PERFORMANCE CONTRACTING AGREEMENT

between

CITY OF GARDEN GROVE, CA

and

Siemens Industry, Inc.,
Building Technologies Division

TABLE OF ARTICLES

Number: 44OP-193145

Article 1
AGREEMENT

THIS **PERFORMANCE CONTRACTING AGREEMENT** ("Agreement") is made this day of , (the "Effective Contract Date", defined below), by and between Siemens Industry, Inc., Building Technologies Division ("SIEMENS") and the party identified below as the CLIENT.

The CLIENT: **City of Garden Grove**
11222 Acacia Parkway
Garden Grove, Ca. 92840

DESIGNATED REPRESENTATIVE: Phil Carter
PHONE: (714) 741-5380 FAX:

Siemens Industry, Inc., Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, Illinois 60089

With offices at: 6141 Katella Avenue
Cypress, CA.90630

DESIGNATED REPRESENTATIVE: Nathan Lyons
PHONE: (858) 275-4019 FAX:

For Work and Services in connection with the following project (the "Project"):

City-Wide Energy Efficiency Facilities Modernization Project

The CLIENT considered performing the following FIMs but at this time, has determined to exclude them from the Scope of Work and Services, Exhibit A:

- **Water Department Facility Upgrades - Controls & Lighting**
- **Replacement of High Efficiency Pumps and Motors**
- **Facility/Pump Station Improvements**
- **AMI Meter upgrade program**
- **Energy Storage**

Articles and Attachments

This Agreement consists of this document, which includes the following articles and exhibits which are acknowledged by the CLIENT and SIEMENS and incorporated into the Agreement by this reference:

Articles

1. Agreement
2. Glossary
3. General
4. Performance Guarantee
5. Work BY SIEMENS
6. The CLIENT's Responsibilities
7. Changes and Delays
8. Compensation
9. Acceptance
10. Insurance and Allocation of Risk
11. Hazardous Material Provisions
12. Miscellaneous Provisions
13. Maintenance Services Program

Exhibits & Addenda

Addendum 1	Insurance Requirements
Exhibit A	Scope of Work and Services
Exhibit B	Payment Schedule(s)
Exhibit C	Performance Assurance
Exhibit D1	Form of Certificate of Substantial Completion
Exhibit D2	Form of Certificate of Final Completion

This Agreement, when executed by an authorized representative of the CLIENT and authorized representatives of SIEMENS, constitutes the entire, complete and exclusive agreement between the Parties relative to the project scope stated in Exhibit A. This Agreement supersedes all prior and contemporaneous negotiations, statements, representations, agreements, letters of intent, awards, or proposals, either written or oral relative to the same, and may be modified only by a written instrument signed by both Parties.

COMPENSATION/TERMS OF PAYMENT:

As full consideration for the performance of the Work and Services set forth in Exhibit A, and for the Performance Assurance set forth in Exhibit C, the CLIENT shall pay SIEMENS in such manner and amounts as agreed to in Exhibit B.

Agreed for **City of Garden Grove**

(Signature) by: _____

Print Name and Title: _____

(Signature) by: _____

Print Name and Title: _____

Agreed for **Siemens Industry, Inc.**

(Signature) by: _____

Print Name and Title: _____

(Signature) by: _____

Print Name and Title: _____

Article 2
Glossary

The following terms shall for all purposes have the meanings stated herein, unless the context otherwise specifies or requires, or unless otherwise defined in the Agreement:

Acceptance means the CLIENT has signed, or is deemed to have signed, a Certificate of Final Completion.

Acceptance Date means the date on which the CLIENT signs or is deemed to have signed a Certificate of Final Completion.

Annual Performance Assurance Report means the document prepared by SIEMENS and submitted to the CLIENT as part of the Performance Assurance Service Program, which identifies the Savings achieved for the applicable Annual Period.

Annual Period means a twelve (12) month period beginning on the Guarantee Date or on any anniversary date thereof.

Annual Realized Savings means the actual Savings achieved by the CLIENT during an Annual Period, calculated as the sum of the Measured & Verified Savings plus the Stipulated Savings.

Applicable Law means laws, ordinances, codes, rules and regulations applicable to the Work and in effect on the Effective Contract Date.

Baseline means the measurements of Facility energy usage taken prior to the Effective Contract Date, and the Facility operating practices in effect prior to the Effective Contract Date, as set forth in the Performance Assurance, Exhibit C.

Baseline Period means the period of time from which data is provided to SIEMENS to derive the Baseline measurements. The Baseline Period is set forth in the Performance Assurance, Exhibit C.

BTU means a British Thermal Unit and is a unit of thermal energy.

Capital Off-Set Savings means a sub-category of Operational Savings where Savings will result in a cost effective upgrade to the Facility to address one or more of the following issues: potential future increased costs, comfort, code non-compliance, usage requirements, user needs and/or expectations.

Certificate of Final Completion means a document, in the form attached as Exhibit D2 hereto, indicating that the Work identified in Article 1 of the Scope of Work and Services-Exhibit A has been completed in accordance with the Agreement, including all items in the Outstanding Items List(s).

Certificate of Substantial Completion means a document, in the form attached as Exhibit D1 hereto, indicating that the Work, or a designated portion of the Work, is Substantially Complete in accordance with the Agreement. A Certificate of Substantial Completion may be accompanied by an Outstanding Items List.

CLIENT Representative means the person identified to SIEMENS by the CLIENT as the person authorized to make decisions on behalf of the CLIENT as set forth in Section 6.1(a) hereof.

Construction Period means the period between the Effective Contract Date and the first day of the month following the Acceptance Date.

Construction Period Savings means the actual accumulated Measured & Verified Savings plus the Stipulated Savings achieved from the Effective Contract Date until the Guarantee Date.

Contracted Baseline means the post-FIM-implementation Facility operating profile based on parameters described in Exhibit C, which the CLIENT shall maintain throughout the Performance Guarantee Period and are relied upon by SIEMENS for the calculation of Guaranteed Savings as provided in the Performance Assurance, Exhibit C. The Contracted Baseline must also include stipulated hours of operation and plug-loads for all Facilities, and must include stipulated blended, or non-blended, utility rates.

Deferred Maintenance means a sub-category of Operational Savings where Savings result from a reduction of current or potential future repair and maintenance costs due to certain work being performed hereunder where such work had been previously postponed.

Deliverables shall mean collectively, (a) any Equipment and any Software Product deliverable to CLIENT from SIEMENS under or in connection with the Work, and (b) any Work Product Deliverables.

Effective Contract Date is the date appearing at the top of this Agreement, unless specifically indicated otherwise.

Energy Conservation Measure or **ECM** means the SIEMENS Products and/or other third party equipment, devices, materials and/or software as installed by SIEMENS at the Facilities, or as repaired or replaced by SIEMENS or the CLIENT hereunder, for the purpose of improving the efficiency of utility consumption.

Equipment means the installed physical equipment to be provided by SIEMENS as described in the Scope of Work and Services, Exhibit A.

Escalation Rate means an annual percentage increase to be applied to the previous Annual Period's energy savings, operational savings and service pricing, beginning and occurring on dates outlined in the Performance Assurance, Exhibit C. A different Escalation Rate may be applied to differing Savings calculations and/or payment schedules depending on the percentage agreed upon by the Parties.

Facility or Facilities means the **building**(s) or structure(s) where Work will be installed or implemented.

Facility Improvement Measures or **FIMs** means the (i) Instruments, know-how and Intellectual Property, including but not limited to methods and techniques for energy conservation, owned or licensed by SIEMENS and employed by SIEMENS to perform the Work and Services under this Agreement; and, (ii) the installation of Equipment and Software Products with the intent of generating net savings or efficiencies at or in connection with the operation of the Facilities. A FIM may include one or multiple ECMs as well as any non-conservation-related activities, means or methods.

FEMP means the Federal Energy Management Program managed by the United States Department of Energy.

FEMP Guidelines means the FEMP M&V Guidelines v. 3.0 published by FEMP as M&V Guidelines; Measurement and Verification for Federal Energy Management Projects.

Guarantee Date means the first day of the month following the date on which the CLIENT executes, or is deemed to have executed, the Certificate of Final Completion.

Guaranteed Annual Savings are the Guaranteed Measured & Verified Savings plus the Stipulated Savings that SIEMENS guarantees will be achieved in an Annual Period of the Performance Guarantee Period.

Guaranteed Measured & Verified Savings means the Measured & Verified Savings that SIEMENS guarantees will be achieved, as described in the Performance Assurance, Exhibit C.

Guaranteed Savings means the amount of Savings that SIEMENS guarantees will be achieved at the Facility during the Performance Guarantee Period. as identified in the Performance Assurance, Exhibit C as subject to the limitation identified in Section 4.8.

Hazardous Materials refers to the definition found in Section 11.1.

Instruments means all know-how, tools and related documentation owned or licensed by SIEMENS and used by SIEMENS to install or commission Equipment and Software Products for operation at the Facility, including but not limited to tools for installing any Software Products in Equipment, performing diagnostics on Equipment as installed in the Facility as well as any reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for SIEMENS and used by SIEMENS to provide an ECM or a FIM. Instruments excludes Work Product Deliverables.

Intellectual Property Rights or Intellectual Property means all trade secrets, patents and patent applications, trade marks (whether registered or unregistered and including any goodwill acquired in such trade marks), services marks, trade names, internet domain names, copyrights (including rights in computer software), moral rights, database rights, design rights, rights in know-how, rights in inventions (whether patentable or not) including, but not limited to, any and all renewals or extensions thereof, and all other proprietary rights (whether registered or unregistered, and any application for the foregoing), and all other equivalent or similar rights which may subsist anywhere in the world, including, but not limited to, any and all renewals or extensions thereof.

IPMVP means the International Performance Measurement and Verification Protocol, Volume 1, EVO 10000-1.2007 as prepared by the Efficiency Valuation Organization.

kW and **kWh** means kilowatt and kilowatt hour, respectively.

Maintenance Services Program or **MSP** means the Services performed by SIEMENS to maintain the Equipment in good working order. The MSP may also contain Services unrelated to the maintenance of the Equipment. If applicable, the MSP is more fully described in the Scope of Work and Services, Exhibit A.

Material Change means a measurable deviation in the Contracted Baseline such that there is an adverse impact on the Annual Realized Savings which results or will result in a Savings Shortfall.

Measured & Verified Savings means those Savings that can be calculated and ascertained by the methodology set forth in the Performance Assurance, Exhibit C.

Oil refers to the definition found in Section 11.1.

Operational Savings means Savings derived from reduced operational expenses, including but not limited to, Deferred Maintenance, or Capital Off-Set Savings. Operational Savings can only be expressed in monetary value and are Stipulated Savings.

Outstanding Items List means a list of items in need of completion or correction that relates to the Work, or a designated portion thereof that is Substantially Complete. The absence of such items does not deprive the CLIENT of the ability to put such Work, or a designated portion thereof to beneficial use. An Outstanding Items List may be attached to a Certificate of Substantial Completion.

Parties means the CLIENT and SIEMENS.

Performance Assurance is the process of ascertaining whether the FIMs are performing at the level necessary to achieve the Guaranteed Savings.

Performance Assurance Services Program or PASP means the Services required to monitor the operation of the FIMs so that SIEMENS can provide the Annual Performance Assurance Report detailing the Annual Realized Savings and comparing the same to the Annual Guaranteed Savings based upon the calculations agreed to by the Parties in the Performance Assurance, Exhibit C. The Services provided under the PASP are described in the Scope of Work and Services, Exhibit A.

Performance Guarantee means the guarantee that SIEMENS makes to the CLIENT which is reconciled and confirmed through the Performance Assurance process set forth in the Performance Assurance, Exhibit C.

Performance Guarantee Period means the timeframe from the Guarantee Date to the last day of the final Annual Period as described in Table 1.1 of the Performance Assurance, Exhibit C, or the period from the Guarantee Date until the termination of this Agreement, whichever occurs earlier.

Permitted Users means the CLIENT, its employees and agents.

Savings means the Parties' intended result from implementing all FIMs. Savings can be derived from reductions in energy or utility consumption, reductions in operating expenses, a changed utility rate classification or a combination thereof. The Savings that are achieved from reduced energy or utility consumption are converted to a dollar figure based upon the calculation in Article 4.1.1 and as detailed in the Performance Assurance, Exhibit C. When converted to a dollar figure, these Savings become energy cost savings. Operational Savings are only expressed in a dollar figure.

Savings Shortfall means the Annual Realized Savings less the Guaranteed Annual Savings for the Annual Period resulting in an amount less than zero.

Services means those services to be provided by SIEMENS as described in the Scope of Work and Services, Exhibit A.

SIEMENS Pre-existing Intellectual Property means any Intellectual Property: (i) that has been conceived or developed by an employee or subcontractor of SIEMENS before SIEMENS performs any Work or Services under this Agreement; (ii) that is conceived or developed by such employee or subcontractor at any time wholly independently of SIEMENS performing the Work under this Agreement; or, (iii) if developed while performing the Work under this Agreement, where the development of Intellectual Property for the benefit of the CLIENT is not expressly identified as a FIM or part of a FIM. SIEMENS Pre-existing Property is included in all reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for SIEMENS.

SIEMENS Product means a product, including Software Product and/or Equipment, offered for sale or license by SIEMENS or its affiliates or subsidiaries and developed prior to performing the Work or SIEMENS rendering services in connection with this Agreement. A SIEMENS Product also includes improvements or modifications to any Equipment and any Software Product developed by SIEMENS or developed as part of the Work, including any SIEMENS Product that is configured or modified for operation at a site specified by the CLIENT. Any information that is provided by the CLIENT and incorporated into a SIEMENS Product is not, by itself, a SIEMENS Product. A compilation of such information and the product of such compilation, however, is a SIEMENS Product.

Software Product means any software that is owned or licensed by SIEMENS or its affiliates and that is either separately deliverable for use in the Equipment or for use in a computer system owned by the CLIENT or delivered as firmware embedded in the Equipment.

Stipulated Savings are a sub-category of Guaranteed Savings that do not require post-FIM implementation measurement and verification because they are agreed upon by the Parties based upon representations made to SIEMENS by the CLIENT and through the application of generally accepted analytical formulae. As such, Stipulated Savings are agreed upon in advance by the Parties and cannot be changed. When used as a methodology for representing a FIM's energy savings, such methodology is not recognized as a measurement and verification methodology under IPMVP. Therefore, where the

IPMVP measurement methodologies are required, a methodology other than Stipulated Savings must be used to calculate energy savings.

Substantial Completion or Substantially Complete means the Work, or any identifiable portion thereof, which is sufficiently complete, in accordance with the provisions of this Agreement relating to the Scope of the Work and Services, Exhibit A, such that the CLIENT will be able to realize from such Work substantially all of the practical benefits intended to be gained therefrom, or otherwise employ the Work or the FIMs for their intended purposes.

Therm is a measure of energy equal to 100,000 BTUs.

Total Guaranteed Savings means the sum of the Savings that are guaranteed for all Annual Periods during the Performance Guarantee Period (inclusive of the Construction Period, if applicable). The Total Guaranteed Savings are reflected in Tables 1.1 and 1.2 in the Performance Assurance, Exhibit C.

Work means collective labor, Equipment and services comprising the FIMs to be performed by SIEMENS, as described in the Scope of Work and Services, Exhibit A.

Work Product Deliverable means the tangible form of a report or drawing specifically developed for, commissioned by and deliverable to the CLIENT in connection with the Work to be performed by SIEMENS under this Agreement.

Article 3 – General

3.1 The Parties hereto acknowledge and agree that this Agreement has been negotiated at arm's length and among the Parties equally sophisticated and knowledgeable as to the subject matter of this Agreement. Each party has conferred, or has had the opportunity to confer, with their respective legal counsel. Accordingly, in the event any claim is made relating to any conflict, omission, or ambiguity in this Agreement, no presumption, burden of proof, or persuasion shall be implied by virtue of the fact that this Agreement was drafted by or at the request of a particular party or its legal counsel.

3.2 The CLIENT hereby engages and SIEMENS hereby accepts the engagement to perform and to provide the Work and Services set forth in Exhibit A in accordance with the terms and conditions of this Agreement.

3.3 SIEMENS shall perform the Work as an independent contractor with exclusive control of the manner and means of performing the Work in accordance with the requirements of this Agreement. SIEMENS has no authority to act or make any agreements or representations on behalf of the CLIENT. This Agreement is not intended, and shall not be construed to create, between the CLIENT and SIEMENS, the relationship of principal and agent, joint-venturers, co-partners or any other such relationship, the existence of which is hereby expressly denied. No employee or agent of SIEMENS shall be, or shall be deemed to be, an employee or agent of the CLIENT.

3.4 SIEMENS represents, warrants and covenants to the CLIENT that:

(a) It has all requisite corporate power to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of SIEMENS organizational documents, any Applicable Law, or any agreements with third parties;

(b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence and the Agreement;

(c) This Agreement is the legal, valid and binding obligation of SIEMENS, in accordance with its terms, and all requirements have been met and procedures have been followed by SIEMENS to ensure the enforceability of the Agreement;

(d) To SIEMENS best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting SIEMENS that affects the validity or enforceability of this Agreement; and,

(e) It is duly authorized to do business in all locations where the Work and Services are to be performed.

3.5 The CLIENT represents, warrants and covenants to SIEMENS that:

(a) It has all requisite corporate power and/or statutory authority to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of the CLIENT's organizational documents, any Applicable Law, or any agreements with third parties;

(b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence and the Agreement;

(c) This Agreement is the legal, valid and binding obligation of the CLIENT, in accordance with its terms, and all requirements have been met and procedures have been followed by the CLIENT to ensure the enforceability of the Agreement;

(d) To the CLIENT's best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting the CLIENT that affects the validity or enforceability of this Agreement; and,

(e) The CLIENT has consulted with its legal counsel and is relying on the advice of its counsel concerning all legal issues related to this Agreement, and is not relying on SIEMENS in this regard.

Article 4 - Performance Guarantee

4.1 The Annual Realized Savings generated during each Annual Period will be no less than the Guaranteed Annual Savings as shown in Tables 1.1 and 1.2 of the Performance Assurance, Exhibit C, subject to the limits in Section 4.8. The measurement and verification calculation methodology for determining the Savings is set forth in the Performance Assurance, Exhibit C.

4.1.1 General. Except as otherwise provided, energy savings will be calculated for each month of each Annual Period as the product of (a) "units of energy saved" (kWh, Therms, GJ, etc.) multiplied by (b) "cost of energy."

(a) Units of energy saved are calculated by 1) assuming the Contracted Baseline has been maintained per Section 4.3 below, and 2) subtracting the then current period measured units of energy consumed from the Baseline units of energy defined in Article 5 of Exhibit C.

(b) Costs of energy are defined in Article 6 of Exhibit C-Utility Rate Structures and Escalation Rates.

4.2 Any future Escalation Rates to be applied to utility, energy or other costs are set forth in Exhibit C. SIEMENS and the CLIENT agree that the Baseline data set forth in Exhibit C is a full and accurate reflection of the existing Facility, equipment, operation, business use and energy usage, and that such Baseline data will be the basis on which all future energy use will be compared in order to determine the Annual Realized Savings.

4.3 SIEMENS and the CLIENT agree that the Contracted Baseline fully described in Exhibit C will represent the new operating and/or equipment profile of the Facility resulting from the FIM implementation. The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT operates and maintains its Facilities within the Contracted Baseline parameters, as may be adjusted in accordance with the terms herein, during the entire term of the Performance Guarantee Period.

4.4 The CLIENT agrees to notify SIEMENS prior to or within thirty (30) days of CLIENT's knowledge of any Material Change.

4.5 Within thirty (30) days of notice of a Material Change, SIEMENS' discovery of a Material Change and with prompt notice to CLIENT, SIEMENS will either:

(a) Require an adjustment to the Performance Assurance and the Performance Guarantee as a result of the Material Change; or,

(b) Where a commercially reasonable adjustment to the Performance Guarantee is unavailable, terminate both the Performance Assurance and the Performance Guarantee.

4.6 A Performance Guarantee Period savings reconciliation as identified in Section 4.1 will be performed at the end of each Annual Period as follows:

(a) Within ninety (90) days of the Guarantee Date, the Construction Period Savings shall be reconciled and applied to the calculation of the first Annual Period's Annual Realized Savings.

(b) At the conclusion of each Annual Period, SIEMENS will calculate the Annual Realized Savings and compare the calculated amount to the applicable Guaranteed Annual Savings amount.

(c) Where the Annual Realized Savings are less than the Guaranteed Annual Savings, a Savings Shortfall shall be recorded for the applicable Annual Period.

(d) A Savings Shortfall shall be paid by SIEMENS within sixty (60) days following the CLIENT's acceptance of the reconciliation and once paid SIEMENS shall have fulfilled its obligations under the Performance Guarantee for the applicable Annual Period.

4.6.1 As the mutual goal of the Parties is to maximize Savings, if SIEMENS can correct a Savings Shortfall through an operational improvement at no expense or material inconvenience to the CLIENT and without future operational expenses, and the CLIENT declines to allow such operational improvement, then any future Savings Shortfall that the improvement would have corrected will be negated by deeming the value of the Savings

Shortfall as Savings achieved and adding the amount of same to the Annual Realized Savings calculations for each Annual Period thereafter.

