls Community Center	297	Fair	8.2	10.22	14.3	39428	0	39428	0	Yes	New	11.2	10.2	10.4	28832	0	28832	3.8	10596	10596

Attachment 5 - FIM 3.0 DX Savings

SEER to EER Convertor*	
Enter Rated SEER	13
Equivelant EER	11.18

EER = −0.02 × SEER² + 1.12 × SEER

*U.S. DOE Building America House Simulation Protocols Revised 10-2010

SEER/EER Degradation Calculator		
Enter Base EER		10
Enter Age (Inventory Avg.)		14
Enter Maint. Factor	Good	0.01
	Fair	0.02
	Poor	0.03
Degraded EER	Good	8.69
Degraded EER	Fair	7.54
Degraded EER	Poor	6.53

11.18

Best Practice - SEER and EER Determination

Date: Revised January 3, 2017

Subject: Calculation of SEER and EER for aged HVAC systems.

Problem or Question: We are assessing an apartment complex with air conditioners installed in the early 1980s. We know the SEER on these units should be degraded because of old –age, but how can we do that accurately, safely, and properly?

Discussion: You can degrade the SEER of an existing unit to reflect the reduced capability caused by age. The National Renewable Energy Laboratory (NREL) published a booklet that outlines how to degrade the SEER of aged HVAC systems entitled *Building America Performance Analysis Procedures for Existing Homes* (BAPA) booklet. This publication can be obtained on the TDHCA website and should be used, along with this best practice, whenever SEER-EER or AFUE degradations are applied. Link to NREL publication: <http://www.nrel.gov/docs/fy06osti/38238.pdf>

The formulas provided accurately measure the SEER of an existing unit based on the age of the system. Since we do not know the maintenance frequency of the HVACs for most homes being weatherized, a conservative application of this formula is best. For WAP it is recommended to use the “Annual Professional Maintenance” **M**-factor in the tables. Do not use the “Seldom or Never Maintained” **M**-factor to derive a SEER without proper documentation and support for this choice. Include information gathered from client interviews, photo documentation, and assessment notes. Choosing the “Annual Professional Maintenance” will result in an unquestioned degraded SEER determination for existing air conditioners. It is important to note that this best practice replaces many different ways of determining the actual SEER of older units. Some of these unapproved and unscientific ways of determining the “electrical draw” or “watt input to BTU output” are unreliable and dangerous. Do not attempt to evaluate the electrical draw of a 220 volts system. Even licensed HVAC professional tests cannot recreate the laboratory conditions of fixed humidity, temperature differences, air-handler functioning, duct sizes, and uniform building size. These factors are constant when the SEER of new units is determined by manufacturers under strict federal and industry guidelines.

Air Conditioning SEER/EER Degradation

On the subject of SEER determination of air conditioner systems, NREL’s BAPA booklet states: “The default air-conditioner and heat-pump efficiencies in Table 8 may be used if the actual efficiency cannot be calculated or measured. If this is determined, ‘negative documentation’ (what attempts you made to test or acquire the efficiency of the equipment) must be in file, along with the calculations. Base values for SEER, EER, and HSPF were obtained from the engineering analysis of appliance standards for air conditioners and heat pumps (DOE 2002), and from the LBNL Energy Data Sourcebook (Wenzel et al. 1997). Default efficiencies for equipment not listed in the table may either be interpolated or estimated by referring to the original references. Adjustments to efficiency related to age and quality of maintenance shall be applied in accordance with Equation 2. Performance degradation rates for cooling systems are based in part on a study done by LBNL for the California Energy Commission (Matson et al. 2002).”

Equation 2: $EFF = (Base\ EFF) * (1 - M)^{age}$

Base EFF = Typical efficiency of Pre-Retrofit equipment when new

M = Maintenance Factor

Age = Age of equipment in years. “

For example, if you are assessing a 16-year old HVAC system that had an original SEER of 10 you would calculate: $SEER = (10) * (1 - .01)^{16} = (10) * (.99)^{16} = (10) * (.851458) = 8.5146$ is the current SEER of existing unit.

<https://www.tdhca.state.tx.us/community-affairs/wap/docs/WAP-BP-SEERandEERdetermination.pdf>

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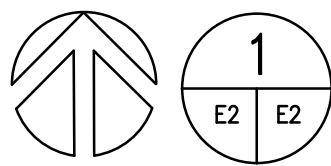
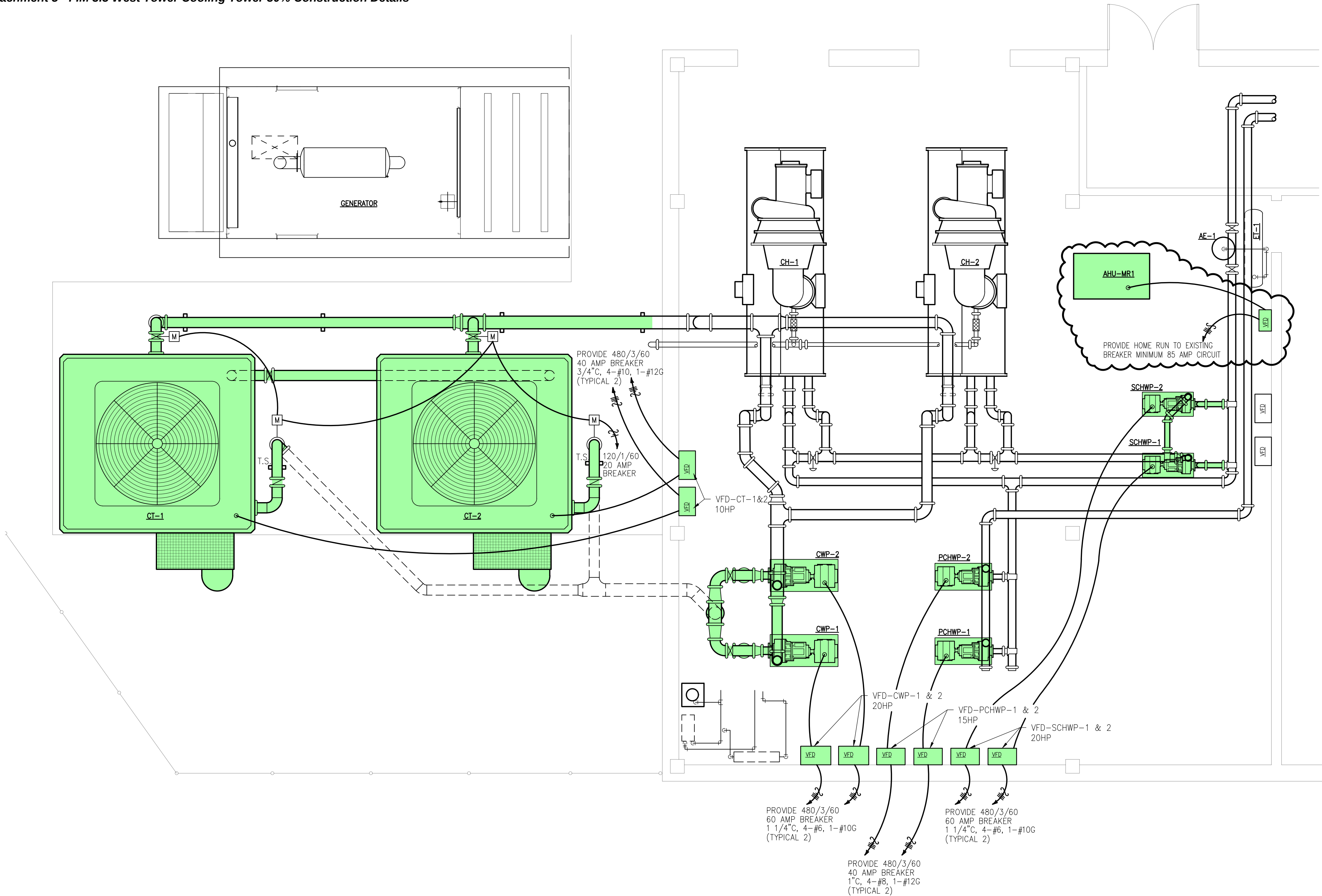
Table 1 below provides typical original SEER of older equipment to be used in the NREL applied formulas. Identify the age of the existing system and original SEER. With the information gathered from that table, then use the equation below to determine the degraded SEER/EER of the equipment.