4.7 The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT maintains the PASP during the entire Performance Guarantee Period. If the CLIENT fails to maintain, breaches, cancels or otherwise causes the termination of the PASP then; (a) The Performance Guarantee shall terminate immediately and be void and of no force or effect; or, (b) Where termination of the Performance Guarantee acts to render the Agreement in violation of Applicable Law, all Guaranteed Savings thereafter shall be determined to have been achieved and SIEMENS shall have been deemed to have met its Performance Guarantee obligations under this Agreement for each and every Annual Period thereafter without the obligation to provide the CLIENT, or any third-party as the case may be, with any further Annual Performance Assurance Reports.

4.8 The payments and credits based on Savings Shortfalls, if any, are the sole remedy of the CLIENT under this Performance Guarantee. ANY PAYMENTS MADE OR TO BE MADE TO THE CLIENT UNDER THE TERMS OF THIS PERFORMANCE GUARANTEE SHALL NOT EXCEED THE PAYMENTS ACTUALLY MADE BY CLIENT TO EITHER SIEMENS AND/OR A THIRD-PARTY (IN THE EVENT THAT THE CLIENT HAS FINANCED THE TRANSACTION) FOR THE AGGREGATE OF: THE PRICE, AS DEFINED IN EXHIBIT B, ARTICLE 1.1; THE PASP PAYMENTS; THE MSP PAYMENTS, IF ANY; AND, IF APPLICABLE, THE CLIENT'S COST OF FINANCING THE WORK. The CLIENT's cost of financing the Work is the cost of financing calculated either: (a) On the date that the escrow account is funded in accordance with Exhibit B, Article 1.2; or, (b) On the Effective Contract Date if the escrow requirement is expressly waived by SIEMENS.

4.9 The CLIENT represents that all existing equipment that is not installed by SIEMENS under this Agreement but is deemed necessary to achieve the Performance Guarantee, is in satisfactory working condition. Prior to the beginning of the Performance Guarantee Period, SIEMENS will have inspected all such existing equipment and reported any deficiencies to the CLIENT. To the extent that the deficiencies are not remedied by the CLIENT prior to the Guarantee Date, the adverse effect on the ability of the Project to attain the necessary Guaranteed Savings shall be factored into the Annual Performance Assurance Report and, if necessary, the Performance Guarantee shall be adjusted accordingly.

4.10 If the Equipment or the existing equipment is altered or moved by any person (including the CLIENT) other than SIEMENS or a person authorized by SIEMENS, the CLIENT shall immediately notify SIEMENS in writing, and SIEMENS reserves the right to perform a reacceptance test on, or if necessary a re-commissioning of, the system at the CLIENT's expense in order to determine if a Material Change has occurred.

4.11 SIEMENS will have no liability or obligation to continue providing PASP Services or any Guaranteed Savings under the Performance Guarantee in the event that the CLIENT fails to:

(a) Authorize a re-acceptance test or re-commissioning that SIEMENS reasonably deems necessary in order to determine if a Material Change has occurred;

(b) Provide access to any Facility where Work is to be performed;

(c) Service and maintain all Equipment in accordance with the manufacturers' recommendations in order to prevent a Savings Shortfall; or,

(d) Provide SIEMENS with accurate Facility operating information as soon as such information becomes reasonably available to the CLIENT, including energy usage and cost, executed preventive maintenance and repair records, building or equipment additions, and occupancy levels during each Annual Period.

4.12 Unless expressly contrary to Applicable Law, should the CLIENT decide to discontinue the PASP before the end of the Performance Guarantee Period, the CLIENT will give SIEMENS thirty (30) days prior written notice and in such notice indicate that the CLIENT has selected one of the following:

(a) The CLIENT will re-invest the avoided cost of cancellation of the PASP into Facility improvements and services that improve the overall Facility's performance and which improvements and services are implemented by SIEMENS; or,

(b) The CLIENT will pay to SIEMENS % of the remaining value left in the PASP Annual Period, as a liquidated damage and not as a penalty, to compensate SIEMENS for SIEMENS' up-front costs and expenses in preparing to perform the PASP as contracted for the Annual Period.

4.13 Unless expressly contrary to Applicable Law, any disputes concerning the calculation of the Annual Realized Savings or changes to the Contracted Baseline that are not resolved by negotiation between the Parties within thirty (30)

days of the notice of the dispute, will be resolved by a third-party professional engineering firm which is reasonably acceptable to both SIEMENS and the CLIENT. The determination of such firm will be final and binding upon CLIENT and SIEMENS. SIEMENS and the CLIENT will each be responsible for half of the fees of such firm.

Article 5 - Work by SIEMENS

5.1 SIEMENS will perform the Work expressly described in this Agreement and in any work release documents or change orders that are issued under this Agreement and signed by both Parties. The Work performed by SIEMENS shall be conducted in a workmanlike manner.

5.2 SIEMENS shall perform the Work during its normal hours, Monday through Friday inclusive, excluding holidays, unless otherwise agreed herein. The CLIENT shall make the Facility available so Work may proceed in an efficient manner.

5.3 SIEMENS is not required to conduct safety, reacceptance or other tests, install new devices or equipment or make modifications to any Equipment unless expressly made a part of the Work identified in the Scope of Work and Services, Exhibit A. Any CLIENT request to change the scope or the nature of the Work or Services must be in the form of a mutually agreed change order, effective only when executed by the Parties.

5.4 All Work Product Deliverables shall become the CLIENT's property upon receipt by CLIENT. SIEMENS may retain file copies of such Work Product Deliverables. If any Instruments are provided to the CLIENT under this Agreement, any such Instruments shall remain SIEMENS' property, including the Intellectual Property conceived or developed by SIEMENS in the Instruments. All SIEMENS' Pre-existing Intellectual Property that may be included in the Deliverables provided to the CLIENT under this Agreement shall also remain SIEMENS property including the SIEMENS Pre-existing Intellectual Property included in the Work Product Deliverables. All Work Product Deliverables and any Instruments provided to the CLIENT are for Permitted Users' use and only for the purposes disclosed to SIEMENS. SIEMENS hereby grants the CLIENT a royalty-free (once payments due under this Agreement are paid to SIEMENS), non-transferable, perpetual, nonexclusive license to use any SIEMENS Pre-existing Intellectual Property solely as incorporated into the Deliverables and SIEMENS' Intellectual Property as incorporated into any Instruments provided to the CLIENT under this Agreement. Under such license, and following agreement to be bound to such separate confidentiality provisions that may exist between the Parties, Permitted Users shall have a right to:

(a) Use, in object code form only, the Software Products included in the Deliverables ("Software Deliverables");

(b) Make and retain archival and emergency copies of such Software Deliverables (subject to any confidentiality provisions) except if the Software Deliverable is embedded in the Equipment; and,

(c) Use all such Deliverables and such Instruments, provided however, the Deliverables and Instruments shall not be used or relied upon by any parties other than Permitted Users, and such use shall be limited to the particular project and location for which the Deliverables are provided. All Deliverables provided to the CLIENT are for Permitted Users' use only for the purposes disclosed to SIEMENS, and the CLIENT shall not transfer them to others or use them or permit them to be used for any extension of the Work or any other project or purpose, without SIEMENS' express written consent.

5.4.1 Any reuse of such Deliverables or such Instruments for other projects or locations without the written consent of SIEMENS, or use by any party other than Permitted Users will be at Permitted Users' risk and without liability to SIEMENS; and, the CLIENT shall indemnify, defend and hold SIEMENS harmless from any claims, losses or damages arising therefrom.

5.4.2 In consideration of such license, CLIENT agrees not to reverse engineer any Equipment or Software Product to reconstruct or discover any source code, object code, firmware, underlying ideas, or algorithms of such Equipment or Software Product even to the extent such restriction is allowable under Applicable Law.

5.4.3 Nothing contained in this Agreement shall be interpreted or construed to convey to the CLIENT the pre-existing Intellectual Property rights of any third party incorporated into the Deliverables. CLIENT agrees to take delivery of any Software Deliverables subject to any applicable SIEMENS or third party end-user license agreement accompanying such Software Deliverable.

5.5 SIEMENS shall be responsible for any portion of the Work performed by any subcontractor of SIEMENS. SIEMENS shall not have any responsibility, duty or authority to direct, supervise or oversee any contractor of the CLIENT or their work or to provide the means, methods or sequence of their work or to stop their work. SIEMENS' work and/or presence at the Facility shall not relieve others of their responsibility to the CLIENT or to others.

5.6 SIEMENS warrants that:

(a) Unless otherwise agreed, all Equipment shall be new and of good quality. Until one year from the date the Equipment is installed, all Equipment manufactured by SIEMENS or bearing its nameplate will be free from defects in material and workmanship arising from normal use and service.

(b) Labor for all Work, excluding PASP or MSP Services, is warranted to be free from defects in workmanship for one year after the Work is performed. PASP Services and MSP Services are warranted to be free from defects in workmanship for ninety (90) days after the Services are performed.

5.7 Warranty Limitation:

(a) The limited warranties set forth in Section 5.6 will be void as to, and shall not apply to, any Equipment (i) repaired, altered or improperly installed by any person other than SIEMENS or its authorized representative; (ii) which the CLIENT or a third party subjects to unreasonable or improper use or storage, uses beyond rated conditions, operates other than per SIEMENS or the manufacturer's instructions, or otherwise subjects to improper maintenance, negligence or accident; (iii) damaged because of any use of the Equipment after the CLIENT has, or should have had, knowledge of any defect in the Equipment; or (iv) not manufactured, fabricated and assembled by SIEMENS or not bearing SIEMENS nameplate. However, SIEMENS assigns to the CLIENT, without recourse, any and all assignable warranties available from any manufacturer, supplier, or subcontractor of such Equipment.

(b) Any claim under the limited warranty granted above must be made in writing to SIEMENS within thirty (30) days after discovery of the claimed defect unless discovered directly by SIEMENS. Such limited warranty only extends to the CLIENT and not to any subsequent owner of the Equipment. The CLIENT's sole and exclusive remedy for any Equipment or Services not conforming with this limited warranty is limited to, at SIEMENS' option: (i) repair or replacement of defective components of covered Equipment; (ii) re-performance of the defective portion of the Services; or (iii) to the extent previously paid and itemized, the issuance of a credit or refund for the original purchase price of such defective component or portion of the Equipment or Services.

(c) SIEMENS shall not be required to repair or replace more than the component(s) of the Equipment or the portion of the Work and Services actually found to be defective. SIEMENS' warranty liability shall not exceed the purchase price of such item. Repaired or replaced Equipment or Services will be warranted hereunder only for the remaining portion of the original warranty period.

5.8 THE EXPRESS LIMITED WARRANTIES PROVIDED ABOVE ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES, STATUTORY, EXPRESS, OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. THE LIMITED EXPRESS WARRANTIES AND REPRESENTATIONS SET FORTH IN THIS AGREEMENT MAY ONLY BE MODIFIED OR SUPPLEMENTED IN A WRITING EXECUTED BY A DULY AUTHORIZED SIGNATORY OF EACH PARTY.

5.9 SIEMENS will not be responsible for the maintenance, repair or replacement of, or Services necessitated by reason of:

(a) Non-maintainable, non-replaceable or obsolete parts of the Equipment, including but not limited to: ductwork, shell and tubes, heat exchangers, coils, unit cabinets, casings, refractory material, electrical wiring, water and pneumatic piping, structural supports, cooling tower fill, slats and basins, etc., unless covered by the warranty provisions herein or otherwise specifically stated herein; or

(b) The CLIENT's or a third-party's negligence, abuse, misuse, improper or inadequate repairs or modifications, improper operation, lack of operator maintenance or skill, corrosion, erosion, improper or inadequate water treatment, electrolytic action, chemical action, failure to comply with manufacturer's operating and environmental requirements, Acts of God, or other reasons beyond SIEMENS' control. Unless expressly agreed in writing, SIEMENS is not responsible for the removal or reinstallation of replacement valves, dampers, or waterflow and tamper switches with respect to pipes and ductwork, including vent or drain system. SIEMENS ASSUMES NO RESPONSIBILITY FOR ANY SERVICE PERFORMED ON ANY EQUIPMENT OTHER THAN THAT PERFORMED BY SIEMENS OR ITS AGENTS.

Article 6 - CLIENT Responsibilities

6.1 The CLIENT, without cost to SIEMENS, shall:

(a) Designate a contact person with authority to make decisions for the CLIENT regarding the Work and provide SIEMENS with information sufficient to contact such person in an emergency;

(b) Coordinate the work of contractors under CLIENT's sole control so as not to disrupt the Work and Services proceeding in an efficient manner;

(c) Provide or arrange for 24 hour, 7 day per week access and make all reasonable provisions for SIEMENS to enter any Facility where Work is to be performed so that Work may proceed in an efficient manner;

(d) Permit SIEMENS to control and/or operate all building controls, systems, apparatus, equipment and machinery necessary to perform the Work;

(e) Furnish SIEMENS with blueprints, surveys, legal descriptions, waste management plans and all other available information pertinent to the Work and any Facility where the Work is to be performed as may be reasonably requested by SIEMENS. Such plans and blueprints, along with an executed copy of this Agreement, with its Exhibits, shall be kept and maintained in CLIENT's files for a period of fifteen (15) years from the Effective Contract Date;

(f) Furnish SIEMENS with all approvals, permits and consents from government authorities and others as may be required for performance of the Work, except for those SIEMENS has expressly agreed in writing to obtain;

(g) In accordance with Article 11 hereof, promptly notify SIEMENS of all known or suspected Hazardous Materials at the Facility, of any contamination of the Facility by Oil or Hazardous Material, and of any other conditions requiring special care or which may reasonably be expected to affect the Work, and provide SIEMENS with any available documents describing the quantity, nature, location and extent of such materials, contamination or conditions;

(h) Comply with Applicable Law and provide any notices required to be given to any government authorities in connection with the Work, except such notices SIEMENS has expressly agreed in writing to give;

(i) Provide SIEMENS with legally required materials and information (including but not limited to Material Safety Data Sheets) related to all Hazardous Materials located at any Facility where the Work is to be performed;

(j) Furnish SIEMENS with any contingency plans, safety programs and other policies, plans or programs related to any Facility where the Work is to be performed;

(k) Operate, service and maintain all Equipment according to the manufacturer's recommendations including those set forth in the manufacturer's operating manuals or instructions, as well as all requirements of Applicable Law or of authorities having jurisdiction. The CLIENT shall furnish all needed servicing and parts for said FIMs, which parts shall become part of the FIMs. Such Equipment shall be operated only in the specified operating environment, which shall be supplied by the CLIENT, including without limitation: (1) suitable electrical service, including clean, stable, properly conditioned power, to all Equipment; (2) telephone lines, capacity and connectivity as required by such Equipment; and (3) heat, light, air conditioning or other environmental controls, and other utilities in accordance with the specifications for the Equipment;

(l) Promptly notify SIEMENS of any unusual operating conditions, hours of usage, system malfunctions, installed equipment or building alterations that may affect the Equipment or energy usage or any Services; and,

(m) If applicable, provide and pay for a dedicated voice grade dial-up phone line, or a mutually agreed communication method, and install a terminal block, or an equivalent communication mechanism, in a mutually agreed upon location. All on-line service Equipment (excluding the phone line) will remain the property of SIEMENS unless otherwise stated herein.

6.2 Unless contrary to Applicable Law, the CLIENT acknowledges that the technical and pricing information contained in this Agreement is confidential and proprietary to SIEMENS and agrees not to disclose it or otherwise make it available to others without SIEMENS' express written consent.

6.3 The CLIENT acknowledges that it is now and shall at all times remain in control of the Facility. Except as expressly provided herein, SIEMENS shall not be responsible for the adequacy of the health or safety programs or precautions related to the CLIENT's activities or operations, the CLIENT's other contractor(s), the work of any other person or entity, or Facility conditions. SIEMENS shall not be responsible for inspecting, observing, reporting or correcting health or safety conditions or deficiencies of the CLIENT or others at the Facility. So as not to discourage SIEMENS from voluntarily addressing health or safety issues while at the Facility, in the event SIEMENS does address such issues by making observations, reports, suggestions or otherwise, the CLIENT shall not hold, or attempt to hold, SIEMENS liable or responsible on account thereof.

Article 7-Changes and Delays

7.1 As the Work is performed, Applicable Law or conditions may change, or circumstances outside SIEMENS' reasonable control may develop, which would require SIEMENS to expend additional costs, effort or time to complete the Work, in which case SIEMENS will notify the CLIENT and an equitable adjustment will be made to SIEMENS' compensation and the time for performance. In the event such changes require the Work to be suspended or terminated, SIEMENS shall be compensated for Work previously performed and for costs reasonably incurred in connection with the suspension or termination.

7.2 Either party may request additions, deletions, modifications or changes to the Work. Any such requests shall only become effective upon execution of a written agreement by authorized representatives of both Parties.

7.3 SIEMENS may, in its sole discretion, substitute alternative parts, goods or equipment in the performance of the Work, provided that any such substitution shall be of an equal or better quality.

7.4 SIEMENS shall not be responsible for loss, delay, injury, damage or failure of performance that may be caused by circumstances beyond its control, including but not restricted to acts or omissions by the CLIENT or its employees, agents or contractors, Acts of God, war, civil commotion, acts or omissions of government authorities, fire, theft, corrosion, flood, water damage, lightning, freeze-ups, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, or shortage of vehicles, fuel, labor or materials. In the event of such delay or failure, the time for performance shall be extended by a period equal to the time lost plus a reasonable recovery period and the compensation shall be equitably adjusted to compensate for additional costs SIEMENS incurs due to such delay. If any such delay exceeds sixty (60) days, SIEMENS may terminate this Agreement upon three (3) days notice to the CLIENT and the CLIENT shall promptly pay SIEMENS for the allocable portion of the Work completed, for any costs and expenses of termination, and for any loss or damage incurred with respect to materials, equipment, tools and machinery, including reasonable overhead and profit.

Article 8- Compensation

8.1 The aggregate amount paid by CLIENT provides for and is solely in consideration of the Scope of Work and Services described in Exhibit A, and is detailed in Exhibit B.

8.2 SIEMENS will invoice the CLIENT in accordance with the schedules set forth in Exhibit B. Unless otherwise agreed in writing, invoices are due and payable upon receipt by the CLIENT. If the CLIENT disagrees with any portion of an invoice, it shall notify SIEMENS in writing of the amount in dispute and the reason for its disagreement within 21 days of receipt of the invoice, and shall pay the portion not in dispute.

8.3 SIEMENS may suspend or terminate the Work or Services at any time if payment is not received when due. In such event, SIEMENS shall be entitled to compensation for the Work or Services previously performed and for costs reasonably incurred in connection with the suspension or termination.

8.4 On amounts not paid within forty-five (45) days of invoice date, the CLIENT shall pay interest from invoice date until payment is received at the lesser of 12% per annum or the maximum rate allowed by law. The CLIENT shall reimburse SIEMENS for SIEMENS' costs and expenses (including reasonable attorney and witness fees) incurred for collection under this Agreement.

8.5 Except to the extent expressly agreed herein, SIEMENS' fees do not include any taxes, excises, fees, duties or other government charges related to the Work or Services. The CLIENT shall pay such amounts or reimburse SIEMENS for any such amounts SIEMENS pays to the extent such charges are lawfully due and payable by CLIENT and have been paid or incurred by SIEMENS in furtherance thereof. If the CLIENT claims that the Work or Services is subject to a tax exemption or direct payment permit, it shall provide SIEMENS with a valid exemption certificate or permit and, unless specifically prohibited by law, shall indemnify, defend and hold SIEMENS harmless from any taxes, costs and penalties arising out of the use or acceptance of same.

8.6 All other work or services requested by the CLIENT, including but not limited to the following, shall be separately billed or surcharged on a time and materials basis:

(a) Emergency services, if inspection does not reveal any deficiency covered by the Scope of Work and Services, Exhibit A;

(b) Work and/or services performed at times other than during SIEMENS' normal working hours, unless otherwise agreed to in Exhibit A; or

(c) Work and/or services performed on equipment not covered by the Scope of Work and Services, Exhibit A.

***Article 9-* Acceptance**

9.1 When SIEMENS believes that all or an independent definable phase or portion of the Work is Substantially Complete, SIEMENS will submit a Certificate of Substantial Completion to the CLIENT which shall be subject to the following:

(a) If the CLIENT concurs that the described portion of the Work as performed is Substantially Complete, the CLIENT will sign the Certificate of Substantial Completion and return it to SIEMENS;

(b) A Certificate of Substantial Completion may include, as an attachment to it, an Outstanding Items List prepared by SIEMENS;

(c) If the CLIENT does not concur that the Work is Substantially Complete, then, within five (5) business days of receiving the Certificate of Substantial Completion, the CLIENT shall notify SIEMENS in writing of the reasons it believes the Work is not Substantially Complete;

(d) If SIEMENS disagrees with the CLIENT as to whether the Work is Substantially Complete, SIEMENS shall notify the CLIENT of a dispute and such dispute shall be resolved in accordance with Section 9.3 herein;

(e) If, within five (5) business days of receiving the Certificate of Substantial Completion the CLIENT fails to sign the Certificate, and within the same period the CLIENT's Representative does not deliver to SIEMENS a written notice of the reasons the CLIENT believes that the Work is not Substantially Complete, then in the mutual interests of the Project proceeding in a timely manner, the CLIENT will be deemed to have agreed to, signed and returned the Certificate of Substantial Completion.

9.2 After the CLIENT signs and returns, or is deemed to have signed and returned to SIEMENS all of the Certificates of Substantial Completion relating to the Work, and after SIEMENS corrects and completes all of the items on all of the Outstanding Items Lists, if any, SIEMENS will submit to the CLIENT a Certificate of Final Completion which shall be subject to the following:

(a) If the CLIENT concurs that all of the items on all of the Outstanding Items Lists have been completed or corrected, the CLIENT will indicate its final acceptance of the Work by signing the Certificate of Final Completion and returning it to SIEMENS;

(b) If the CLIENT does not concur that all of the items on all of the Outstanding Items Lists have been completed or corrected, then the CLIENT shall, within five (5) business days of receiving the Certificate of Final Completion, identify the items that, it believes, were not completed or corrected;

(c) If SIEMENS disagrees that the items identified by the CLIENT have not been completed or corrected, SIEMENS shall notify the CLIENT of a dispute and such dispute shall be resolved in accordance with section 9.3 herein;

(d) If, within five (5) business days of receiving a Certificate of Final Completion, the CLIENT fails to sign that Certificate, and, within the same period the CLIENT's Representative does not deliver to SIEMENS a written notice identifying the items on the Outstanding Items List(s) that, the CLIENT believes, were not completed or corrected, then the CLIENT will be deemed to have agreed to and signed and returned the Certificate of Final Completion.

9.3 Any disputes concerning the Substantial Completion or the Final Completion of the Work will be resolved by submitting the issue to a third party professional engineering firm and which is reasonably acceptable to both SIEMENS and the CLIENT. The determination of this firm with respect to Final Completion or Substantial Completion will be final and binding upon the Parties. SIEMENS and the CLIENT shall share equally the costs or fees for such firm in connection with such dispute resolution process.

Article 10-Insurance and Allocation of Risk

10.1 During the term of this Agreement, SIEMENS shall comply with the insurance requirements set forth in Addendum 1 hereto.

10.2 The CLIENT will either maintain at its own expense, or self-insure for the equivalent risks, property insurance written on a builder's "all-risk" or equivalent policy form in an amount no less than the Price identified in Exhibit B, Article 1.1, plus the value of subsequent modifications and cost of materials supplied or installed by others, on a replacement

cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by SIEMENS, until final payment has been made to SIEMENS or no person or entity other than the CLIENT has an insurable interest in the property, whichever is later. The policy form shall include without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and start-up, rebuilding and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for SIEMENS' services and expenses required as result of such insured loss. If the insurance requires deductibles or retentions, the CLIENT shall pay costs not covered because of such deductibles or retentions. This insurance shall cover portions of the Work off the Facility, and also portions of the Work in transit. Partial occupancy or use shall not commence unless the insurance company providing this insurance has consented to such partial occupancy or use by endorsement for otherwise. The CLIENT shall purchase and maintain boiler and machinery insurance which shall specifically cover such insured objects during installation and until Acceptance by the CLIENT. The insurance required by this section shall include the interests of the CLIENT, SIEMENS, subcontractor and sub-subcontractor in the Work. SIEMENS shall be included as an additional insured on each such insurance coverage. The CLIENT and SIEMENS waive all rights against each other and any of their subcontractors, sub-subcontractors, agents and employees for damages caused by fire or other causes of loss to the extent covered by the insurance required by this section and for any other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the CLIENT as fiduciary. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged. Insurance certificates shall be furnished upon request.

10.3 Title and risk of loss of materials and Equipment furnished by SIEMENS shall pass to the CLIENT upon their delivery to the Facility, and the CLIENT shall be responsible for protecting them against theft and damage.

10.4 All work covered by this Agreement done at the site of construction or in preparing or delivering materials to the site shall be at the risk of SIEMENS alone. SIEMENS agrees to defend, save, indemnify and keep the CLIENT and its officers, agents, employees, engineers, and consultants for this Agreement, and all public agencies from whom permits will be obtained and their directors, officers, agents and employees harmless against any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (SIEMENS' employees included) and damage to property, arising directly or indirectly out of the obligations herein undertaken or out of the operations conducted by SIEMENS, save and except claims or litigation arising through the active negligence or willful misconduct of the CLIENT, and will make good to reimburse the CLIENT for any expenditures, including reasonable attorneys' fees the CLIENT may incur by reason of such matters. SIEMENS reserves the right to control the defense and settlement of any claim for which SIEMENS has an obligation to indemnify hereunder. UNLESS CONTRARY TO APPLICABLE LAW, IN NO EVENT SHALL THE CLIENT OR SIEMENS BE LIABLE UNDER THIS INDEMNITY OR OTHERWISE UNDER THIS AGREEMENT FOR SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING COMMERCIAL LOSS, LOSS OF USE, OR LOST PROFITS, HOWEVER CAUSED, EVEN IF SIEMENS OR THE CLIENT HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND, IN ANY EVENT, UNLESS CONTRARY TO APPLICABLE LAW, SIEMENS' AGGREGATE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES OR EXPENSES ARISING OUT OF THIS AGREEMENT, OR OUT OF ANY GOODS OR SERVICES FURNISHED UNDER THIS AGREEMENT, WHETHER BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, AGENCY, WARRANTY, TRESPASS, INDEMNITY OR ANY OTHER THEORY OF LIABILITY, SHALL BE LIMITED TO THE LESSER OF $1,500,000 OR THE TOTAL COMPENSATION RECEIVED BY SIEMENS FROM THE CLIENT UNDER THIS AGREEMENT. The preceding limit shall not apply to the CLIENT's remedy under the Performance Guarantee as such is limited by Section 4.8.

10.5 As to Patents and Copyrights:

(a) SIEMENS will, at its own expense, defend or at its option settle any suit or proceeding brought against the CLIENT in so far as it is based on an allegation that any Work (including parts thereof), or use thereof for its intended purpose, constitutes an infringement of any United States patent or copyright, if SIEMENS is promptly provided notice and given authority, information, and assistance in a timely manner for the defense of said suit or proceeding. SIEMENS will pay the damages and costs awarded in any suit or proceeding so defended. SIEMENS will not be responsible for any settlement of such suit or proceeding made without its prior written consent. In case the Work, or any part thereof, as a result of any suit or proceeding so defended is held to constitute infringement or its use by the CLIENT is enjoined,

SIEMENS will, at its option and its own expense, either: (i) procure for the CLIENT the right to continue using said Work; (ii) replace it with substantially equivalent non-infringing Work; or (iii) modify the Work so it becomes non-infringing.

(b) SIEMENS will have no duty or obligation to the CLIENT under Section 10.5(a) to the extent that the Work is: (i) supplied according to the CLIENT's design or instructions, wherein compliance therewith has caused SIEMENS to deviate from its normal course of performance; (ii) modified by the CLIENT or its contractors after delivery; or, (iii) combined by the CLIENT or its contractors with items not furnished hereunder, and by reason of said design, instruction, modification, or combination, a suit is brought against the CLIENT. If by reason of such design, instruction, modification or combination, a suit or proceeding is brought against SIEMENS, unless expressly prohibited by law, the CLIENT shall protect SIEMENS in the same manner and to the same extent that SIEMENS has agreed to protect the CLIENT under the provisions of Section 10.5(a) above.

(c) THIS SECTION 10.5 IS AN EXCLUSIVE STATEMENT OF ALL THE DUTIES OF THE PARTIES RELATING TO PATENTS AND COPYRIGHTS, AND DIRECT OR CONTRIBUTORY PATENT OR COPYRIGHT AND OF ALL THE REMEDIES OF THE CLIENT RELATING TO ANY CLAIMS, SUITS, OR PROCEEDINGS INVOLVING PATENTS AND COPYRIGHTS. Compliance with Section 10.5 as provided herein shall constitute fulfillment of all liabilities of the Parties under the Agreement with respect to the intellectual property indemnification.

10.6 The Parties acknowledge that the price for which SIEMENS has agreed to perform the Work and obligations under this Agreement was calculated based upon the foregoing allocations of risk, and that each Party has expressly relied on and would not have entered into this Agreement but for such allocations of risk.

Article 11-Hazardous Materials Provisions

11.1 The Work does not include directly or indirectly performing or arranging for the detection, testing, handling, storage, removal, treatment, transportation, disposal, monitoring, abatement or remediation of any contamination of any Facility at which Work is performed and any soil or groundwater at the Facility by petroleum or petroleum products (collectively called "Oil"), asbestos, PCBs or hazardous, toxic, radioactive or infectious substances, including any substances regulated under RCRA, CERCLA or any other Applicable Law (collectively called "Hazardous Materials"), including without limitation: ionization smoke detectors, ballasts, mercury bulb thermostats, used oil, contaminated filters, contaminated absorbents, and refrigerant. Except as expressly disclosed pursuant to Section 11.2, the CLIENT represents and warrants that, to the best of its knowledge following due inquiry, there are no Hazardous Materials or Oil present where the Work is to be performed. SIEMENS will notify the CLIENT immediately if it discovers or reasonably suspects the presence of any previously undisclosed Oil or Hazardous Material. All Services have been priced and agreed to by SIEMENS in reliance on the CLIENT's representations as set forth in this Article. The discovery or reasonable suspicion of Hazardous Materials or hazardous conditions at a Facility where SIEMENS is to perform Work, or of contamination of the Facility by Oil or Hazardous Materials not previously disclosed pursuant to Section 11.2, shall entitle SIEMENS to suspend the Work immediately, subject to mutual agreement of terms and conditions applicable to any further Work, or to terminate the Work and to be paid for Work previously performed.

11.2 The CLIENT warrants that, prior to the execution of the Agreement, it notified SIEMENS in writing of any and all Oil or Hazardous Materials, to the best of its knowledge following due inquiry, known to be present, potentially present or likely to become present at the Facility and provided a copy of any Facility safety policies and information, including but not limited to lock-out and tag procedures, chemical hygiene plan, material safety data sheets, and other items covered or required to be disclosed or maintained by Applicable Law.

11.3 Regardless of whether Oil or Hazardous Material was disclosed pursuant to Section 11.2, the CLIENT shall be solely responsible for properly testing, abating, encapsulating, removing, disposing, remedying or neutralizing such Oil or Hazardous Materials, and for the costs thereof. Even if an appropriate change order has been entered into pursuant to Section 11.1, SIEMENS shall have the right to stop the Work until the Facility is free from Oil or Hazardous Materials. In such event, SIEMENS will receive an equitable extension of time to complete the Work, and compensation for delays caused by Oil or Hazardous Materials remediation. In no event shall SIEMENS be required or construed to take title, ownership or responsibility for such Oil or Hazardous Materials. The CLIENT shall sign any required waste manifests in conformance with all government regulations, listing the CLIENT as the generator of the waste. If someone other than the CLIENT is the generator of the waste, the CLIENT shall arrange for such other person to sign such manifests.

11.4 Except where expressly prohibited by Applicable Law, for separate consideration of $10 and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the CLIENT shall indemnify, defend and hold SIEMENS harmless from and against any damages, losses, costs, liabilities or expenses (including attorneys'

fees) arising out of any Oil or Hazardous Materials or from the CLIENT's breach of, or failure to perform its obligations under this Article.

11.5 For purposes of this Article 11, in the context of the phrase "to the best of its knowledge following due inquiry"; "knowledge" means actual awareness of the facts by the CLIENT's directors, officers, employees or agents, or the presence of relevant information contained in the CLIENT's books or records; and, "due inquiry" means inquiry of those persons under the CLIENT's control who should have knowledge of the subject matter of such inquiry.

Article 12-Miscellaneous Provisions

12.1 Notices between the Parties shall be in writing and shall be hand-delivered or sent by certified mail, express courier, or acknowledged telefax properly addressed to the appropriate party. Any such notice shall be deemed to have been received when delivered in-person or when sent by telefax, or five (5) business days subsequent to deposit in the U.S. mails, or one (1) day after deposit with express courier.

12.2 Neither the CLIENT nor SIEMENS shall assign or transfer any rights or obligations under this Agreement, except that either party may assign this Agreement to its affiliates and SIEMENS may use subcontractors in the performance of the Work or Services. Nothing contained in this Agreement shall be construed to give any rights or benefits to anyone other than the CLIENT and SIEMENS without the express written consent of both Parties.

12.3 This Agreement shall be governed by and construed in accordance with the laws of the state or commonwealth within which the Facilities are located.

12.4 This Agreement and all provisions of this Agreement allocating responsibility or liability between the Parties shall survive the completion of the Work, the Services, and the termination of this Agreement.

12.5 Unless contrary to Applicable Law and with the exception of disputes arising under Article 4 or Article 9, all disputes not resolved by negotiation between the Parties shall be resolved in accordance with the Commercial Rules of the American Arbitration Association in effect at that time, except as modified herein. All disputes shall be decided by a single arbitrator. A decision shall be rendered by the arbitrator no later than nine months after the demand for arbitration is filed, and the arbitrator shall state in writing the factual and legal basis for the award. No discovery shall be permitted. The arbitrator shall issue a scheduling order that shall not be modified except by the mutual agreement of the Parties. Except as provided in Article 8.4, the arbitrator shall have no authority to award, and shall not award, attorneys' fees. Judgment may be entered upon the award in the highest state or federal court having jurisdiction over the matter.

12.6 SIEMENS' performance of the Work and Services is expressly conditioned on the Parties assenting to all of the terms of this Agreement, notwithstanding any different or additional terms contained in any writing at any time submitted or to be submitted by a Party to the other Party relating to the Work or Services, even if signed by the Parties, unless the written statement expressly indicates that such terms supersede the terms of this Agreement.

12.7 Any provision of this Agreement found to be invalid, unlawful or unenforceable by a court of law shall be ineffective to the extent of such invalidity, and deemed severed herefrom, without invalidating the remainder of this Agreement. All other provisions hereof shall remain in full force and effect.

12.8 The waiver by a party of any breach by the other party of any term, covenant or condition hereof shall not operate as a waiver of any subsequent breach hereof. No waiver shall operate or be effective unless made in writing and executed by the party to be bound thereby.

12.9 In the event that Applicable Law or the CLIENT requires that SIEMENS procure a performance bond and/or a payment bond, SIEMENS shall provide a performance and payment bond in the amount of $2,846,439. The performance and payment bond will solely apply to the Work performed during the Construction Period and to the required statutory lien filing period thereafter. The performance and payment bond will not apply to any of the obligations included in the Performance Assurance, Exhibit C. Furthermore, the CLIENT's funding source may be named as "Co-Obligee" on the performance bond if so requested by the CLIENT.

Article 13-Maintenance Services Program

13.1 If applicable, the scope of Services provided by SIEMENS for the Maintenance Services Program is stated in Exhibit A.

13.2 The CLIENT represents that all equipment not installed by SIEMENS under this Agreement and subject to a MSP is in satisfactory working condition. SIEMENS will have inspected all such equipment within the first thirty (30) days of MSP commencement or no later than the first scheduled inspection. Testing and inspection will not be deemed to be complete until all such equipment has been so tested and inspected.

13.3 If the equipment is altered or moved by any person, including the CLIENT, other than SIEMENS or a person authorized by SIEMENS, the CLIENT shall immediately notify SIEMENS in writing, and SIEMENS reserves the right to perform a reacceptance test on, or if necessary a re-commissioning of, the system at the CLIENT's expense.

13.4 If SIEMENS reasonably determines as a result of such inspection and/or testing that any equipment requires repair or replacement, the CLIENT will be so notified and shall take corrective action within thirty (30) days, or such equipment shall be removed from coverage hereunder without further action by the Parties. SIEMENS is not liable or responsible for the continued testing, maintenance, repair, replacement or operating capabilities of any portion of the equipment until it has been inspected and/or tested and has been, if necessary, restored to an acceptable initial condition at the CLIENT's sole expense. Any services provided by SIEMENS in the course of such restoration will be separately charged on a time and materials basis, and not included in fees paid hereunder. If individual items of equipment cannot, in SIEMENS' sole determination, be properly repaired or replaced due to age, obsolescence, lack of availability of refrigerant gas, halon gas, necessary parts, materials, compatibility or otherwise, or as a result of excessive wear or deterioration, SIEMENS may, within ten (10) days of such inspection, give written notice that it is withdrawing such items from coverage under the MSP and adjust the MSP payments due hereunder accordingly.

13.5 If the removal of equipment from coverage would compromise or impair the integrity of the Work, Services or compliance with law of any system, then SIEMENS will provide a written statement thereof for execution by the CLIENT. The CLIENT's failure to execute such statement within ten (10) days will void the MSP and release SIEMENS from any further obligations with respect to the MSP.

13.6 If the MSP scope of Services provides for equipment maintenance, repairs and/or replacements of equipment by SIEMENS, those Services are limited to restoring the proper working condition of such equipment. SIEMENS will not be obligated to provide replacement equipment that represents significant capital improvement compared to the original. Exchanged components become the property of SIEMENS, except Hazardous Materials, which under all circumstances remain the property and responsibility of the CLIENT.

ADDENDUM 1 – INSURANCE REQUIREMENTS

For the purposes of this Addendum, SIEMENS shall be referred to as "CONTRACTOR" and the CLIENT shall be referred to as the "CITY"

1. COMMENCEMENT OF WORK. CONTRACTOR and all subcontractors shall not commence work under this Agreement until all certificates and endorsements have been received and approved by the CITY. CONTRACTOR shall be responsible to collect and maintain all insurance from all subcontractors. All subcontractors shall obtain and maintain the same insurance as required of CONTRACTOR. All insurance required by this Agreement shall contain a Statement of Obligation on the part of the carrier to notify the CITY of cancellation, material changes or termination at least thirty (30) days in advance. CONTRACTOR is also aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Workers' Compensation, or undertake self-insurance in accordance with the provisions of that Code, and will comply with such provisions before commencing the performance of the work of this Contract.

2. WORKERS COMPENSATION INSURANCE. For the duration of this Agreement, CONTRACTOR and all subcontractors shall maintain Workers Compensation Insurance in the amount and type required by California law, if applicable for the protection of its employees during the progress of the work. The insurer shall waive its rights of subrogation against the CITY and its officers, officials, employees, agents, volunteers, and consultants for this Contract, and all public agencies from whom permits will be obtained and their directors, officers, agents and employees. The insurer shall issue a certificate and endorsement to the policy evidencing the same. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

3. INSURANCE AMOUNTS. CONTRACTOR shall maintain the following insurance for the duration of this Agreement:

(a) Commercial general liability, not excluding XCU, and including mobile equipment, if applicable, in an amount not less than $5,000,000 per occurrence; (claims made and modified occurrence policies are not acceptable); Insurance companies must be acceptable to CITY and have an AM Best's Guide Rating of A-, Class VII or better, as approved by the CITY.

(b) Automobile liability, including mobile equipment if applicable, in an amount not less than $1,000,000 combined single limit; (claims made and modified occurrence policies are not acceptable); Insurance companies must be acceptable to CITY and have an AM Best's Guide Rating of A-, Class VII or better, as approved by the CITY.

(c) Excess liability coverage shall be provided for any underlying policy that does not meet the insurance requirements set forth herein; Excess liability coverage shall be Follows Form to the underlying policies. (claims made and modified occurrence policies are not acceptable) Insurance companies must be acceptable to CITY and have a Best's Guide Rating of A-Class VII or better, as approved by the CITY.

4. An Additional Insured Endorsement, ongoing and products-completed operations, for the policy under section 3(a), shall designate the CITY and its officers, officials, employees, agents, volunteers, and consultants for this Contract, and all public agencies from whom permits will be obtained and their directors, officers, agents and employees as additional insureds for liability arising out of work or operations performed by or on behalf of the CONTRACTOR. Coverage shall not exclude XCU, and shall include mobile equipment, if applicable. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

5. An Additional Insured Endorsement for the policy under section 3(b), including mobile equipment if applicable, shall designate the CITY and its officers, officials, employees, agents, volunteers, and consultants for this Contract, and all public agencies from whom permits will be obtained and their directors, officers, agents and employees as additional insureds for automobiles owned, leased, hired, or borrowed by the CONTRACTOR. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

6. In the event any of CONTRACTOR'S underlying policies do not meet policy limits within the insurance requirements, CONTRACTOR shall provide the schedule of underlying polices for a Follows Form excess liability policy, state that the excess policy follows form on the insurance certificate, and an additional insured endorsement for the excess liability policy under section 4 designating the CITY and its officers, officials, employees, agents, volunteers, and consultants for this Contract, and all public agencies from whom permits will be obtained and their directors, officers,

agents and employees as additional insured's. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

7. For any claims related to this Agreement, CONTRACTOR'S insurance coverage shall be primary insurance as respects the CITY and its officers, officials, employees, agents, volunteers, and consultants for this Contract, and all public agencies from whom permits will be obtained and their directors, officers, agents and employees.

8. Any insurance or self-insurance maintained by the CITY and its officers, officials, employees, agents, volunteers, and consultants for this Contract, and all public agencies from whom permits will be obtained and their directors, officers, agents and employees shall be excess of the CONTRACTOR'S insurance and shall not contribute with it. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

9. All insurance policies must be endorsed to provide that the insurer will waive all rights of subrogation against the CITY and its officers, officials, employees, agents, volunteers, and consultants for this Contract, and all public agencies from whom permits will be obtained and their directors, officers, agents and employees. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

10. If City sustained a loss for which it intends to submit a claim, then, at any time, CITY or its representatives shall have the right to inspect and receive the original or a certified copy of all said policies of insurance, including certificates and endorsements. CONTRACTOR shall pay the premiums on the insurance hereinabove required.