SEER/EER DEGRADATION TABLE: EFF Degrading Equation - Typical SEER ratings per year					
Year of System	Original SEER	Year of System	Original SEER	Year of System	Original SEER
Units manufactured before 1980 have original 6.5 SEER		1991	8	2004	12
		1992	10	2005	12
1980	6.5	1993	10	2006	12
1981	8	1994	10	2007	12
1982	8	1995	10	2008	12
1983	8	1996	10	2009	14
1984	8	1997	10	2010	14
1985	8	1998	10	2011	14
1986	8	1999	10	2012	14
1987	8	2000	12	2013	14
1988	8	2001	12	2014	14.5
1989	8	2002	12	2015	14.5
1990	8	2003	12	2016	15.5

Table 8. Default Air-Conditioning and Heat-Pump Efficiencies

Type of Air-Conditioning or Heat-Pump Equipment	Base SEER	Base EER	Base HSPF	Maintenance Factor (M): Annual Professional Maintenance	Maintenance Factor (M): Seldom or Never Maintained
Split central air conditioner, two-speed reciprocating compressor, electronically commutated air handler motor (ECM), thermostatic expansion valve (TXV), fan coil	14	10.5		0.01	0.02
Split central air conditioner, single-speed scroll compressor, ECM air handler motor, cased coil	12	10.8		0.01	0.03
Split central air conditioner, single-speed reciprocating compressor, PSC air-handler motor, cased coil (after 1991)	10	9.3		0.01	0.03
Split central air conditioner, single-speed reciprocating compressor, PSC air-handler motor, cased coil (1981-1991)	8	7.7		0.01	0.03
Split central air conditioner, single-speed reciprocating compressor, PSC air-handler motor, cased coil (before 1981)	6.5	6.4		0.01	0.03
Split heat pump, single-speed scroll compressor, ECM air handler motor, TXV valve	14	10.5	8.0	0.01	0.03
Split heat pump, single-speed reciprocating compressor, PSC air-handler motor (after 1991)	10	9.3	7.1	0.01	0.03
Split heat pump, single-speed reciprocating compressor, PSC air-handler motor (1981-1991)	8	7.7	6.6	0.01	0.03
Split heat pump, single-speed reciprocating compressor, PSC air-handler motor (before 1981)	6.5	6.4	6.0	0.01	0.03

Attachment 5 - FIM 3.5 West Tower Cooling Tower 30% Construction Details



WEST TOWER CHILLER PLANT ELECTRICAL PLAN

SCALE: 1/4"=1'-0"