11 If CONTRACTOR maintains higher insurance limits than the minimums shown above, CONTRACTOR shall provide coverage for the higher insurance limits otherwise maintained by the CONTRACTOR

Article 1: Scope of Work

1.1 *Description*: Except as otherwise expressly provided herein, SIEMENS shall provide each and every item of cost and expense necessary for implementation of the FIMS described in Section 1.2, below. Work will be based on California Prevailing Wage requirements as approved by the CLIENT. The CLIENT to provide adequate site access and appropriate area on site for contractor staging and storage.

As required by California Law, SIEMENS and its subcontractors must be registered with the California Department of Industrial Relations pursuant to Labor Code Section 1725.5. SIEMENS shall be responsible for its compliance in all respects with the Prevailing Wage Law, including the payment of the prevailing wage rates to all the laborers involved, and with California Labor Code Section 1770 et seq., including the keeping of all records required by the provisions of Labor Code Section 1776 and the implementing administrative regulations. SIEMENS shall submit payroll records to the Labor Commissioner pursuant to Labor Code section 1771.4(a)(3) and shall comply with the job site notices posting requirements established by the Labor Commissioner pursuant to Title 8, California Code of Regulations Section 16461(e) or other regulation promulgated pursuant to Labor Code Section 1771.4(a)(2). Pursuant to Labor Code Section 1771.4, this project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations. CLIENT shall be a third party beneficiary of the forgoing covenant with rights to enforce the same as against SIEMENS.

1.2 *Specific Elements*: The Work shall include the following:

1.2.1 Lighting Upgrade

1. Provide necessary supporting documents for the Onsite Energy Corporation, Local Capacity Requirements ("LCR") rebate. Coordinate with Onsite Energy prior to installation for rebate pre-inspection if required. CLIENT will sign the Onsite Energy Corporation, LCR Customer Incentive Agreement before SIEMENS can proceed on the Work.

2. Provide necessary supporting documents for rebates to the appropriate agencies. Coordinate with rebate providers prior to installation for rebate pre-inspection if required.

3. Provide lighting upgrades as shown in Appendix 1.

    a) Remove and dispose of existing Fluorescent lamps and ballasts and provide and install new direct wire LED equivalent lamps as shown in Appendix 1. Fixtures will be rewired to accept direct voltage to the sockets. Reflective surfaces and lenses will be wiped to remove dirt and dust.

    b) Remove and dispose of existing Compact Fluorescent, Incandescent, Metal Halide, High Pressure Sodium and Induction lamps and provide and install specific upgrades in Appendix 1.

4. Lighting upgrades will occur at the following locations.

Location	Address
Police Station	11301 Acacia Parkway, Garden Grove CA 92840
Juvenile Justice	11301 Acacia Parkway, Garden Grove CA 92840
Property & Evidence	11301 Acacia Parkway, Garden Grove CA 92840
Police Annex	11400 Stanford Ave, Garden Grove CA 92840
City Hall	11222 Acacia Parkway, Garden Grove CA 92840
Gem Theatre	12852 Main st. Garden Grove CA 92840
Amphitheatre	12762 Main St, Garden Grove CA 92840
Courtyard Center + Activity Center	12732 Main st. Garden Grove, CA 92840
Community Meeting Center, H. Louis Lake Senior Center	11300 Stanford Ave, Garden Grove CA 92840
Buena Clinton	12661 Sunswept Ave, Garden Grove CA 92843
Municipal Service Center	13802 Newhope St., Garden Grove CA 92843
Fire Station #1	11301 Acacia Parkway, Garden Grove CA 92840
Fire Station #2	11805 Gilbert st., Garden Grove CA 92841
Fire Station #3	12132 Trask ave., Garden Grove CA 92843
Fire Station #4	12191 Valley View st., Garden Grove CA 92845
Fire Station #5	12751 Western ave., Garden Grove CA 92841
Fire Station #7	14162 Forsyth Ln, Garden Grove CA 92844
Sports and Rec + Pump house	9301 Westminister blvd, Garden Grove CA 92844
Atlantis	9301 Westminster ave. Garden Grove CA 92844
Garden Grove Park (not including	9301 Westminister blvd, Garden

Musco/Stadium lighting)	Grove CA 92844
Chapman Sports Complex (not including Musco/Stadium lighting)	11990 Knott St, Garden Grove CA 92841
Woodbury Park	13800 Rosita pl., Garden Grove CA 92843
West Grove Park	5372 Cerulean Ave, Garden Grove CA 92845
Village Green Park	12852 Main St, Garden Grove CA 92840
Eastgate Park	12001 St. Mark St., Garden Grove CA 92845
Gutosky Park	9201 Ferris Ln, Garden Grove CA 92841
Magnolia Park	11402 Magnolia ave., Garden Grove CA 92841
Faylane Park	11700 Seacrest Dr., Garden Grove CA 92840
Civic Center Parking lot	11300 Stanford Ave, Garden Grove CA 92840
Library Parking lot	11300 Stanford Ave, Garden Grove CA 92840

5. Work to be installed in accordance with applicable Title 24 requirements.

6. Title 24 compliance paperwork, inspections and testing

7. Work shall be performed during normal business hours (Monday through Friday 7:00 am to 5:00 pm). Weekends or overtime hours are not included in our labor assumptions.

1.2.1.1 Exclusions and Clarifications

1. Permit fees will be excluded. City to waive fees

2. The scope for this FIM is based on the lighting retrofits described above and as shown in Appendix 1. SIEMENS has noted some areas which currently have low light levels and which still may not meet necessary lighting standards post-FIM implementation. For these and other such areas identified during the Construction Period, SIEMENS will provide recommendations to CLIENT for addressing light level issues and provide pricing in the form of a change order(s) to scope of work and savings calculations for the proposed additional work on a time-and-material basis.

Post-implementation lighting levels will be documented after Acceptance, with the results provided to CLIENT for further consideration.

3. SIEMENS shall not be responsible for repairs to existing damaged ceiling tiles or walls. Repairs or upgrades to existing drop ceilings or fixture supports to bring them up to local building codes are not included.

4. SIEMENS' scope is limited to replacing the fixtures identified in Appendix 1 or working inside the fixtures identified therein. Correction of any pre-existing defects or non-conformities with the applicable Codes in the electrical wiring to the fixture is not included.

5. Since the incentives are paid for by a third party, SIEMENS cannot guarantee the incentives, but will provide work necessary in a timely manner to help to secure the funds. The CLIENT acknowledges that: (i) any incentive that may be available to the CLIENT to pay the costs of the work will be granted by a third party outside the control of SIEMENS; (ii) lack of availability of such incentives shall not relieve the CLIENT of its payment obligations under this Agreement.

6. Entire scope was priced as universal voltage (120/277V), 480V fixtures/drivers are not included in the scope.

7. Emergency circuits/drivers are not included. If additional LED emergency drivers are needed, SIEMENS will submit a change order for additional work.

8. Scope assumes 1 for 1 retrofit and/or replacement only, any change in layout or not reasonably foreseeable electrical issues are not included in the scope.

9. SIEMENS shall not be responsible for repairs to existing, non-functioning sensors not identified for replacement in the scope of Work.

10. Design services i.e. CAD drawings/reflective ceilings plans are not included in the scope of work.

11. Calibration of existing sensors is not included.

12. Replacement of existing cracked or discolored fixture lenses is not included.

13. Any extra or spare parts are not included.

14. Lighting control acceptance testing is not included.

15. No dimmable ballasts are included in the Work.

16. Any room(s)/floor (s) or area not identified in Appendix 1 are not included

17. Repair, replacement or re-commissioning of existing damaged, defective, or obsolete motion sensors, time clocks, switches or energy management systems are not included.

18. The repair or replacement of fixture locking devices is not included. For example, tamperproof screws or locking fastener type lens or door frame.

1.2.2 Package Unit Replacement

Site	Mark	Capacity Tons	Type	Existing Make/Model
Public Works	AC 6	3	Package Unit	Make: Carrier Model: 48GXN036060501— Serial: 4704G51114
Public Works	AC 7	3	Package Unit	Make: Carrier Model: 48GXN036060501-- Serial: 4704G21282
Public Works	AC 8	5	Package Unit	Make: Carrier Model: 48GXN060090511-- Serial: 4904G11999
Public Works	AC 9	3.5	Package Unit	Make: Carrier Model: 48GXN042060501-- Serial: 2204G31400
Fire Station #5	AC-1	5	Package Unit	Make: Carrier Model: 48GSN-060-090301 Serial: 1404G31236
Fire Station #5	AC-2	5	Package Unit	Make: Carrier Model: 48GSN-060-090301 Serial: 1404G41552
Gem Theater	AC-3	6	Package Unit	Make: Carrier Model: 48TJD007--- 521-- Serial: 3098G21619
Gem Theater	AC-5	6	Package Unit	Make: Carrier Model: 48TJD007--- 521-- Serial: 1199G21264
Teen Center	AC-1	5	Split	Make: Payne Model: 5930j060-A Serial: 0292E00590
Magnolia Park Neighborhood Center	AC-1	3.5	Split	Make: Carrier Model: 38CKC042310 Serial: 2399E22922
Magnolia Park Neighborhood Center	AC-2	3	Split	Make: Carrier Model: 38CKC036--- 341--

				Serial: 2299E07859
Sports & Recreation Center	AC-1	25	Package Unit	Make: Carrier Model: 48HGF028AC-601AH Serial: 2404F39457
Sports & Recreation Center	AC-2	25	Package Unit	Make: Carrier Model: 48HGF028AC-601AH Serial: 2404F39458
Sports & Recreation Center	AC-3	12	Package Unit	Make: Carrier Model: 48HJD012---671-- Serial: 0105G40529
Sports & Recreation Center	AC-4	10	Package Unit	Make: Carrier Model: 48HJD009---651-- Serial: 3505G30754

SIEMENS will:

1. Provide necessary supporting documents for the Onsite Energy Corporation, Local Capacity Requirements ("LCR") rebate. Coordinate with Onsite Energy prior to installation for rebate pre-inspection if required. CLIENT will sign the Onsite Energy Corporation, LCR Customer Incentive Agreement before SIEMENS proceeds with the Work.
2. Provide required mechanical and electrical permits.
3. Work shall be performed in accordance with latest California adopted Codes, local codes and applicable ordinances having jurisdictions over this site.
4. Demo, remove and dispose of the existing packaged HVAC units listed above (including compressor oil and refrigerant per EPA guidelines). Disconnect existing electrical, piping and ductwork connections.
5. Modify existing pad as/if needed for ground mounted units. Provide curb adaptors as necessary for roof mounted units.
6. Furnish and install the new packaged HVAC replacement units ("New Units"), of the same size as existing unit, meeting 2016 Title 24 requirements. Existing units' sizes are listed above. New Units are to be of equal or lesser weight than the existing units.
7. Reconnect New Units to existing electrical wiring, piping and ductwork.
8. Provide for connection and termination of new copper condensate drain lines to nearest roof drain

9. Furnish and install new disconnect switches for the New Units.

10. Tie New Units to existing programmable SIEMENS' thermostats. If an existing thermostat is not a SIEMENS' thermostat, then replace with a new SIEMENS thermostat.

11. Provide commissioning/start-up for the New Units.

12. Provide air-flow measurements, at the supply and return for New Units. Verify post air flow matches pre measurements.

13. Provide as built drawings and O&M manuals in pdf

14. Work shall be performed during normal business hours (Monday through Friday 7:00 am to 5:00 pm).

Assumptions:

1. Existing piers that the existing packaged units are set on are attached to the roof structure

Exclusions and Clarifications:

1. Permit fees are excluded. City to waive fees

2. Since the incentives are paid for by a third party, SIEMENS cannot guarantee the incentives, but will provide work necessary in a timely manner to help to secure the funds. The CLIENT acknowledges that: (i)any incentive that may be available to the CLIENT to pay the costs of the work will be granted by a third party outside the control of SIEMENS; and (ii) lack of availability of such incentives shall not relieve the CLIENT of its payment obligations under this Agreement.

3. The Work does not include any ADA upgrades.

4. Removal or installation of fire life safety equipment is excluded. SIEMENS will coordinate with CLIENT's consultant for any work related to SIEMENS' Work.

5. Major structural work such as reinforcing of structural members below the roof line is excluded from the cost of the project.

6. SIEMENS is not responsible for clearance requirements.

7. Any Hazardous Materials at the project site shall be treated in accordance with Article 11 of the Performance Contracting Agreement. All areas that contain Hazardous Materials must be tagged by CLIENT.

8. Painting and patching not related to SIEMENS' Work is excluded.

9. Repair of any faulty or non-code compliant wiring is excluded.
10. No testing and air balancing for any unit other than the New Units is included.
11. No premium time hours are included. Premium time includes all hours before 7 a.m. and after 5 p.m. Monday-Friday.
12. No repair or replacement of existing ductwork is included
13. SIEMENS is not responsible for remedying any pre-existing comfort conditions due to under-sizing of existing equipment. SIEMENS' scope assumes that the units are adequately sized for current loads to maintain comfort conditions, and no additional load calculations were performed.
14. SIEMENS is not responsible for remedying any existing duct leakage issues in the building.
15. Repair/replacement of any damaged structural membranes caused by water, or repair/replacement of any other latent damage to existing structural members is not included.
16. Any work related to the insulation outside the ductwork is not included.
17. The Work does not include responsibility for system design deficiencies, including but not limited to poor air distribution, water flow imbalances, system equipment and component obsolescence, electrical failures, unserviceable equipment, and operating the system(s).

1.2.3 Chiller Replacement

Location	Mark	Type	Capacity Ton	Existing Make/Model
City Hall	CH-1	Water-Cooled Chiller; Screw	118	Carrier Model # 30HXC126RYE540AA Serial # 3202Q01883

1. Provide necessary supporting documents for the Onsite Energy Corporation, Local Capacity Requirements ("LCR") rebate. Coordinate with Onsite Energy prior to installation for rebate pre-inspection if required. Client will sign the Onsite Energy Corporation, LCR Customer Incentive Agreement before SIEMENS can proceed on the Work.
2. Provide required mechanical and electrical permits.
3. Work shall be performed in accordance with 2016 Title 24 and latest California adopted Codes, local codes and applicable ordinances having jurisdictions over this site.

4. Provide inspection, calibration and verification of performance of the refrigerant monitoring system.
5. Dismantle and remove the above existing chiller from site, haul away and dispose.
6. Furnish and install new energy efficient water cooled chiller, equal in size to the existing chiller. Chiller will be set on neoprene pads to match existing conditions
7. Modify existing concrete pad as/if needed per requirements of new chiller.
8. Connect to existing supply and return piping.
9. Provide and install new disconnect and connect to existing 208V electrical service.
10. Provide start up and commissioning of the new chiller. Provide pre-replacement measurements of water flow at chiller supply and return. Verify that post-replacement measurements of water flow match the pre-replacement measurements.
11. Provide as built drawings and O&M manuals in pdf
12. Work to be performed during non-regular business hours (Friday-Sunday, Holidays)

Exclusions and Clarifications:

1. Permit fees will be excluded. City to waive fees
2. Since the incentives are paid for by a third party, SIEMENS cannot guarantee the incentives, but will provide work necessary in a timely manner to help to secure the funds. The CLIENT acknowledges that: (i) any incentive that may be available to the CLIENT to pay the costs of the work will be granted by a third party outside the control of SIEMENS; and (ii) lack of availability of such incentives shall not relieve the CLIENT of its payment obligations under this Agreement.
3. Any Hazardous Materials at the Project site shall be treated in accordance with Article 11 of the Performance Contracting Agreement. All areas that contain Hazardous Materials must be tagged by CLIENT.
4. Full replacement of the refrigerant monitoring system is excluded.
5. Provisions for temporary cooling are not included.
6. Provisions for temporary power are not included.
7. Repair of any faulty or non-code wiring not included.
8. SIEMENS is not responsible for remedying any preexisting comfort conditions due to undersizing of existing equipment. SIEMENS' scope assumes that the

chiller is adequately sized for current load to maintain comfort conditions, and no additional sizing calculations were performed.

9. Connections to existing fire/smoke alarm system or removal and installation of fire life safety equipment are not included. SIEMENS will coordinate with CLIENT's consultant for any work related to SIEMENS Work.
10. The Work does not include responsibility for system design deficiencies, including but not limited to poor air distribution, water flow imbalances, system equipment and component obsolescence, electrical failures, unserviceable equipment and operating the system(s).

1.2.4 Boiler Replacement

Location	Type	Existing Make/Model
Police Department	Hi Delta Hydronic Boiler	Raypak Model # H9-1262 Serial # 0210199847

1. Work shall be performed in accordance with 2016 Title 24 and latest California adopted Codes, local codes and applicable ordinances having jurisdictions over this site.
2. Provide required mechanical and electrical permits.
3. Dismantle and remove the above existing boiler from site, haul away and dispose.
4. Provide and install new boiler to match existing capacity meeting applicable codes.
5. Modify existing pad as/if needed per requirements of new boiler.
6. Provide and install new disconnect and connect to existing electrical service.
7. Connect new boiler to existing outgoing and incoming piping, pumps, gas lines and condensate lines.
8. Connect new boiler to existing SIEMENS' energy management system.
9. Provide for start-up and commissioning of the new boiler. Provide pre-replacement measurements of water flow at the boiler supply and return. Verify that post-replacement measurements of water flow match the pre-replacement measurements.
10. Provide as built drawings and O&M manuals in pdf

11. Work to be performed during the weekends

Exclusions and Clarifications:

1. Permit fees are excluded. City to waive fees
2. Provisions for temporary heating are not included.
3. Provisions for temporary power are not included.
4. Any Hazardous Materials at the Project site shall be treated in accordance with Article 11 of the Performance Contracting Agreement. All areas that contain Hazardous Materials must be tagged by CLIENT.
5. Repair of any faulty or non-code wiring or remediation of any existing defective piping are excluded.
6. Connections to existing fire/smoke alarm system or removal and installation of fire life safety equipment are not included. SIEMENS will coordinate with CLIENT's consultant for any work related to SIEMENS' Work.
7. SIEMENS is not responsible for remedying any preexisting comfort conditions due to undersizing of existing equipment. SIEMENS' scope assumes that the boiler is adequately sized for current loads to maintain comfort conditions, and no additional load calculations were performed.
8. The Work does not include responsibility for system design deficiencies, including but not limited to poor air distribution, water flow imbalances, system equipment and component obsolescence, electrical failures, unserviceable equipment, and operating the system(s), unless otherwise stated in this Work.

1.2.5 Refurbish AHUs

Location	Mark	Existing Make/Model
City Hall-Mech Room	AC-1	PACE 36AF
City Hall-Mech Room	MZ-1	PACE A20-AF
Police Department- Penthouse	AH-1	Thermal MT 501-H

1. Provide necessary supporting documents for rebates to the appropriate agencies. Coordinate with rebate providers prior to installation for rebate pre-inspection if required.

2. For the City Hall AC-1, confirm existing fan size is adequate by performing a CFM load calculation. If the fan size is not adequate Siemens has included an allowance to increase the CFM from 34,500 to 40,000.
3. Recondition existing dampers on outside air, return air and exhaust air. Provide new linkages where broken or beyond repair
4. Install new electrical actuators for the outside air, return air and mixed air dampers
5. Remove existing filters and provide new higher efficiency filters.
6. Provide and install new supply fan for the City Hall-AC-1 by removing and reinstalling the existing louvers, dampers.
7. Refurbish the return fan for the City Hall-AC-1 by cleaning the fan wheel and replacing the shaft, bearings and wire wheeling.
8. Provide and install inverter rated premium efficiency motors for the supply fan and return fan
9. Lubricate fan and motor bearings for MZ-1 and PD AH-1
10. Replace belts and sheaves for MZ-1 and PD AH-1
11. Clean AHU coils, condensate drain lines and condensate pan for MZ-1 and PD AH-1.
12. For City Hall AC-1, replace cooling coils and drain pan. Reconnect new drain pan to existing drain line.
13. Install new control valves for chilled water and hot water to air handling unit coils
14. Replace any damaged insulation of chilled water and/or hot water piping within the mechanical room
15. Provide air-flow measurements, at the supply and return for the AHU's. Verify post-refurbishment air flow matches pre-refurbishment measurements.
16. Provide for start-up and commissioning of the unit and VFD.
17. SIEMENS proposal is contingent upon the refurbishment of both AHUs serving City Hall being performed over the same weekend.
18. Work to be performed during non-regular business hours (Friday-Sunday, Holidays).

Exclusions and Clarifications:

1. Since the incentives are paid for by a third party, SIEMENS cannot guarantee the incentives, but will provide work necessary in a timely manner to help to secure the funds. The CLIENT acknowledges that: (i) any incentive that may be available to the CLIENT to pay the costs of the work will be granted by a third party outside the control of SIEMENS; and (ii) lack of availability of such incentives shall not relieve the CLIENT of its payment obligations under this Agreement.
2. Provisions for temporary heating/cooling are not included.
3. Provisions for temporary power are not included.
4. Any Hazardous Materials at the Project site shall be treated in accordance with Article 11 of the Performance Contracting Agreement. All areas that contain Hazardous Materials must be tagged by CLIENT.
5. Repair of any faulty or non-code wiring or remediation of any existing defective piping are not included.
6. Connections to existing fire/smoke alarm system or removal and installation of fire life safety equipment are not included. SIEMENS will coordinate with CLIENT's consultant for any work related to SIEMENS' Work.
7. SIEMENS is not responsible for remedying any preexisting comfort conditions.
8. The Work does not include responsibility for system design deficiencies, including but not limited to poor air distribution, water flow imbalances, system equipment and component obsolescence, electrical failures, unserviceable equipment and operating the system(s), unless otherwise stated in this Work.
9. No permits are anticipated or included for the Work.