GENERAL NOTES – ELECTRICAL:
APPLY TO ALL ELECTRICAL DRAWINGS

- THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE WORK UNDER THIS SECTION OF THE CONTRACT IN COMPLIANCE WITH NEC-MOST RECENT EDITION AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES. IF THE CONTRACTOR DETERMINES THAT THE CONTRACT DOCUMENTS AND PLANS ARE NOT IN COMPLIANCE WITH THE APPLICABLE LOCAL CODES, HE SHALL INFORM THE ARCHITECT/ENGINEER FOR DIRECTION PRIOR TO BIDDING THE JOB. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET APPLICABLE LOCAL CODES AT HIS COST.
- THE ELECTRICAL DISTRIBUTION SYSTEM SIZING IS BASED ON EQUIPMENT DATA FROM THE SPECIFIED SUPPLIER OR A TYPICAL SUPPLIER. THE CONTRACTOR IS FULLY RESPONSIBLE FOR PROVIDING THE CORRECTLY SIZED ELECTRICAL SYSTEM TO MATCH THE REQUIREMENTS OF THE ELECTRICALLY POWERED EQUIPMENT ACTUALLY INSTALLED. USE NEC MINIMUM CONDUIT AND CONDUCTOR SIZE WHERE NOT INDICATED. FIELD VERIFY POWER REQUIREMENT FROM NAMEPLATE DATA.
- THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED WORK AND SHALL FULLY INFORM HIMSELF REGARDING THE FACILITIES. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR WORK OR MATERIAL OMITTED FROM CONTRACTOR'S CONTRACT PROPOSAL DUE TO HIS FAILURE TO SO INFORM HIMSELF BY SUCH INVESTIGATION.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH MECHANICAL DRAWINGS, OTHER TRADES, AND VERIFY LOCATION OF ALL EQUIPMENT WITH PRIME CONTRACTOR OR ENGINEER BEFORE CONSTRUCTION. FAILURE TO DO SO MIGHT RESULT IN MOVING EQUIPMENT AT NO COST TO OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE, TO THE SATISFACTION OF THE OWNER AND ENGINEER, ANY UTILITIES, MATERIALS, EQUIPMENT, WALLS, FOUNDATIONS, ETC., DAMAGED, DISASSEMBLED, REMOVED OR AFFECTED BY CONSTRUCTION, EXCAVATION, INSTALLATION, REMOVAL, OR ACCIDENT.
- ALL CONDUCTORS SHALL BE COPPER, ROUTED IN CONDUIT WITH SPLICES IN APPROVED ACCESSIBLE JUNCTION BOXES. INSULATION SHALL BE AS THHN, THWN UNLESS OTHERWISE NOTED.
- BRANCH CIRCUITS SHALL BE #12 MINIMUM WITH 1P/20A INVERSE TIME CIRCUIT BREAKERS (REFER TO #2 ABOVE). TWENTY-AMP CIRCUIT RUNS EXCEEDING 100 FEET SHALL BE WITH MINIMUM #10 COPPER CONDUCTORS.
- CONTRACTOR SHALL SIZE CONDUCTORS AS REQUIRED TO MAINTAIN A MAXIMUM VOLTAGE DROP OF 3 PERCENT FROM SERVICE TO DEVICE.
- CONTRACTOR SHALL PROVIDE CIRCUIT CONTINUITY OF ALL BRANCH CIRCUITS AND ACCESSIBLE JUNCTION BOXES WITH SPLICES SO THAT ANY RECEPTACLE, LIGHT, OR DEVICE MAY BE REMOVED WITHOUT INTERRUPTION OF CIRCUIT CONTINUITY.
- ALL INTERIOR CONDUIT SHALL BE NEC MINIMUM SIZE EMT COMPRESSION FITTINGS (EMT), ROUTED PARALLEL OR PERPENDICULAR TO WALLS, NEAR CEILINGS (IF EXPOSED OVERHEAD), WITH PULL BOXES AND EXPANSION UNIONS AS REQUIRED UNLESS OTHERWISE NOTED.
- ALL EXTERIOR EXPOSED CONDUIT SHALL BE NEC MINIMUM SIZE RGS UNLESS OTHERWISE NOTED.