1.2.6 SIEMENS DESIGO Controls System

1. CLIENT to provide a port and Network IP Assignment (IP Address, Subnet Mask, Default Gateway) at each building. This is a pre-requisite for SIEMENS to connect the new controller to the existing SIEMENS BAS.
2. Migrate Staefa Talon Control System to SIEMENS Desigo Automation System at the City Hall
    - VAV Boxes
        - Demo and remove existing Staefa control devices at the VAV boxes listed below.
        - Furnish and install new SIEMENS zone controllers for the VAV boxes listed below.

- Furnish and install new sensors for zone controllers including:
  - ❖ VAV damper actuators at the VAV box
  - ❖ Hot water valves at the VAV box (only if broken)
  - ❖ Room temperature sensors

List of Zone Controllers- City Hall

Location	Equipment
1st Floor	VAV1-1 to VAV1-37, HP-1, HP-2
2nd Floor	VAV2-1 to VAV2-30, CAC-1, CAC-2
3rd Floor	VAV3-1 to VAV3-30

- Mechanical Equipment
  - Demo and remove existing Staefa control devices at the mechanical equipment listed below.
  - Furnish and install new SIEMENS controllers for the mechanical equipment listed below.
  - AH-1 and MZ-2: Install new control valves for chilled water and hot water to air handling unit coils. Install new actuators and sensors for both air handling units.
  - Cooling Tower: Install new temperature sensors
  - Chiller: Install new DP and temperature sensors
  - Boiler: Install new temperature sensors
  - For remaining sensors not listed above, reuse existing sensors for the mechanical equipment. SIEMENS has included an allowance of 20% for failed sensors. If there are any failed sensors beyond the 20% allowance, SIEMENS shall provide unit pricing to CLIENT for approval.
- Integrate all existing and new devices (based on the list of equipment below) include wiring and termination to the new Desigo™ Automation System
- Program the energy efficient sequence/parameters provided in Exhibit C, Article 7.
- Provide new computer and install Desigo CC application
- Provide start up and commissioning

- Develop standard application graphics

List of Equipment-City Hall

Equipment	Location
Single Duct VAV Air Handling Unit (AH-1)	Penthouse
Dual Duct-Multi Zone-VAV Air Handling Unit (MZ-2)	Penthouse
Boiler (B-1)	Penthouse
Chiller (CH-1)	Penthouse
Cooling Tower (CT-1)	Penthouse
Condenser Water Pump (CWP-1)	Penthouse
Chilled Water Pump (CHWP-1)	Penthouse
Hot Water Pump (HWP-1)	Penthouse
Fan Coil Unit (FCU-1)	TBD
Fan Coil Unit (FCU-2)	TBD
Fan Coil Unit (FCU-3)	TBD
Fan Coil Unit (FCU-4)	TBD
Split Unit	Roof/IT Room
Wall Mount Airflow Unit	IT Room
Wall Mount Airflow Unit	Traffic Equipment Room

3. Provide new SIEMENS Desigo Automation System at the following buildings

Building	# of Units	Unit Numbers
Juvenile Justice	4	AC-1, AC-2, AC-3, AC-4
Property & Evidence Building	4	AC-1, F1, F-2, F-3
Fire Station #5	2	AC-1, AC-2
Fire Station #6	6	AC-1 to AC-6
Fire Station #7	1	AC-1
Public works	14	AC 1-14
Buena Clinton Youth & Family Center	8	SHP 1-2, 4, 5A-5B HP 7-8,10

Courtyard Center/ Activity Center	5	Courtyard AC-1, AC-2, AC-3, AC-4, Activity AC-1
Police Annex	4	AC-1, AC-2, AC-3, AC-4
Magnolia Park Neighborhood Center	2	AC-1, AC-2
Festive Amphitheatre	2	AC-1, AC-2
Teen Center	1	AC-1
Community Service Center	1	AC-1

- CLIENT to provide a port and Network IP Assignment (IP Address, Subnet Mask, Default Gateway) at each building. This is a pre-requisite for SIEMENS to connect the new controller to the existing SIEMENS BAS.
- Demo and remove existing control panels including package unit controllers
- Furnish and install new SIEMENS controllers including package unit controllers
- Furnish and install new room temperature sensors for the equipment listed above
- Integrate new controllers and sensors for the equipment listed above. Include wiring and termination to the new Desigo™ Automation System
- Program the energy efficient sequence/parameters provided in Exhibit C, Article 7.
- Provide start up and commissioning
- Develop standard application graphics

4. Relocate existing thermostat to hall way at Fire Station #2

5. Control sensor testing of AHU-1 at the Police Department

- Perform functional testing of control sensors for AHU-1
- Review findings with CLIENT and coordinate schedule for replacement of failed sensors (temperature, humidity, pressure), if any. If there are any failed valves or actuators, proposal for a change order will presented to CLIENT for approval.
- If the CLIENT approves the change order proposal and provided that the Project savings are sufficient to cover additional costs, furnish and install new valves and actuators

- Integrate any new devices, include wiring and termination to the automation system
- Program the energy efficient sequence/parameters provided in Exhibit C, Article 7.
- Provide start up and commissioning
- Develop standard application graphics

6. Connect new boiler to the existing SIEMENS Energy Management System.
7. Migrate Insight at the Public Works SIEMENS' central workstation to Desigo CC.
8. Work shall be performed during normal business hours (Monday through Friday 7:00 am to 5:00 pm). Weekends or overtime hours are not included in our labor assumptions.
9. Provide as-built drawings for customer records

Assumptions:

1. SIEMENS will utilize all existing conduits.

Exclusions and Clarifications

1. Desigo training will not be included in this contract because CLIENT has an existing service contract with SIEMENS which includes 3 classes per year.
2. No permits or inspection fees are anticipated or provided for the controls Work.
3. Changes in proposed scope and delays in schedule due to any repairs or other issues in existing equipment, access to facility, employee clearance or other undetermined schedules will be treated in accordance with Section 7.1 of the Performance Contacting Agreement.
4. Smoke control or dampers of any kind are not included. SIEMENS will coordinate with CLIENT's consultant for any work related to SIEMENS' Work.
5. No new 120V power wiring is included (SIEMENS to tap off existing 120V power wiring)
6. Control or wiring of equipment not listed above is excluded
7. Conduit stub ups for VAV zone room thermostats are excluded
8. Air / Water Balancing of any equipment not described in this scope of Work is excluded.

9. Integration to third party systems is excluded
10. No premium time hours are included. Premium time includes weekends, holidays and all hours before 7 a.m. and after 5 p.m. Monday-Friday.
11. Correction of existing code violation is excluded
12. Patching and painting of any surfaces is excluded

1.2.7 Plug Load Management

1. Provide Bert smart plugs for the equipment as shown in Appendix 2.
    a) Bert Control automatically turns off loads during nights, weekends and holidays when buildings are unoccupied based on the schedule provided by the City.
    b) Bert Smart plugs are limited to the equipment specifically shown in Appendix 2.
2. Plug load management scope is contingent upon CLIENT providing all necessary IT requirements (hardware, software, remote access, etc) as stated in the BERT Pre-Installation Software and Network setup guide. See Appendix 3.
3. Plug load management will occur at the following locations.

Location	Address
City Hall	11222 Acacia Parkway, Garden Grove CA 92840
Buena Clinton	12661 Sunswept Ave, Garden Grove CA 92843
Municipal Service Center	13802 Newhope St., Garden Grove CA 92843
Community Meeting Center, H. Louis Lake Senior Center	11300 Stanford Ave, Garden Grove CA 92840

4. Provide link to the BERT website within the SIEMENS control system
5. Work shall be performed during normal business hours (Monday through Friday 7:00 am to 5:00 pm). Weekends or overtime hours are not included in our labor assumptions.

Exclusions:

1. Since the incentives are paid for by a third party, SIEMENS cannot guarantee the incentives, but will provide work necessary in a timely manner to help to secure the funds. The CLIENT acknowledges that: (i)any incentive that may be available to the CLIENT to pay the costs of the work will be granted by a third party outside the control of SIEMENS; and (ii) lack of availability of such incentives shall not relieve the CLIENT of its payment obligations under this Agreement.
2. No premium time hours included.
3. No permits are anticipated or included for the Plug Load Work.

1.3 *Technical Specifications, Drawings, and Exhibits:* The Work shall be performed in accordance with the following specifications, drawings and other attachments hereto, which are specifically incorporated herein and made part hereof:

1.3.1 Appendix 1: Lighting Audit
1.3.2 Appendix 2: Plug Load Audit
1.3.3 Appendix 3: BERT Pre-Installation Software and Network setup guide
1.4 CLIENT'S Responsibilities (in addition to those in Article 6 of the Agreement):

1.4.1 CLIENT will provide access to any area that contains equipment to be measured and/or verified.

Article 2: Work Implementation Period

2.1 Commencement of Work (select **one**):

2.1.1 ☐ SIEMENS shall commence the Work on _____, 20__, and shall perform the Work diligently and shall complete the Work no later than _____, 20__;

or,

2.1.1 ☒ SIEMENS shall commence the Work 45 calendar days from the Effective Contract Date, and shall perform the Work diligently and shall complete the Work no later than 365 calendar days from the day of commencement.

Article 3: Scope of Services-Performance Assurance Services Program

3.1 SIEMENS will manage the Performance Guarantee consistent with the Agreement and Exhibit C. SIEMENS will provide an Annual Performance Assurance Report ninety (90) days after the end of each Annual Period.

3.2 Performance Assurance Services are all labor activities, site visits, monitoring and analyses necessary to calculate the Realized Annual Savings achieved by the Project, and to prepare and present the Annual Performance Assurance Report for the respective Annual Period.

3.3 Each Annual Performance Assurance Report shall include:

3.3.1 The Measured and Verified Savings for the respective Annual Period, including supporting documentation required to complete the Measurement and Verification Plan outlined in Article 4, Exhibit C of this Agreement.

3.3.2 The Realized Annual Savings achieved by the Project for each respective Annual Period.

3.3.3 A comparison of the Accumulated Realized Savings and Accumulated Guaranteed Savings to determine whether there is a Savings Shortfall for the respective Annual Period, pursuant to Article 4 of the Performance Contracting Agreement.

Article 4: Scope of Services-Maintenance Services Program

(Please check one box only)

☒ CLIENT has elected to self-implement maintenance. Therefore SIEMENS shall not perform any on-going maintenance services, although the Parties may negotiate a separate agreement for such services at a later date. CLIENT agrees that it will maintain the equipment per manufacturer specifications and that it will operate the Equipment in accordance with the Contracted Baseline described in Article 7 of Exhibit C. If CLIENT fails to properly maintain or operate the Equipment, SIEMENS shall have the right to modify the Performance Guarantee pursuant to Article 4 of the Agreement.

☐ The follow consists of the Services to be performed by SIEMENS:

4.1

4.2

By signing below, this Exhibit is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT:	**City of Garden Grove**	**SIEMENS:**	**Siemens Industry, Inc.**
Signature:	_____	Signature:	_____
Printed Name:	_____	Printed Name:	_____
Title:	_____	Title:	_____
Date:	_____	Date:	_____
		Signature:	_____
		Printed Name:	_____
		Title:	_____
		Date:	_____

Article 1: Payment for Scope of Work

1.1 **Price:** As full consideration of the Work as described in Exhibit A, Article 1: Scope of Work, the CLIENT shall pay to SIEMENS **$2,846,439** (plus taxes, if applicable).

1.2 **Sufficient Funds**: The CLIENT warrants and represents that: (i) it possesses sufficient funds to pay in full the amount set forth in Section 1.1 above; (ii) such funds are on deposit with the City of Garden Grove Treasurer, and (iii) such funds have been specifically dedicated to the Project and shall not be used for any other purpose.

1.3 **Timely Payments:** The CLIENT agrees to pay SIEMENS per Table B.1 below. CLIENT agrees to pay all invoices submitted by SIEMENS per Article 8 of the Agreement.

Table B.1 – FIM Work Payment Schedule

Project Phase	Payments ($)	Payments (%)	Schedule
Mobilization		25%	
Project Installation		70%	Billed monthly as POC
Project Retention		5%	
PROJECT TOTAL:		100%	$2,846,439

Article 1 of Exhibit B is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT: **City of Garden Grove**

Signature: _____
Printed Name: _____
Title: _____
Date: _____

SIEMENS: **Siemens Industry, Inc.**

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Article 2: Payment for Performance Assurance Services Program (PASP)

2.1 **Price:** As full consideration of the Services as described in Exhibit A, Article 3, the CLIENT shall pay to SIEMENS the amounts identified in Table B.2 plus taxes, if applicable, on the dates identified therein.

2.2 **Performance Assurance Services Program Term:** The term of the PASP shall commence on the Guarantee Date and shall extend for either: (a) the term of the Performance Guarantee Period where multi-year obligations are allowed; or (b) for twelve (12) month periods corresponding to the term of each Annual Period.

2.3 **Automatic Renewal:** Where the PASP term is limited to an Annual Period, the PASP shall automatically renew for successive Annual Periods beginning on the anniversary date of Guarantee Date. Either party may request to amend the PASP at the end of an Annual Period by giving the other party at least sixty (60) days prior written notice of such amendments and such amendment shall be mutually negotiated by the Parties and effective upon a written amendment signed by both Parties prior to commencement of the next Annual Period. Each automatic renewal shall be and remain subject to the terms and conditions of this Agreement. SIEMENS obligations under the Performance Guarantee are dependent upon and subject to the express condition that the CLIENT maintains the PASP during the entire Performance Guarantee Period.

2.4 **Termination**: See Section 4.7 of the Agreement.

Table B.2 – Performance Assurance Program Payment Schedule

Date	Annual Payments ($) *	Notes
Annual Period 1	$ 20,718	Billed at project acceptance
Annual Period 2	$ 21,340	Billed at 1st anniversary of project acceptance
Annual Period 3	$ 21,980	Billed at 2nd anniversary of project acceptance
Annual Period 4	$ 22,639	Billed at 3rd anniversary of project acceptance
Annual Period 5	$ 23,318	Billed at 4th anniversary of project acceptance
Annual Period 6	$ 24,018	Billed at 5th anniversary of project acceptance
Annual Period 7	$ 24,738	Billed at 6th anniversary of project acceptance
Annual Period 8	$ 25,481	Billed at 7th anniversary of project acceptance
Annual Period 9	$ 26,245	Billed at 8th anniversary of project acceptance
Annual Period 10	$ 27,032	Billed at 9th anniversary of project acceptance
Annual Period 11	$ 27,843	Billed at 10th anniversary of project acceptance
Annual Period 12	$ 28,679	Billed at 11th anniversary of project acceptance
Annual Period 13	$ 29,539	Billed at 12th anniversary of project acceptance
Annual Period 14	$ 30,425	Billed at 13th anniversary of project acceptance
Annual Period 15	$ 31,338	Billed at 14th anniversary of project acceptance
Annual Period 16	$ 32,278	Billed at 15th anniversary of project acceptance
Annual Period 17	$ 33,246	Billed at 16th anniversary of project acceptance
Annual Period 18	$ 33,246	Billed at 17th anniversary of project acceptance
Annual Period 19	$ 33,246	Billed at 18th anniversary of project acceptance

*3% escalation annually

Article 2 of Exhibit B is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT:	**City of Garden Grove**	**SIEMENS:**	**Siemens Industry, Inc.**
Signature:	_____	Signature:	_____
Printed Name:	_____	Printed Name:	_____
Title:	_____	Title:	_____
Date:	_____	Date:	_____
		Signature:	_____
		Printed Name:	_____
		Title:	_____
		Date:	_____

Articles and Tables

The following Articles and Tables are hereby included and made part of this Exhibit C:

Article 1	Total Guaranteed Savings
Article 2	Measurement and Verification Options
Article 3	Performance Guarantee Period Responsibilities of CLIENT
Article 4	Measurement and Verification Plan
Article 5	Baseline Data
Article 6	Utility Rate Structures and Escalation Rates
Article 7	Contracted Baseline Data
Appendix 1-	Lighting Audit
Appendix 2-	Plug Load Audit
Appendix 3-	BERT Pre-Installation Software and Network setup guide

This Exhibit C provides the methodology to be used to determine the Annual Realized Savings and the reconciliation of these calculated Savings with the Guaranteed Annual Savings for each Annual Period of the Performance Guarantee Period. The Scope of Services for the Performance Assurance Service Program is provided in Article 3 of Exhibit A.

Article 1: Total Guaranteed Savings

Table 1.1 – Total Guaranteed Savings (Units)

Performance Period	Electric Energy Saved (kWh)	Electric Power Saved (kW)	Natural Gas Saved (Therms)
Construction	457,701	58.4	
Annual Period 1	1,213,659	127.1	3969.1

1.1 Only Annual Period 1 is shown as the energy/utility unit Savings will remain constant for each Annual Period of the Performance Guarantee Period as the CLIENT will operate the Facility in accordance with the Contracted Baseline identified in Article 7.

Table 1.2 – Total Guaranteed Savings (Cost)

Performance Period	Energy/Utility Savings	Operational Savings	Total Savings
Construction	$53,261	$6,719	$59,980
Annual Period 1	$136,030	$11,816	$147,846
Annual Period 2	$141,471	$12,170	$153,641
Annual Period 3	$147,130	$12,535	$159,665
Annual Period 4	$153,015	$12,911	$165,927
Annual Period 5	$159,136	$13,299	$172,435
Annual Period 6	$165,501	$13,698	$179,199
Annual Period 7	$172,121	$14,109	$186,230
Annual Period 8	$179,006	$14,532	$193,538
Annual Period 9	$186,166	$14,968	$201,134
Annual Period 10	$193,613	$15,417	$209,030

Annual Period 11	$201,357	$15,879	$217,237
Annual Period 12	$209,412	$16,356	$225,768
Annual Period 13	$217,788	$16,846	$234,635
Annual Period 14	$226,500	$17,352	$243,852
Annual Period 15	$235,560	$17,872	$253,432
Annual Period 16	$244,982	$18,409	$263,391
Annual Period 17	$254,781	$18,961	$273,742
Annual Period 18	$264,973	$19,530	$284,502
Annual Period 19	$275,572	$20,116	$295,687
TOTALS	**$3,817,376**	**$303,495**	**$4,120,870**

1.2 Table 1.2 shows the CLIENT'S guaranteed cost Savings for each Annual Period that are extrapolated from the guaranteed energy/utility unit Savings shown in Table 1.1 by multiplying the energy/utility Savings by the Baseline energy/utility rates including the stipulated Escalation Rates found in Article 6.

1.3 SIEMENS cannot and does not predict fluctuations in utility rates or the cost of energy. Therefore, the CLIENT and SIEMENS agree that the energy/utility cost Savings for each Annual Period will be calculated by multiplying the verified units of energy/utility Savings by the Annual Period's stipulated energy/utility rate and Escalation Rates and not the Annual Period's actual utility rate.

1.4 The determination of energy/utility Savings will follow current best practice, as defined in the IPMVP, or the FEMP Guidelines where required, unless otherwise agreed to by the Parties.

1.5 The Performance Guarantee does not operate to guarantee the Savings per-FIM. Rather, the calculation of Savings is based on aggregate performance of all of the FIMs contained in the Project. The projected value of such aggregate performance is contained in Table 1.2 above representing the Total Guaranteed Savings as monetized.

This Exhibit C, comprising 39 pages, is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT: **City of Garden Grove**

Signature: _____
Printed Name: _____
Title: _____
Date: _____

SIEMENS: **Siemens Industry, Inc.**

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Article 2: Measurement and Verification Options

2.1 Measurement and Verification Options: There are five measurement and verification options to measure and verify energy/utility Savings: Option A - Retrofit Isolation: Key Parameter Measurement; Option B - Retrofit Isolation: All Parameter Measurement; Option C - Whole Facility; and, Option D – Calibrated Simulation. Options A through and including D are part of the IPMVP. Option E-Stipulated is based on industry accepted engineering standards and is the Option used for purposes of calculating Operational Savings.

Option A - Retrofit Isolation: Key Parameter Measurement. Savings are determined by field measurement of the key performance parameter(s) which define the energy use of the FIM's affected system(s) and/or the success of the Project. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the measured parameter and the length of the reporting period. Parameters not selected for field measurement are estimated. Estimates can be based on historical data, manufacturer's specifications, or engineering judgment. Documentation of the source or justification of the estimated parameter is required. The plausible savings error arising from estimation rather than measurement is evaluated. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option B – Retrofit Isolation: All Parameter Measurement. Savings are determined by field measurement of the energy use of the FIM-affected system. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the savings and the length of the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option C - Whole Facility: Savings are determined by measuring energy use at the whole Facility or sub-Facility level. Continuous measurements of the entire Facility's energy use are taken throughout the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option D - Calibrated Simulation: Savings are determined through simulation of the energy use of the whole Facility, or of a sub-Facility. Simulation routines are demonstrated to adequately model actual energy performance measured in the Facility. This Option usually requires considerable skill in calibrated simulation. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option E – Stipulated: This Option is the method of measurement and verification applicable to FIMS consisting either of Operational Savings or where the end use capacity or operational efficiency; demand, energy consumption or power level; or manufacturer's measurements, industry standard efficiencies or operating hours are known in advance, and used in a calculation or analysis method that will stipulate the outcome. Both CLIENT and SIEMENS agree to the stipulated inputs and outcome(s) of the analysis methodology. Based on the established analytical methodology the Savings stipulated will be achieved upon completion of the FIM and no further

measurements or calculations will be performed during the Performance Guarantee Period. If applicable, the methodology and calculations to establish Savings value will be defined in Section 4.6 of this Exhibit C.