- ALL CONDUIT DIRECT BURIED, UNDER SLAB, OR IN DUCT BANK SHALL BE PVC SCHEDULE 40, SUITABLE FOR ITS INTENDED USE, NEC MINIMUM SIZE AND 24 INCHES MINIMUM BURIAL DEPTH UNLESS OTHERWISE NOTED. STUB-UP (PVC) ELBOWS LARGER THAN 1-INCH SHALL BE SCHEDULE 80, WITH CONCRETE ENCASEMENT FOR PULLING STRENGTH. ALL STUB-UPS SHALL BE RGS UP TO 8 FEET ABOVE FINISHED FLOOR. (INSTALLATION IN CONCRETE SHALL HAVE MINIMUM 3-INCH COVERING, ALL OTHER INSTALLATIONS SHALL HAVE 24 INCHES MINIMUM OF SAND.)
- CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND EQUIPMENT PRIOR TO ANY EXCAVATIONS.
- NO CONDUIT SHALL BE ROUTED EXPOSED ON HORIZONTAL SURFACES SO AS TO CREATE A TRIPPING HAZARD.
- ALL STRUCTURE PENETRATIONS SHALL BE SEALED IN SUCH A MANNER AS TO EQUAL OR EXCEED THE ORIGINAL STRUCTURE CHARACTERISTICS, INCLUDING FIRE RATINGS, WEATHERPROOFING, ETC. PROVIDE METALIC CONDUIT AND INTUMESANT PUTTY SEAL ON ALL FIRE BARRIER PENETRATIONS.
- ALL ELECTRICAL EQUIPMENT USED FOR THIS PROJECT SHALL BE U.L. APPROVED, COMMERCIAL GRADE, AND SUITABLE FOR ITS INTENDED PURPOSE.
- MOUNTING OF ALL DEVICES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.
CENTERLINE OF DEVICES SHALL BE:
RECEPTACLES 18" AFF
TOGGLE SWITCHES 48" AFF
PANEL BOARDS 60" AFF
SAFETY SWITCHES 60" AFF
- ALL EQUIPMENT SHALL BEAR A PERMANENT LABEL FOR IDENTIFICATION. DISCONNECTS AND DEVICES FOR EQUIPMENT SHALL BE LOCKABLE AND PANELS SHALL BE WITH LOCK AND KEY.
- ALL BRANCH AND FEEDER CIRCUITS SHALL BE LABELED AT THEIR RESPECTIVE OVERCURRENT PROTECTIVE DEVICE WITH AN ADEQUATE DESCRIPTION OF PURPOSE AND LOCATION.
- ALL PANELBOARDS SHALL BE SQUARE D, G.E. OR CUTLER-HAMMER WITH BOLT-ON CIRCUIT BREAKERS, NEUTRAL BUS AND GROUND BUS.
- ALL SURFACE MOUNT (EXPOSED) BOXES SHALL BE FD TYPE.
- PROVIDE DISCONNECTING MEANS WITHIN SIGHT OF EQUIPMENT AS REQUIRED BY ARTICLE 430, LATEST EDITION OF NEC. PROVIDE ONE DISCONNECT TO EACH EQUIPMENT UNIT.
- INSTALLATION FOR SPECIAL EQUIPMENT SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.
- CONTRACTOR SHALL BALANCE ALL LOADS ON THE ELECTRICAL SYSTEM.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, PAY ALL LEGAL FEES AND CHARGES PERTAINING TO WORK UNDER THIS PROJECT.
- ALL CONDUITS INSTALLED BY CONTRACTOR FOR USE BY OTHERS OR WITH NO CONDUCTORS SHALL CONTAIN PULL WIRES.
- PROVIDE 120V, 1pH, 60HZ POWER TO ALL HVAC DEVICES TO SUPPORT DDC PANELS, SMOKE DAMPERS, SUPPLY FAN DAMPERS AND VALVE ACTUATORS, INCLUDING CONDUIT CONDUCTOR, DISCONNECT DEVICE, FLEXIBLE CONNECTORS AND ALL TERMINATIONS. PROVIDE POWER TO LOW VOLTAGE TRANSFORMERS.
- VERIFY THE LOCATION OF ALL WALLS, PARTITIONS, DOORS, CABINETS, AND CEILINGS FROM ACTUAL FIELD MEASUREMENTS.
- ALL EXTERNALLY MOUNTED ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH WINDSTORM CODE AS APPLICABLE, CONTRACTOR SHALL PROVIDE ALL PERMITS AND CERTIFICATIONS.