2.2 Table 2.1 below summarizes the first Annual Period's Guaranteed Savings (See Article 1, Tables 1.1 and 1.2) utilizing the applicable Measurement and Verification Options as applied to the referenced FIMs valued pursuant to the agreed upon amounts identified in Article 6 hereof.

Table 2.1 – Savings for First Annual Period by Option

FIM	Energy/Utility Savings $						Operational Savings $	Total Savings $
	Measurement and Verification Options							
	A Retrofit Isolation: Key Parameter Measurement	B Retrofit Isolation: All Parameter Measurement	C Whole Facility	D Calibrated Simulation	E Stipulated	Total Energy/Utility Savings	E Stipulated	
Package Unit Replacement	$13,379					$13,379		$13,379
Boiler Replacement	$962					$962		$962
Chiller Replacement	$9,856					$9,856		$9,856
Refurbish AHU's	$16,555					$16,555		$16,555
Lighting Retrofit	$93,656					$93,656	$ 11,816	$105,472
Plug Load	$716					$716		$716
Controls	$906					$906		$906
TOTALS	**$136,030**					**$136,030**	**$ 11,816**	**$147,846**

2.3 Table 2.2 identifies the source of Operational Savings defined and quantified by the Parties. The Parties affirm that such amounts are Stipulated Savings for purposes of calculating Annual Realized Savings and acknowledge that the Guaranteed Savings identified herein have been based on CLIENT'S affirmation. **OPERATIONAL SAVINGS SHALL NOT BE MEASURED OR MONITORED DURING THE PERFORMANCE GUARANTEE PERIOD.**

Table 2.2 - Source of Operational Savings

Account/Vendor	Description	Annual Cost $	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
City of Garden Grove	Interior and Exterior Lighting material replacements (Lamp, Ballasts and recycling maintenance cost reductions)	$ 11,816	17	Construction Year

2.4 SIEMENS has explained to the CLIENT and the CLIENT has satisfied itself as to how Operational Savings are incorporated into the Annual Realized Savings.

2.5 The Escalation Factor applicable to the Operational Savings is 3%.

BY SIGNING BELOW, THE PARTIES CONFIRM THAT THEY HAVE REVIEWED THE INCLUDED MEASUREMENT AND VERIFICATION OPTIONS AND THEIR APPLICATION TO BE USED IN CALCULATING SAVINGS UNDER THE AGREEMENT.

CLIENT:	**City of Garden Grove**	**SIEMENS:**	**Siemens Industry, Inc.**
Signature:	_____	Signature:	_____
Printed Name:	_____	Printed Name:	_____
Title:	_____	Title:	_____
Date:	_____	Date:	_____
		Signature:	_____
		Printed Name:	_____
		Title:	_____
		Date:	_____

Article 3: Performance Guarantee Period Responsibilities of the CLIENT
In addition to the CLIENT'S responsibilities under Article 6 of the Agreement, this Article details the responsibilities of the CLIENT in connection with the management and administration of the Performance Guarantee.

3.1 The CLIENT will provide a representative at each Facility to coordinate work and provide required data described below.

3.2 The CLIENT will provide SIEMENS with accurate Facility operating information as defined below and in the Contracted Baseline article of this Exhibit C during each Annual Period, within thirty (30) days of any Material Change that may increase or decrease energy usage.

3.3 If applicable, the CLIENT will provide SIEMENS with copies of utility bills within thirty (30) days of receipt by the CLIENT or provide access to utility vendor information to allow SIEMENS to include a utility bill analysis in the Annual Performance Assurance Report. The utility bill analysis does not take the place of the Measurement and Verification Plan identified in Article 4 of this Exhibit C and is not used to measure the Project's performance.

3.4 If required for the Work, CLIENT will provide telephone/data remote access, through SIEMENS Insight® software package or otherwise, as SIEMENS reasonably requests. All charges related to telephone/data line installation, activation and communication services are the responsibility of the CLIENT.

3.5 If required for the Work, CLIENT will provide and coordinate utility meter upgrade for interface with SIEMENS metering and data collection. All charges related for these upgrades are the responsibility of the CLIENT.

Article 4: Measurement and Verification Plan

The following information is applicable to this Agreement:

Article 4.1 General Overview
Article 4.2 Option A - Retrofit Isolation: Key Parameter Measurement
Article 4.3 Option B - Retrofit Isolation: All Parameter Measurement
Article 4.4 Option C - Whole Facility
Article 4.5 Option D - Calibrated Simulation
Article 4.6 Option E – Stipulated-Energy/Utility Savings

4.1 **General Overview –**

The purpose of the Measurement and Verification (M&V) Plan is to identify the methods, measurements, procedures and tools that will be used to verify the Savings for each FIM which has energy/utility Savings. Savings are determined by comparing prior usage, consumption or efficiencies (defined as the "Baseline") against the post-FIM implementation usage, consumption or efficiencies. The Baseline usage, consumption or efficiencies are described in this Exhibit C, Article 5. The post-FIM implementation usage, consumption or efficiencies is defined as the Contracted Baseline and are described in this Exhibit C, Article 7.

4.2 **Option A - Retrofit Isolation: Key Parameter Measurement**

4.2.1 Lighting Upgrade

Location(s):

Location	Address
Police Station	11301 Acacia Parkway, Garden Grove CA 92840
Juvenile Justice	11301 Acacia Parkway, Garden Grove CA 92840
Property & Evidence	11301 Acacia Parkway, Garden Grove CA 92840
Police Annex	11400 Stanford Ave, Garden Grove CA 92840
City Hall	11222 Acacia Parkway, Garden Grove CA 92840
Gem Theatre	12852 Main st. Garden Grove CA 92840
Amphitheatre	12762 Main St, Garden Grove CA 92840
Courtyard Center + Activity Center	12732 Main st. Garden Grove, CA 92840
Community Meeting Center, H. Louis Lake Senior Center	11300 Stanford Ave, Garden Grove CA 92840
Buena Clinton	12661 Sunswept Ave, Garden Grove CA 92843

Municipal Service Center	13802 Newhope St., Garden Grove CA 92843
Fire Station #1	11301 Acacia Parkway, Garden Grove CA 92840
Fire Station #2	11805 Gilbert st., Garden Grove CA 92841
Fire Station #3	12132 Trask ave., Garden Grove CA 92843
Fire Station #4	12191 Valley View st., Garden Grove CA 92845
Fire Station #5	12751 Western ave., Garden Grove CA 92841
Fire Station #7	14162 Forsyth Ln, Garden Grove CA 92844
Sports and Rec + Pump house	9301 Westminister blvd, Garden Grove CA 92844
Atlantis	9301 Westminster ave. Garden Grove CA 92844
Garden Grove Park (not including Musco/Stadium lighting)	9301 Westminister blvd, Garden Grove CA 92844
Chapman Sports Complex (not including Musco/Stadium lighting)	11990 Knott St, Garden Grove CA 92841
Woodbury Park	13800 Rosita pl., Garden Grove CA 92843
West Grove Park	5372 Cerulean Ave, Garden Grove CA 92845
Village Green Park	12852 Main St, Garden Grove CA 92840
Eastgate Park	12001 St. Mark St., Garden Grove CA 92845
Gutosky Park	9201 Ferris Ln, Garden Grove CA 92841
Magnolia Park	11402 Magnolia ave., Garden Grove CA 92841
Faylane Park	11700 Seacrest Dr., Garden Grove CA 92840
Civic Center Parking lot	11300 Stanford Ave, Garden Grove CA 92840
Library Parking lot	11300 Stanford Ave, Garden Grove CA 92840

Overview:

SIEMENS will retrofit the existing fixtures, lamps, and/or ballasts with more energy-efficient fixtures, lamps, and/or ballasts. SIEMENS will also install occupancy sensor controls in selected locations as per Exhibit A Appendix 1 Verification of electric energy Savings (kWh) achieved by the lighting retrofit shall be based upon a one-time measurement of the lighting power capacity under existing conditions, a one-time measurement of the lighting power capacity upon completion of the lighting retrofit project and agreed-upon annual operating hours. Spot wattage measurements of a random sample of baseline and post-

installation fixture types or fixture circuits will be used to establish demand. Sample size for wattage measurements will be determined based on FEMP guidelines for sample size determination, with overall population sample size not to exceed 10% of the retrofit population.

Pre-Retrofit Measurement\Calculations:

$kWh_{pre} = (kW_{pre} * Quantity_{pre} * AOHrs_{pre})_{fixture\ type\ "n"}$, summed across all fixture types = pre-retrofit annual kWh

Where:

kW_{pre} = Instantaneous kW based on random sample of existing lighting-fixture types

$Quantity_{pre}$ = Count of each fixture-type based on as-built survey

$AOHrs_{pre}$ = Pre-Retrofit Annual Operating Hours, stipulated Exhibit A Appendix 1

Post-Retrofit Measurement\Calculations:

$kWh_{post} = (kW_{post} * Quantity_{post} * AOHrs_{post})_{fixture\ type\ "n"}$, summed across all fixture types = post-retrofit annual kWh

Where:

kW_{post} = Instantaneous kW based on random sample of the installed/retrofitted lighting-fixture types

$Quantity_{post}$ = Count of each fixture-type based on as-built survey

$AOHrs_{post}$ = Post-Retrofit Annual Operating Hours, stipulated Exhibit A Appendix 1

Savings Calculations:

Electric Savings (kWh/yr):

$kWh_S = kWh_{pre} - kWh_{post}$

Demand Savings (kW/yr):

$kW_S = (kW_{pre} - kW_{post}) * Months$

Where:

kW_S = annual post-retrofit kilowatt savings

Months = months per year of electric demand savings = 12

Cost Savings ($/yr):

$\$_S = (kWh_S * \$/kWh_{,x}) + (kW_S * \$/kW_{,x})$

Where:

$/kWh = contracted unit price for electricity at each location as per Article 6 of this Exhibit C

$/kW = contracted unit price for electricity at each location as per Article 6 of this Exhibit C

$\$_S$ = Total annual cost savings

4.2.2 Package Unit Replacement

Location(s): Public Works, Gem Theatre, Fire Station #5, Gem Theatre, Teen Center, Magnolia Park Neighborhood Center, Sports & Recreation Center

Overview:
Siemens will replace the package units as described in Exhibit A. Savings result from the increase in cooling and heating efficiency and energy savings control strategies implemented (scheduling and/or night setback/set up). Savings will be verified by continuously trending the electric power (kW) of the equipment and thermal efficiency per manufacturer's specification of install units.

In addition the control strategies implemented will be monitored to ensure the units are operating as described in Article 7 of this Exhibit C.

Scheduling
Continuous trending of equipment fan status (on/off) and status (occ/unocc) to verify the schedule as described in Article 7 of this Exhibit C.

Night Setback/Set up
Continuous trending of heating and cooling set point in conjunction with equipment status to verify the set point is setting back during heating mode and setting forward during cooling mode as described in Article 7 of this Exhibit C.

Post-retrofit, if contracted baseline schedules for this equipment, as established in Article 7 of this Exhibit C, are modified by the CLIENT and result in a loss of energy savings, the Guaranteed Savings for this FIM will be deemed achieved.

Pre-Retrofit Measurement\Calculations:
kWh_{pre} = pre-retrofit electric consumption (kWh/yr) based on modeling of existing equipment, shown in Table 4.2.2.1
kW_{pre}= pre-retrofit electric demand (kW/yr) based on modeling of existing equipment, shown in Table 4.2.2.1
$Therms_{pre}$= pre-retrofit natural gas consumption (Therms/yr) based on modeling of existing equipment, shown in Table 4.2.2.1

Table 4.2.2.1 - Pre-retrofit Consumption by Location and Equipment

Location	Unit	kWh_{pre}	kW_{pre}	$Therms_{pre}$
Public Works	AC-6 & AC-7	6,440	4.43	281
Public Works	AC-8	11,144	7.50	471
Public Works	AC-9	7,924	5.29	326
Fire Station #5	AC-1 & AC-2	12,797	8.50	490
Gem Theater	AC-3 & AC-5	13,102	9.68	718
Teen Center	AC-1	9,987	8.53	496
Magnolia Park Neighborhood Center	AC-1	7,891	5.30	341
Magnolia Park Neighborhood Center	AC-2	7,809	4.71	279
Sports & Recreation Center	AC-1 & AC-2	61,385	39.89	2,536
Sports & Recreation	AC-3	22,913	15.40	1,067

Center				
Sports & Recreation Center	AC-4	21,030	13.84	903

Post-Retrofit Measurement\Calculations:

$kWh_{post} = \Sigma(\text{Avg Cooling kW} * \text{AOH})_{BIN}$

$kW_{post} = \Sigma(\text{Avg Cooling kW})_{BIN}$

$Therms_{post\ Heating} = \Sigma(\text{Total Heating Load} / 100{,}000\ ^{BTU}/_{Therm} / \eta)_{BIN}$

Where:

Avg Cooling Kw = average electric demand (kW) per OAT Bin as shown in Table 4.2.2.2a and b
AOH= annual operating hours per OAT Bin as shown in Table 4.2.2.2a and b
Total Heating Load = total heating load (BTU) as shown in Table 4.2.2.2a and b
η = Thermal Efficiency verified by manufacturer's specification of installed equipment (%)

Table 4.2.2.2a - Total Heating Load (BTU)

Average Outdoor Air Temp (°F)	Annual Operating Hours (AOH)	Total Heating Load (BTU)				
		Public Works AC-6 & AC-7	Public Works AC-8	Public Works AC-9	Fire Station 5	Gem Theatre
97.5	3	34,494	57,889	40,642	68,160	85,804
92.5	14	27,873	46,854	32,917	56,140	71,380
87.5	67	23,998	40,397	28,398	48,699	62,451
82.5	277	20,034	33,747	23,730	41,621	53,958
77.5	522	14,760	24,865	17,485	32,187	42,493
72.5	881	9,484	15,979	11,237	22,075	29,589
67.5	1652	4,415	7,439	5,231	12,410	17,238
62.5	2188	-4,648	-7,723	-5,399	2,605	4,646
57.5	1582	-9,073	-15,074	-10,538	-12,720	-13,882
52.5	964	-13,498	-22,426	-15,677	-21,038	-23,675
47.5	432	-17,922	-29,777	-20,816	-29,355	-33,468
42.5	140	-22,347	-37,129	-25,955	-37,672	-43,260
37.5	38	-26,772	-44,480	-31,094	-45,989	-53,053

Table 4.2.2.2b – Total Heating Load (BTU)

Average Outdoor Air Temp (°F)	Annual Operating Hours (AOH)	Total Heating Load (BTU)					
		Teen Center	Magnolia Park Neighbor-hood Center AC-1	Magnolia Park Neighbor-hood Center AC-2	Sports & Recreation Center AC-1 & AC-2	Sports & Recreation Center AC-3	Sports & Recreation Center AC-4
97.5	3	57,390	40,642	36,171	327,847	129,701	111,109
92.5	14	46,489	32,917	29,550	267,749	105,662	90,675
87.5	67	40,167	28,398	25,676	230,545	90,780	78,026
82.5	277	33,637	23,730	21,535	195,155	76,624	65,993
77.5	522	24,912	17,485	15,874	143,489	56,328	48,519
72.5	881	16,179	11,237	10,210	91,675	35,978	30,997
67.5	1652	7,792	5,231	4,753	41,800	16,404	14,133
62.5	2188	-7,286	-5,399	-4,547	-40,225	-16,182	-13,699
57.5	1582	-14,505	-10,538	-8,874	-81,419	-32,753	-27,729
52.5	964	-21,724	-15,677	-13,202	-122,613	-49,325	-41,758
47.5	432	-28,943	-20,816	-17,530	-163,807	-65,897	-55,788
42.5	140	-36,162	-25,955	-21,857	-205,001	-82,468	-69,817
37.5	38	-43,381	-31,094	-26,185	-246,195	-99,040	-83,847

Savings Calculations:

Electric Savings (kWh/yr):

$kWh_S = kWh_{pre} - kWh_{post}$

Demand Savings (kW/yr):

$kW_S = (kW_{pre} – kW_{post}) * Months$

Natural Gas Savings (Therms/yr):

$Therms_S = Therms_{pre} - Therms_{post}$

Cost Savings ($/yr):

$\$_S = (kWh_S * \$/kWh_{,x}) + (kW_S * \$/kW_{,x}) + (Therms_S * \$/Therm_{,x})$

Where:

kW_S = annual post-retrofit kilowatt savings
Months = months per year of electric demand savings = 12
$/kWh = contracted unit price for electricity at each location as per Article 6 of this Exhibit C
$/kW = contracted unit price for electricity at each location as per Article 6 of this Exhibit C
$/Therm = contracted unit price for natural gas at each location as per Article 6 of this Exhibit C
$\$_S$ = Total annual cost savings

4.2.3 Chiller Replacement

Location(s): City Hall

Description
Energy and cost savings will be achieved by replacing the existing cooling systems with a higher efficiency cooling system. Savings will be verified by comparing the energy intensity (kW/ton_{pre}) of the pre-retrofit cooling equipment against the energy intensity (kW/Ton_{post}) of the post-retrofit cooling Equipment based on continuous trending chiller.

Pre-Retrofit Measurements\Calculations:
$kWh_{Pre} = CHkWh_{Pre} + CTkWh_{Pre} + CHWPkWh_{Pre} = 237{,}738$ kWh/yr

$CHkWh_{Pre}$ = Occ kW/Ton_{pre} * AOHOcc + Unocc kW/Ton_{pre} * AOHUnocc

$CTkWh_{Pre} = OccCTkW_{pre}$ * AOHOcc + $UnoccCTkW_{pre}$ * AOHUnocc

$CHWPkWh_{Pre}$ = (CHWP1kW + CHWP2kW) * AOHOcc + (CHWP1kW + CHWP2kW) * AOHUnocc

Where:

kWh_{pre} = Pre-Retrofit electric consumption of chiller plant (kWh/yr) based on the operating parameters shown in Table 4.2.3.1

$CHkWh_{Pre}$ = Pre-Retrofit electric consumption of the existing chillers (kWh/yr) = 140,448 kWh/yr

Occ kW/Ton_{pre} = Pre-retrofit chiller efficiency occupied per Table 4.2.3.1

AOHOcc = Annual Occupied Operating Hours per Table 4.2.3.1

Unocc kW/Ton_{pre} = Pre-retrofit unoccupied chiller efficiency per Table 4. 4.2.3.1

AOHUnocc = Annual Unoccupied Operating Hours per Table 4.2.3.1

$CTkWh_{Pre}$ = Pre-Retrofit electric consumption of the cooling tower fan (kWh/yr) = 3,477 kWh/yr

$OccCTkW_{pre}$ = Cooling Tower Fan occupied electric demand per Table 4.2.3.1

$OccCTkW_{pre}$ =CTFull LoadkW * $Occ\%Cap^3$ * CHWTMin / $CHWST_{pre}$

CTFull LoadkW = Electric demand of the cooling tower fan at full load = 14.92 kW

$Occ\%Cap_{Pre}$ = Occupied percent capacity on chiller plant per Table 4.2.3.1

CHWTMin = 70°F

OccCHWST = Occupied chilled water system temp per Table 4.2.3.1

$UnoccCTkW_{pre}$ = Cooling Tower Fan unoccupied electric demand per Table 4.2.3.1

$UnoccCTkW_{pre}$ = CTFull LoadkW * $Unocc\%Cap^3$ * CHWTMin/ $CHWST_{Pre}$

Unocc%Cap = Occupied percent capacity on chiller plant = 20%

$CHWPkWh_{Pre}$ = Pre-Retrofit electric consumption of the chilled water pumps (kWh/yr) = 93,813 kWh/yr

CHWP1kW = Chilled water pump 1 electric demand = 5.595 kW

CHWP2kW= Chilled water pump 2 electric demand = 7.460 kW

Table 4.2.3.1 - Pre-retrofit Chilled Water Plant Operating Parameters

OAT Bin	Annual Occupied Operating Hours (AOHOcc)	Pre-Retrofit Chilled Water System Temp	Pre-retrofit Occ % Capacity	Pre-Retrofit Chiller Plant kW/ Ton	Pre-Retrofit CT kW Occ	Annual Unocc Operating Hours (AOHUnocc)	Post-Retrofit Chiller Plant kW/ Ton	Pre-Retrofit CT kW Unocc
97.5	2	85	80%	0.839	6.29	1	0.945	0.098
92.5	9	85	80%	0.839	6.29	5	0.945	0.098
87.5	42	85	70%	0.864	4.21	25	0.945	0.098
82.5	171	85	70%	0.864	4.21	106	0.945	0.098
77.5	303	85	60%	0.816	2.65	219	0.945	0.098
72.5	457	85	50%	0.764	1.54	424	0.945	0.098
67.5	676	85	30%	0.893	0.33	976	0.945	0.098
62.5	851	80	30%	0.804	0.35	1,337	0.847	0.104
57.5	555	80	20%	0.847	0.10	1,027	0.847	0.104

Post-Retrofit Measurements\Calculations:

$kWh_{Pre} = CHkWh_{Post} + CTkWh_{Post} + CHWPkWh_{Pre}$

$CHkWh_{Post} = kW/Ton_{Post} * AOHOcc$

$CTkWh_{Pre} = OccCTkW_{Post} * AOHOcc$

Where:

kW/Ton_{post} = Post-retrofit chiller plant efficiency based on continuous trending of the chiller plant

$OccCTkW_{post}$ = Post-retrofit cooling tower fan occupied electric demand per Table 4.2.3.2

$CTkW_{Post}$ =CTFull LoadkW * $Occ\%Cap_{Post}^{3}$ * CHWTMin / $CHWST_{Post}$

Table 4.2.3.2 - Post-retrofit Chilled Water Plant Operating Parameters

OAT Bin	Annual Occupied Operating Hours (AOHOcc)	Post-Retrofit Chilled Water System Temp	Post-Retrofit Occ % Capacity	Post-Retrofit CT kW Occ
97.5	2	80	80%	6.68
92.5	9	78	80%	6.86
87.5	42	77	70%	4.65
82.5	171	76	70%	4.71
77.5	303	75	60%	3.01
72.5	457	73	60%	3.09
67.5	676	70	60%	3.22
62.5	851	69	20%	0.12
57.5	555	68	20%	0.12

Savings Calculations:

Energy (kWh) Savings:
$kWh_s = kWh_{pre} - kWh_{post}$

Formulas for Cost Savings:
$\$_S = kWh_S \times \$/kWh_{,x}$

Where:

$\$_S$ = annual cost savings
kWh_S = annual Electric savings (kWh/yr)
$\$/kWh_{,x}$ = electricity unit cost per kWh as defined for location 'x' in Article 6 of this Exhibit C

4.2.4 Boiler Replacement

Location(s): Police Department

Overview:
Energy savings expected from an efficiency increase by upgrading existing boilers to condensing hot water boilers. These savings will be verified by a post-retrofit combustion efficiency based on manufacturer's specifications of installed equipment.