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BOILER & CHILLER IMPROVEMENTS
EAST & WEST JAIL TOWERS
FORT BEND COUNTY
RICHMOND, TEXAS

FOR INTERIM
REVIEW
NOT INTENDED FOR
CONSTRUCTION, BIDDING
OR PERMIT PURPOSES.
RONALD B. WHEATON, P.E. 73355
DATE: 4/5/23

30% REVIEW
FOR PRICING
NOT FOR
CONSTRUCTION

PROJECT #:
2314

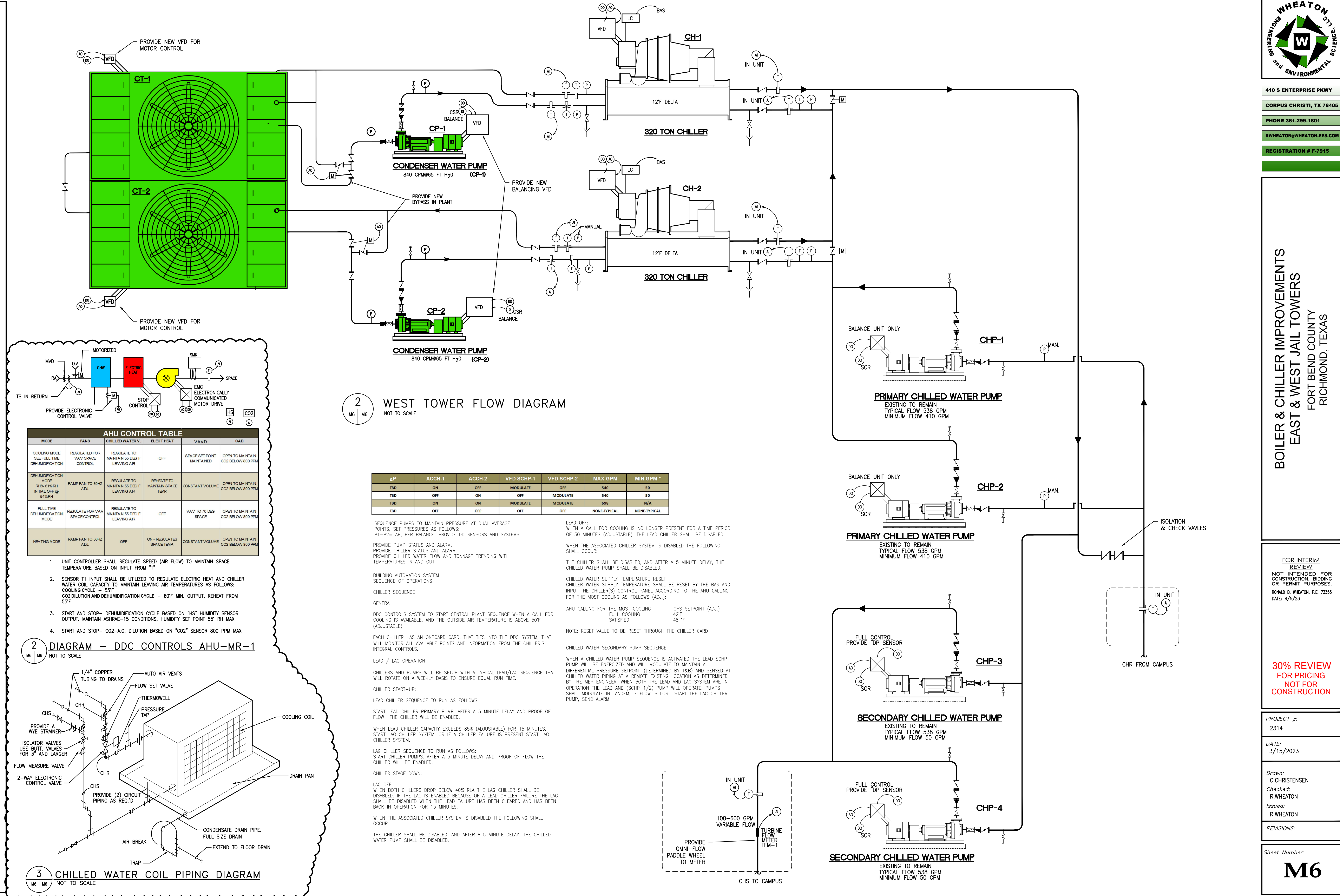
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5/5/2023

Drawn:
C.CHRISTENSEN
Checked:
R.WHEATON
Issued:
R.WHEATON

REVISIONS:

Sheet Number:

E2



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PROJECT #: 2314
DATE: 3/15/2023
Drawn: C.CHRISTENSEN
Checked: R.WHEATON
Issued: R.WHEATON
REVISIONS:
Sheet Number: M6

Attachment 5 - FIM 3.9 MZ Dampers Details

Johnson
Controls

Field Notes by Lotion for FBC-2

Equipment Audited to be Replaced

					Existing				Proposed				
Location	Type	Tag	ECM	Category	Manufacturer	Model	Tons	Age	Manufacturer	Model	Tons	EER	Note
Jail - East Tower	Damper Actuator	600.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		601.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		602.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		603.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		604.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		605.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		606.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		607.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		608.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		609.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		610.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		611.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
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		614.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators
		615.	3.90 - Damper Actuators	Mechanical									Replace actuator assembly and actuators