Pre-retrofit measurements\Calculations:
$Fuel_{pre} = (Capacity * AOH * \%PF) / (\eta_{Pre,CE} * \eta_D) / HVNG$

Where:

$Fuel_{pre}$ = Pre-retrofit natural gas usage (Therms/yr) = 8,356 Therms/yr
Capacity = Boiler Capacity = 1,260 Mbh
AOH = Annual operating hours = 630 hours/yr
%PF = Part load factor = 75%
$\eta_{Pre,CE}$ = Pre-retrofit combustion efficiency = 75 %
η_D = Pre-retrofit distribution efficiency = 95 %
HVNG = High heating value of natural gas = 100 $^{MBtu}/_{Therm}$

Post-retrofit measurements\Calculations:
$Fuel_{post} = (Capacity * AOH * \%PF) / (\eta_{Post,CE} * \eta_D) / HVNG$

Where:

$Fuel_{post}$ = Post-retrofit natural gas usage (Therms/yr)
$\eta_{Post,CE}$ = average combustion efficiency based on manufacturer's specifications

Savings Calculations:
Energy Savings (Therms/yr):
$Fuel_S = Fuel_{pre} - Fuel_{post}$

Cost Savings ($/yr):
$\$_S = Fuel_S * \$/Therm_{,x}$

Where:

$Fuel_S$ = annual fuel (Therms/yr) savings
$\$/Therm_{,x}$ = unit price for natural gas at location 'x' as per Article 6 of this Exhibit C

4.2.5 Refurbish AHUs – City Hall AHU-1

Location(s): City Hall

Overview:
Siemens will refurbish AHU-1 at City Hall as described in Exhibit A. Energy savings results from varying the supply and return fans speed from constant volume to variable volume. Savings will be verified by continuously trending the supply and return fan electric demand (kW) in conjunction with fan speed and outdoor air damper position.

Pre-Retrofit Measurement\Calculations:
kWh_{pre} = Supply kWh_{pre} + Return kWh_{pre}

Supply kWh_{post} = Σ[Supply kW_{pre} * AOH]$_{OAT\ BIN}$
Return kWh_{post} = Σ[Return kW_{pre} * AOH]$_{OAT\ BIN}$

Where:

kWh_{pre} = Total pre-retrofit annual electric consumption (kWh/yr) as shown in Table 4.2.5.1
Supply kWh_{pre} = Pre-retrofit supply fan annual electric consumption (kWh/yr) as shown in Table 4.2.5.1
Supply kW_{pre} = Pre-retrofit supply fan electric demand (kW) = 31.32 kW
AOH = Annual operating hours per OAT Bin as shown in Table 4.2.5.1
Return kWh_{post} = Pre-retrofit return fan annual electric consumption (kWh/yr) as shown in Table 4.2.5.1
Return kW_{pre} = Pre-retrofit return fan electric demand (kW) = 7.10 kW

Table 4.2.5.1 - Pre-retrofit Electric Consumption (City Hall AHU-1)

OAT BIN	AOH	Pre-Retrofit Supply Fan kWh	Pre-Retrofit Return Fan kWh	Pre-Retrofit Total kWh
97.5	2	60	14	74
92.5	9	282	64	346
87.5	42	1,319	299	1,618
82.5	171	5,371	1217	6,588
77.5	303	9,486	2150	11,636
72.5	457	14,320	3246	17,566
67.5	676	21,183	4802	25,985
62.5	851	26,652	6041	32,693
57.5	555	17,383	3940	21,323
52.5	293	9,174	2079	11,253
47.5	116	3,629	823	4,452
42.5	35	1,087	246	1,334

37.5	9	287	65	352
Total	**3,520**	**110,233**	**24,986**	**135,219**

Post-Retrofit Measurement\Calculations:

kWh_{post} = Supply kWh_{post} + Return kWh_{post}

Supply kWh_{post} = Σ[Supply kW_{post} * AOH]$_{OAT\ BIN}$
Return kWh_{post} = Σ[Return kW_{post} * AOH]$_{OAT\ BIN}$

Where:

kWh_{post} = Total post-retrofit annual electric consumption (kWh/yr)
Supply kWh_{post} = Post-retrofit supply fan annual electric consumption (kWh/yr)
Supply kW_{post} = Post-retrofit average per OAT Bin supply fan electric demand (kW) trended continuously through EMS
Return kWh_{post} = Post-retrofit return fan annual electric consumption (kWh/yr)
Return kW_{post} Post-retrofit average per OAT Bin return fan electric demand (kW) trended continuously through EMS

Savings Calculations:

Energy Savings (kWh/yr):

$kWh_S = kWh_{pre} - kWh_{post}$

Where:

kWh_S = Total annual electric savings (kWh/yr)

Cost Savings($/yr):

$\$_S = kWh_S * \$/kWh$

Where:

$\$_S$ = Total annual cost savings
$/kWh = contracted unit price for electricity at each location as per Article 6 of this Exhibit C

4.2.6 Refurbish AHUs – City Hall MZ-1

Location(s): City Hall

Overview:

Siemens will refurbish MZ-1 at City Hall as described in Exhibit A. Energy savings results from scheduling MZ-1 from 24/7 operation to 6am to 7pm (M-Thurs and every other Friday) and Holiday scheduling. Savings will be verified by continuously trending the supply fan status. The annual operating hour bin model will be re-run with the actual schedules observed during each Annual Period.

Post-retrofit, if contracted baseline schedules for this equipment, as established in Article 7 of this Exhibit C, are modified by the CLIENT and result in a loss of energy savings, the Guaranteed Savings for this FIM will be deemed achieved.

Pre-Retrofit Measurement\Calculations:

$kWh_{pre} = \Sigma[\text{Supply kW} * AOH_{Pre}]_{OAT\ BIN}$

Where:

kWh_{pre} = Total pre-retrofit annual electric consumption (kWh/yr) as shown in Table 4.2.6.1

Supply kW = supply fan electric demand (kW) = 5.87 kW

AOH_{Pre} = Pre-retrofit annual operating hours per OAT Bin as shown in Table 4.2.6.1

Table 4.2.6.1 - Pre-retrofit Electric Consumption (City Hall AHU-2)

OAT BIN	AOH	Pre-Retrofit Supply Fan kWh
97.5	3	18
92.5	14	82
87.5	67	393
82.5	277	1,627
77.5	522	3,065
72.5	881	5,174
67.5	1652	9,701
62.5	2188	12,849
57.5	1582	9,290
52.5	964	5,661
47.5	432	2,537
42.5	140	822
37.5	38	223
Total	**8,760**	**51,442**

Post-Retrofit Measurement\Calculations:

$kWh_{post} = \Sigma[\text{Supply kW} * AOH_{Post}]_{OAT\ BIN}$

Where:

kWh_{post} = Total post-retrofit annual electric consumption (kWh/yr)

AOH_{Post} = Post-retrofit annual operating hours per OAT Bin modeled by continuously trending supply fan status to determine actual schedule

Savings Calculations:

Energy Savings (kWh/yr):

$kWh_S = kWh_{pre} - kWh_{post}$

Where:

kWh_S = Total annual electric savings (kWh/yr)

Cost Savings($/yr):

$\$_S = kWh_S * \$/kWh$

Where:

$\$_S$ = Total annual cost savings
$/kWh = contracted unit price for electricity at each location as per Article 6 of this Exhibit C

4.2.7 Refurbish AHUs – Police Department AH-1

Location(s): Police Department

Overview:
Siemens will refurbish AH-1 at the Police Department as described in Exhibit A. Energy savings results from varying the supply and return fans speed from constant volume to variable volume. Savings will be verified by continuously trending the supply and return fan electric demand (kW) in conjunction with fan speed and outdoor air damper position.

Pre-Retrofit Measurement\Calculations:
kWh_{pre} = Supply kWh_{pre} + Return kWh_{pre}

Supply kWh_{pre} = Σ[Supply kW_{pre} * AOH]$_{OAT\ BIN}$
Return kWh_{pre} = Σ[Return kW_{pre} * AOH]$_{OAT\ BIN}$

Where:

kWh_{pre} = Total pre-retrofit annual electric consumption (kWh/yr) as shown in Table 4.2.7.1
Supply kWh_{pre} = Pre-retrofit supply fan annual electric consumption (kWh/yr) as shown in Table 4.2.7.1
Supply kW_{pre} = Pre-retrofit supply fan electric demand (kW) = 19.57 kW
AOH = Annual operating hours per OAT Bin as shown in Table 4.2.7.1
Return kWh_{post} = Pre-retrofit return fan annual electric consumption (kWh/yr) as shown in Table 4.2.7.1
Return kW_{pre} = Pre-retrofit return fan electric demand (kW) = 1.87 kW

Table 4.2.7.1 - Pre-retrofit Electric Consumption (PD AHU-1)

OAT BIN	AOH	Pre-Retrofit Supply Fan kWh	Pre-Retrofit Return Fan kWh	Pre-Retrofit Total kWh
97.5	3	59	6	64
92.5	14	274	26	300
87.5	67	1,311	125	1,437
82.5	277	5,422	517	5,939
77.5	522	10,218	974	11,192
72.5	881	17,245	1,644	18,889
67.5	1652	32,337	3,082	35,419
62.5	2188	42,829	4,082	46,912
57.5	1582	30,967	2,952	33,919
52.5	964	18,870	1,799	20,669
47.5	432	8,456	806	9,262

42.5	140	2,740	261	3,002
37.5	38	744	71	815
Total	**8,760**	**171,474**	**16,344**	**187,818**

Post-Retrofit Measurement\Calculations:

kWh_{post} = Supply kWh_{post} + Return kWh_{post}

Supply kWh_{post} = Σ[Supply kW_{post} * AOH]$_{OAT\ BIN}$
Return kWh_{post} = Σ[Return kW_{post} * AOH]$_{OAT\ BIN}$

Where:

kWh_{post} = Total post-retrofit annual electric consumption (kWh/yr)
Supply kWh_{post} = Post-retrofit supply fan annual electric consumption (kWh/yr)
Supply kW_{post} = Post-retrofit average per OAT Bin supply fan electric demand (kW) trended continuously through EMS
Return kWh_{post} = Post-retrofit return fan annual electric consumption (kWh/yr)
Return kW_{post} Post-retrofit average per OAT Bin return fan electric demand (kW) trended continuously through EMS

Savings Calculations:

Energy Savings (kWh/yr):

$kWh_S = kWh_{pre} - kWh_{post}$

Where:

kWh_S = Total annual electric savings (kWh/yr)

Cost Savings($/yr):

$\$_S = kWh_S * \$/kWh$

Where:

$\$_S$ = Total annual cost savings
$/kWh = contracted unit price for electricity at each location as per Article 6 of this Exhibit C

4.2.8 Siemens Desigo Controls System – Holiday Scheduling

Location(s):

Building	# of Units	Unit Numbers
Juvenile Justice	4	AC-1, AC-2, AC-3, AC-4
Property & Evidence Building	4	AC-1, F1, F-2, F-3
Fire Station #5	2	AC-1, AC-2
Fire Station #7	1	AC-1
Public works	14	AC 1-14

Buena Clinton Youth & Family Center	8	SHP 1-2, 4, 5A-5B HP 7-8,10
Courtyard Center/ Activity Center	5	Courtyard AC-1, AC-2, AC-3, AC-4, Activity AC-1
Police Annex	4	AC-1, AC-2, AC-3, AC-4
Magnolia Park Neighborhood Center	2	AC-1, AC-2
Festive Amphitheatre	2	AC-1, AC-2
Teen Center	1	AC-1
Community Service Center	1	AC-1

Overview:
Siemens will install a new Siemens Desigo Automation System in the locations above to control the units listed in Table 4.2.8.1.Currently the units run 5 days a week all year, except for the Police Annex which operates 7 days a week. Siemens will implement a holiday schedule, shutting the units off for 14 days a year. Savings will be verified by continuously trending unit status and verifying the units shut down for 14 week days per year.

Pre-Retrofit Measurement\Calculations:
$kWh_{pre} = \Sigma[kW * AOH_{Pre}]_{Unit}$

Where:

kWh_{pre} = Total pre-retrofit annual electric consumption (kWh/yr) as shown in Table 4.2.8.1 summed over all equipment for each building
kW = Fan motor electric demand (kW) as shown in Table 4.2.8.1 for each piece of equipment
AOH_{Pre} = Annual pre-retrofit operating hours per piece of equipment as shown in Table 4.2.8.1

Table 4.2.8.1 - Pre-retrofit Operating Parameters

Location	Equipment	Pre-Retrofit Electric Demand (kW_{Pre})	Pre-Retrofit Annual Operating Hours (AOH_{Pre})	Pre-Retrofit Electric Consumption (kWh_{Pre})
Public works	AC 1	4.8	1,200	5,760
	AC-2	6	1,200	7,200
	AC-3	6	1,200	7,200
	AC-4	4.8	1,200	5,760
	AC-5	4.8	1,200	5,760
	AC-6	3.39	1,183	4,011
	AC-7	3.39	1,183	4,011
	AC-8	5.76	1,205	6,938
	AC-9	4.07	1,212	4,932
	AC-10	3.6	1,200	4,320
	AC-11	3.6	1,200	4,320
	AC-12	3.6	1,200	4,320

	AC-13	3.6	1,200	4,320
	AC-14	3.6	1,200	4,320
Buena Clinton Youth & Family Center	SHP 1	0.1	1200	112
	SHP 2	0.1	1200	179
	SHP 4	0.1	1200	179
	SHP 5A	0.1	1200	179
	SHP 5B	3.0	1200	3,600
	SHP 7	1.5	1200	1,800
	SHP 8	4.0	1200	4,800
	SHP 10	4.0	1200	4,800
Courtyard Center	AC-1	2.4	1100	2,640
	AC-2	6.0	1100	6,600
	AC-3	6.0	1100	6,600
	AC-4	6.0	1100	6,600
Police Annex	AC 1	4.0	1100	4,400
	AC-2	4.0	1100	4,400
	AC-3	4.0	1100	4,400
	AC-4	4.0	1100	4,400
Magnolia Park Neighborhood Center	AC-1	4.0	1210	4,814
	AC-2	3.7	1316	4,897
Festive Amphitheatre	AC-1	5.6	900	5,040
	AC-2	5.6	900	5,040
Teen Center (Eastgate Park)	AC-1	5.76	880	5,068
Community Service Center (Westgrove Park)	AC-1	3.4	764	2,621

Post-Retrofit Measurement\Calculations:

$kWh_{post} = \Sigma[kW * AOH_{Post}]_{Unit}$

Where:

kWh_{post} = Total post-retrofit annual electric consumption (kWh/yr) summed over all equipment for each building

AOH_{Post} = Annual post-retrofit operating hours per piece of equipment determined by continuously trending equipment status

Savings Calculations:

Energy Savings (kWh/yr):

$kWh_S = kWh_{pre} - kWh_{post}$

Cost Savings($/yr):

$\$_S = kWh_S * \$/kWh$

Where:

kWh_S = Total annual electric savings (kWh/yr)

$\$_S$ = Total annual cost savings

$/kWh = contracted unit price for electricity at each location as per Article 6 of this Exhibit C

4.2.9 Plug Load Management

Location(s): City Hall, Community Meeting Center/Senior Center, Public Works, Buena Client

Overview:
A plug load management system will be installed to reduce unnecessary electric usage when electronic equipment is not in use. Energy savings will be verified by post-retrofit logging of the runtime of a sample of equipment through the use of the energy monitoring controls during the first annual period.

Pre-Retrofit Measurement\Calculations:
$kWh_{pre} = \Sigma(Qty_{,n} * (W_{,n} / 1{,}000\ ^{W}/_{kW}) * AOH_{pre,n})$

Where:

kWh_{pre} = Pre-retrofit electric consumption summed over all equipment per building as shown in Table 4.2.9.1
Qty = Quantity of equipment as shown in Table 4.2.9.1
W = Equipment power as shown in Table 4.2.9.1
AOH_{pre} = Pre-retrofit annual operating hours as shown in Table 4.2.9.1 (hours/year)

Table 4.2.9.1 – Plug Load Parameters

Equipment (n)	Electric Demand (W)	Quantity (Qty)			
		City Hall	Comm Center/ Senior Center	Public Works / Municipal Service	Buena Client
Projector	8	2	0	0	1
Smartboard	6	0	0	0	0
Proj/Smbrd	12	0	0	0	0
Amp	8	0	0	0	0
Chrg Cart	35	0	0	0	0
S Print	11	0	0	0	0
M Print	20	25	4	15	2
L Print/Copy	40	4	1	2	1
TV/Mon	8	0	2	0	0
Snack Vend	40	1	1	1	0
Soda Vend	320	1	1	1	0
Lg Coffee	56	1	2	1	1
H/C Water Disp.	75	4	2	2	0
Pre-Retrofit Annual Operating Hours (AOH_{pre})		2,250	4,250	2,500	2,250
Pre-retrofit Electric consumption (kWhpre)		12,194	6,640	8,287	1,261

Post-Retrofit Measurement\Calculations:
AOH_{post} = Post-retrofit annual operating hours, based on runtime logs collected from post-retrofit energy monitoring controls

$kWh_{post} = \Sigma(Qty_{,n} * (W_{,n} / 1{,}000\ ^{W}/_{kW}) * AOH_{post,n})$

Where:

kWh_{post} = Post-retrofit electric consumption (kWh)

Savings Calculations:
Energy Savings (kWh/yr):
$kWh_S = kWh_{pre} - kWh_{post}$

Where:
kWh_S = Total annual electric savings (kWh/yr)

Cost Savings($/yr):
$\$_S = kWh_S * \$/kWh$

Where:
$\$_S$ = Total annual cost savings
$/kWh = contracted unit price for electricity at each location as per Article 6 of this Exhibit C

4.3 **Option B - Retrofit Isolation: All Parameter Measurement - N/A**

4.4 **Option C - Whole Facility - N/A**

4.5 **Option D – Calibrated Simulation - N/A**

4.6 **Option E - Stipulated-Energy/Utility Savings - N/A**

Article 5: Baseline Data

5.1 The year(s) selected as the Baseline Period starts on 11/3/2016 and ends on 11/2/2017. Table 5.1 outlines the utility consumption that occurred during this Baseline Period. This Baseline Period's Facility utility consumption will be used as the reference for comparing the Facility's utility consumption during the Performance Guarantee Period in order to determine the Annual Realized Savings.

Table 5.1 – Baseline Utility Consumption

Building/ Park	Annual Electric [kWh]	Annual Electric [kW]	Annual Natural Gas [Therm]
City Hall	821,519	235	1911
PD/ Fire Station #1/ Juvenile Justice/ Evidence	833,071	201	16276
CMC	399,641	171	6387
Public Works	343,666	161	8611
Gem Theater	72,488	61	1393
Police Annex	38,889	24	148
Festive Amphitheater	26,008	58	66
Magnolia Park-Building	35,140	20	420
Magnolia Park-Exterior	70,619	59	0
Courtyard	73,372	85	857
Sports & Rec/ Garden Grove Park/ Atlantis	403,595	468	Meter could not be located
Fire Station #2	46,801	13	925
Fire Station #3	48,035	13	916
Fire Station #4	40,336	12	594
Fire Station #5	54,007	24	687
Fire Station #7	33,484	13	380
Buena Clinton	51,213	61	No gas meter
Gutosky Park	11,928	6	N/A
Faylane Park	12,817	6	N/A
Eastgate Park M#1	81,519	37	5168
Eastgate Park M#2	8,206	11	N/A
Woodbury Park	98,101	34	11376
Westgrove Park	19,765	21	N/A
Regional Library	59,075	19	N/A
Champan Sports Complex	122,122	188	133308
Total	**3,805,417**	**2,001**	**189,423**

5.2 The operating practices during the Baseline Period determine the utility consumption shown in Table 5.1. This data indicates the operating characteristics that were in effect during the Baseline Period. The Guaranteed Savings provided under this Agreement are based on the efficiencies gained by implementing the Work and implementing the Contracted Baseline in Article 7 of this Exhibit C.

Table 5.2.1 – Baseline Package Units Parameters

	Building	Eastgate Park Teen Center	Fire Station 5	GEM	Magnolia Park
	Unit	AC-1 5 Ton	AC-1 & AC-2 5 Ton	AC-3 & AC-5 6 Ton	AC-1 3 Ton
		EXISTING	**EXISTING**	**EXISTING**	**EXISTING**
1.	Economizer	None	None	None	None
	Minimum OSA %	20%	20%	20%	20%
	Mixed Air Setpoint (°F)				
	Low Limit (°F)				
	High Limit (°F)				
	Enthalpy Limit (Btu/lb)				
2.	kW /Ton (of Compressor & Cond Fan)	1.57	1.56	1.33	1.36
3.	Supply Air Flow (CFM)	2,000	2,000	2,400	1,400
4.	Supply Fan Control	Cycling	Cycling	Cycling	Cycling
	Minimum Air Flow (%)	100.00%	100.00%	100.00%	100.00%
	Motor Efficiency (%)	85.00%	85.00%	85.00%	85.00%
5.	Gas Furnace - Thermal Efficiency (%)	78.60%	78.60%	77.20%	78.70%
	Heat Pump - HCOP (rated at 47°F OSA)				
6.	OCCUPIED				
	Cooling Setpoint (°F)	70	70	70	70
	Heating Setpoint (°F)	70	70	70	70
	UNOCCUPIED				
	Cooling Setpoint (°F)	70	70	70	70
	Heating Setpoint (°F)	70	70	70	70
7.	OSA Damper Closed at Night?	No	No	No	No
8.	Fan Operation at Night?	Cycling	Cycling	Cycling	Cycling
9.	CO2 Sensors?	No	No	No	No
10.	Schedule	Sat/Sun 7am-6pm	24-7	Mon-Fri 4pm-9pm; Sat/Sun 10am-11pm	Mon-Fri 7am-7pm

Table 5.2.2 – Baseline Package Units Parameters

	Building	Magnolia Park	Public Works	Public Works	Public Works
	Unit	AC-2 3 Ton	AC-6 & AC-7 3 Ton	AC-8 5 Ton	AC-9 3 Ton
		EXISTING	**EXISTING**	**EXISTING**	**EXISTING**
1.	Economizer	None	None	None	None
	Minimum OSA %	20%	20%	20%	20%
	Mixed Air Setpoint (°F)				
	Low Limit (°F)				
	High Limit (°F)				
	Enthalpy Limit (Btu/lb)				
2.	kW /Ton (of Compressor & Cond Fan)	1.29	1.36	1.36	1.36
3.	Supply Air Flow (CFM)	1,200	1,200	2,000	1,400
4.	Supply Fan Control	Cycling	Cycling	Cycling	Cycling
	Minimum Air Flow (%)	100.00%	100.00%	100.00%	100.00%
	Motor Efficiency (%)	85.00%	85.00%	85.00%	85.00%
5.	Gas Furnace - Thermal Efficiency (%)	81.00%	78.70%	78.00%	78.70%

	Heat Pump - HCOP (rated at 47°F OSA)				
6.	OCCUPIED				
	Cooling Setpoint (°F)	70	70	70	70
	Heating Setpoint (°F)	70	70	70	70
	UNOCCUPIED				
	Cooling Setpoint (°F)	70	70	70	70
	Heating Setpoint (°F)	70	70	70	70
7.	OSA Damper Closed at Night?	No	No	No	No
8.	Fan Operation at Night?	Cycling	Cycling	Cycling	Cycling
9.	CO2 Sensors?	No	No	No	No
10.	Schedule	Mon-Fri 7am-7pm	Mon-Fri 5am-6pm	Mon-Fri 5am-6pm	Mon-Fri 5am-6pm

Table 5.2.3 – Baseline Package Units Parameters

	Building	Sports and Rec	Sports and Rec	Sports and Rec
	Unit	AC-1 & AC-2 25 Ton	AC-3 10 Ton	AC-4 8 Ton
		EXISTING	**EXISTING**	**EXISTING**
1.	Economizer	None	None	None
	Minimum OSA %	20%	20%	20%
	Mixed Air Setpoint (°F)			
	Low Limit (°F)			
	High Limit (°F)			
	Enthalpy Limit (Btu/lb)			
2.	kW /Ton (of Compressor & Cond Fan)	1.39	1.37	1.43
3.	Supply Air Flow (CFM)	10,000	4,000	3,400
4.	Supply Fan Control	Cycling	Cycling	Cycling
	Minimum Air Flow (%)	100.00%	100.00%	100.00%
	Motor Efficiency (%)	85.00%	85.00%	85.00%
5.	Gas Furnace - Thermal Efficiency (%)	82.00%	78.40%	78.40%
	Heat Pump - HCOP (rated at 47°F OSA)			
6.	OCCUPIED			
	Cooling Setpoint (°F)	70	70	70
	Heating Setpoint (°F)	70	70	70
	UNOCCUPIED			
	Cooling Setpoint (°F)	70	70	70
	Heating Setpoint (°F)	70	70	70
7.	OSA Damper Closed at Night?	No	No	No
8.	Fan Operation at Night?	Cycling	Cycling	Cycling
9.	CO2 Sensors?	No	No	No
10.	Schedule	6am-11pm	6am-11pm	6am-11pm

Table 5.2.4 – Baseline AHU schedule

AHU	Schedule
City Hall AHU-1	Monday-Thursday & every other Friday: 5am – 9pm
City Hall AHU-2	24-7
Police Department AHU-1	24-7

The currently air handlers at the City Hall and Police Department do not have economizer, supply air reset and static pressure reset.

5.3 Applicable codes - Federal, State, County or Municipal codes or regulations are applicable to the use and operation of the Facility. SIEMENS will maintain the current level of Facility compliance relative to applicable codes unless specifically outlined to the contrary below. Unless specifically set forth in the Scope of Work and Services, Exhibit A, nothing herein should be construed as to require SIEMENS to provide additional work or services in the event that the current applicable code or regulation is modified.

5.3.1 Current code compliance (identify the applicable code citation):

a. California Title 24

Article 6: Utility Rate Structures and Escalation Rates

6.1 Utility costs used for Savings calculations will be based on the utility rates and Escalation Rates, as provided in the table(s) below. Each Escalation Rate will be applied annually to the utility rate.

Table 6.1.1 Electric Utility Rates

		Electric		
Building	**Weighted Rate Average/ Blended Rate**	**Rate Schedule**	**$/kWh**	**$/kW**
City Hall	24/7 Operation - HVAC	TOU-GS-3B	$0.071 /kWh	$19.84 /kW
City Hall	Exterior Lights	TOU-GS-3B	$0.065 /kWh	$18.60 /kW
City Hall	Interior Lights [5:00AM - 11:00PM M-F]	TOU-GS-3B	$0.078 /kWh	$21.17 /kW
City Hall	HVAC (Non24/7) [4:30AM - 9:00PM M-F]	TOU-GS-3B	$0.079 /kWh	$21.27 /kW
CMC	24/7 Operation - HVAC	TOU-GS-2B	$0.072 /kWh	$17.42 /kW
CMC, Library Parking, Credit Union Park	Exterior Lights (7:00pm-9:00 am)	TOU-GS-2B	$0.066 /kWh	$16.22 /kW
CMC	Interior Lights [6:00AM - 7:00PM M-F], (6:00 am to midnight S, S)	TOU-GS-2B	$0.076 /kWh	$18.18 /kW
PD-FS#1-JJ	Exterior Lights (6:00pm-7:00 am)	TOU-GS-2B	$0.066 /kWh	$16.25 /kW
PD-FS#1-JJ	24/7 Operation HVAC; Interior Lighting	TOU-GS-2B	$0.072 /kWh	$17.42 /kW
Public Works	HVAC - Estimated Hours of Operation: M-S: 5:30 am to 8:30 pm	TOU-GS-2B	$0.076 /kWh	$18.19 /kW
Public Works	Exterior Lights (7:00pm-6:00 am)	TOU-GS-2B	$0.066 /kWh	$16.23 /kW
Public Works	Interior Lights [6:00AM - 7:00PM M-F]	TOU-GS-2B	$0.083 /kWh	$19.45 /kW
GEM	Interior Lights + HVAC - Sat/Sun 9:30am-10:30pm; Thursday/Friday 5:30pm-10:30pm; Mon/Tues/Wed 2:30pm-11pm	TOU-GS-2A	$0.102 /kWh	$15.89 /kW
GEM	Exterior Lights (4:00pm-6:00 am)	TOU-GS-2A	$0.082 /kWh	$15.89 /kW
Police Annex	Exterior Lights (6:00pm-7:00 am)	TOU-GS2B	$0.066 /kWh	$16.25 /kW
Police Annex	24/7 Operation HVAC; Interior Lighting	TOU-GS2B	$0.072 /kWh	$17.42 /kW
Festive Amp	Exterior Lights (7:00pm-9:00 am)	TOU-GS2B	$0.066 /kWh	$16.22 /kW
Festive Amp	Interior Lights [6:00AM - 7:00PM M-F], (6:00 am to midnight S, S)	TOU-GS2B	$0.076 /kWh	$18.18 /kW
Magnolia Park-	Blended Rate	TOU-	$0.179 /kWh	

Building		GS1B		
Magnolia Park-Exterior	Blended Rate	AL-2	$0.079 /kWh	
Regional Library	Blended Rate	TOU-GS1B	$0.128 /kWh	
Courtyard / Village Green Park	Blended Rate	AL-2	$0.094 /kWh	
FS#2	Blended Rate	TOU-GS1B	$0.126 /kWh	
FS#3	Blended Rate	TOU-GS1A	$0.153 /kWh	
FS#4	Blended Rate	TOU-GS1A	$0.155 /kWh	
FS#5	Blended Rate	TOU-GS2B	$0.212 /kWh	
FS#7	Blended Rate	TOU-GS1A	$0.157 /kWh	
Faylane Park	Blended Rate	AL-2	$0.082 /kWh	
Eastgate Park M#1	Blended Rate	AL-2	$0.090 /kWh	
Eastgate Park M#2	Blended Rate	AL-2	$0.119 /kWh	
Woodbury Park M#1 and M#2	Blended Rate	AL-2	$0.085 /kWh	
Westgrove Park	Blended Rate	AL-2	$0.083 /kWh	
Sports and Rec/ Garden Grove Park/ Atlantis	Blended Rate	AL-2	$0.096 /kWh	
Chapman Sports Complex	Blended Rate	AL-2	$0.070 /kWh	
Buena Clinton	Blended Rate	TOU-GS2B	$0.319 /kWh	
Gutosky Park	Blended Rate	AL-2	$0.084 /kWh	

Table 6.1.2 Gas Utility Rates

	Gas		
Building	**Tier Level**	**Rate Schedule**	**$/Therm**
City Hall	Tier 2	GN-10	$0.72 /Therm
PD/ Fire Station #1/ Juvenile Justice/ Evidence	Tier 2	GN-10	$0.72 /Therm
CMC	Tier 2	GN-10	$0.72 /Therm
Public Works	Tier 2	GN-10	$0.72 /Therm
Gem Theater	Tier 2	GN-10	$0.72 /Therm
Police Annex	N/A	GN-10	$0.96 /Therm
Festive Amphitheater	Tier 2	GN-10	$0.72 /Therm
Magnolia Park-Building	Tier 2	GN-10	$1.31 /Therm
Courtyard	Tier 2	GN-10	$0.72 /Therm
Sports & Rec/ Garden Grove Park/ Atlantis	N/A	GN-10	$0.72 /Therm
Fire Station #2	Tier 2	GN-10	$0.72 /Therm
Fire Station #3	Tier 2	GN-10	$0.72 /Therm
Fire Station #4	Tier 2	GN-10	$0.72 /Therm
Fire Station #5	Tier 2	GN-10	$0.72 /Therm

Fire Station #7	Tier 2	GN-10	$1.32 /Therm
Buena Clinton	N/A	N/A	no gas meter
Eastgate Park M#1	Tier 2	GN-10	$0.72 /Therm
Woodbury Park	Tier 2	GN-10	$0.72 /Therm

The baseline rate schedules above used in the calculations were those prevailing at the time of execution of this contract escalated by 4%. Energy Escalation Rate: 4.0% per Annual Period thereafter

Article 7: Contracted Baseline Data

7.1 The following tables detail the Facility operating parameters that are required to be implemented on the Guarantee Date or on such time as agreed upon by the Parties. This specific configuration of Facility operating parameters is the Contracted Baseline and failure of the CLIENT to maintain the Contracted Baseline may result in a Material Change which may require a modification of the Performance Guarantee pursuant to Article 4 of the Agreement.

Table 7.1.1 Baseline Package Units Parameters

	Building	Eastgate Park Teen Center	Fire Station 5	GEM	Magnolia Park
	Unit	AC-1 5 Ton	AC-1 & AC-2 5 Ton	AC-3 & AC-5 6 Ton	AC-1 3 Ton
		PROPOSED	**PROPOSED**	**PROPOSED**	**PROPOSED**
1.	Economizer	Temperature	Temperature	Temperature	Temperature
	Minimum OSA %	20%	20%	20%	20%
	Mixed Air Setpoint (°F)	57	57	57	57
	Low Limit (°F)	50	50	50	50
	High Limit (°F)	60	60	60	60
	Enthalpy Limit (Btu/lb)				
2.	kW /Ton (of Compressor & Cond Fan)	1.02	1.02	1.14	1.00
3.	Supply Air Flow (CFM)	2,000	2,000	2,400	1,400
4.	Supply Fan Control	Cycling	Cycling	Cycling	Cycling
	Minimum Air Flow (%)	100.00%	100.00%	100.00%	100.00%
	Motor Efficiency (%)	90.00%	90.00%	90.00%	90.00%
5.	Gas Furnace - Thermal Efficiency (%)	85.00%	85.00%	85.00%	85.00%
	Heat Pump - HCOP (rated at 47°F OSA)				
6.	OCCUPIED				
	Cooling Setpoint (°F)	74	74	74	74
	Heating Setpoint (°F)	69.5	69.5	69.5	69.5
	UNOCCUPIED				
	Cooling Setpoint (°F)	74	74	74	74
	Heating Setpoint (°F)	69	69	69	69
7.	OSA Damper Closed at Night?	No	No	No	No
8.	Fan Operation at Night?	Cycling	Cycling	Cycling	Cycling
9.	CO2 Sensors?	No	No	No	No
10.	Schedule	Sat/Sun 7am-6pm; with no Holidays	24-7	Mon-Fri 4pm-9pm; Sat/Sun 10am-11pm; with no Holidays	Mon-Fri 7am-7pm; with no Holidays

Table 7.1.2 Baseline Package Units Parameters

	Building	Magnolia Park	Public Works	Public Works	Public Works
	Unit	AC-2 3 Ton	AC-6 & AC-7 3 Ton	AC-8 5 Ton	AC-9 3 Ton
		PROPOSED	**PROPOSED**	**PROPOSED**	**PROPOSED**
1.	Economizer	Temperature	Temperature	Temperature	Temperature
	Minimum OSA %	20%	20%	20%	20%

	Mixed Air Setpoint (°F)	57	57	57	57
	Low Limit (°F)	50	50	50	50
	High Limit (°F)	60	60	60	60
	Enthalpy Limit (Btu/lb)				
2.	kW /Ton (of Compressor & Cond Fan)	0.98	1.02	1.02	1.02
3.	Supply Air Flow (CFM)	1,200	1,200	2,000	1,400
4.	Supply Fan Control	Cycling	Cycling	Cycling	Cycling
	Minimum Air Flow (%)	100.00%	100.00%	100.00%	100.00%
	Motor Efficiency (%)	90.00%	90.00%	90.00%	90.00%
5.	Gas Furnace - Thermal Efficiency (%)	85.00%	85.00%	85.00%	85.00%
	Heat Pump - HCOP (rated at 47°F OSA)				
6.	OCCUPIED				
	Cooling Setpoint (°F)	74	74	74	74
	Heating Setpoint (°F)	69.5	69.5	69.5	69.5
	UNOCCUPIED				
	Cooling Setpoint (°F)	74	74	74	74
	Heating Setpoint (°F)	69	69	69	69
7.	OSA Damper Closed at Night?	No	No	No	No
8.	Fan Operation at Night?	Cycling	Cycling	Cycling	Cycling
9.	CO2 Sensors?	No	No	No	No
10.	Schedule	Mon-Fri 7am-7pm; with no Holidays	Mon-Fri 5am-6pm; with no Holidays	Mon-Fri 5am-6pm; with no Holidays	Mon-Fri 5am-6pm; with no Holidays

Table 7.1.3 Baseline Package Units Parameters

	Building	Sports and Rec	Sports and Rec	Sports and Rec
	Unit	AC-1 & AC-2 25 Ton	AC-3 10 Ton	AC-4 8 Ton
		PROPOSED	**PROPOSED**	**PROPOSED**
1.	Economizer	Temperature	Temperature	Temperature
	Minimum OSA %	20%	20%	20%
	Mixed Air Setpoint (°F)	57	57	57
	Low Limit (°F)	50	50	50
	High Limit (°F)	60	60	60
	Enthalpy Limit (Btu/lb)			
2.	kW /Ton (of Compressor & Cond Fan)	1.20	1.13	1.13
3.	Supply Air Flow (CFM)	10,000	4,000	3,400
4.	Supply Fan Control	Cycling	Cycling	Cycling
	Minimum Air Flow (%)	100.00%	100.00%	100.00%
	Motor Efficiency (%)	90.00%	90.00%	90.00%
5.	Gas Furnace - Thermal Efficiency (%)	85.00%	85.00%	85.00%
	Heat Pump - HCOP (rated at 47°F OSA)			
6.	OCCUPIED			
	Cooling Setpoint (°F)	74	74	74
	Heating Setpoint (°F)	69.5	69.5	69.5
	UNOCCUPIED			
	Cooling Setpoint (°F)	74	74	74
	Heating Setpoint (°F)	69	69	69
7.	OSA Damper Closed at Night?	No	No	No

8.	Fan Operation at Night?	Cycling	Cycling	Cycling
9.	CO2 Sensors?	No	No	No
10.	Schedule	6am-11pm; with no Holidays	6am-11pm; with no Holidays	6am-11pm; with no Holidays

Holiday: New year's day, Martin Luther King, Presidents day, Memorial day, Independence day, Labor day, Veterans day, (2) thanksgiving day, (5) Christmas

7.2 Sequence of Operation City Hall AHU-1

City Hall

System Descriptions

AHU-1
Built-up single duct air handler with supply fan w/VFD, relief fan w/VFD, enthalpy controlled economizer, chilled water coils (confirm no hot water heating), and outside air/ mixed air/ supply air/ exhaust air damper. 96 VAV boxes with re-heat serving each zone/space with DDC controls.

Supply Fan (AHU-1)

- Supply fan will be operated by a programmable time clock. Schedules shall be programmed thru the Siemens central building energy management system. Schedule to be programmed as shown in Table 7.2.1. Supply fan shall run based on the table below.
- The supply fan shall vary in speed in response to a static pressure sensor with a 30% minimum speed for ventilation. "Full" speed shall be determined in the field at the time of the air balance, Siemens to coordinate with Mech subcontractor for air balance.
- Minimum air flow will be set based on minimum airflow required for the required ventilation air. Initial supply static air pressure setpoint shall be 1.0" w.c. Perform a static pressure test to determine optimum static pressure set point.

Return Fan (AHU-1)

- Return fan shall be interlocked with the supply fan. They will also vary speed based on building static pressure. "Full" speed shall be determined in the field at the time of the air balance. Building static pressure setpoint shall be +0.05" w.c. (+/-.01).

Table 7.2.1: AHU Schedule

AHU	Schedule
AHU-1 & AHU-2	Monday-Thursday & every other Friday: 6am – 7pm

Economizer

- Economizer shall be based upon outside air dry bulb temperature and relative humidity with both low and high limits.
- When outside air is at the below conditions or less, the economizer cycle shall be enabled

Table 7.2.2: Economizer Temp Parameters

Temp (degrees)	Wet Bulb (degrees)
67.5	61
62.5	57
57.5	53
52.5	49

- When outside air temperature is 2 deg (adjustable) greater than the return air temperature and ambient relative humidity is great than 50%, the economizer cycle shall be disabled. The outside air economizer damper shall be set to minimum.
- When outside air temperature decreases below supply air temperature setpoint (67.5 deg adjustable), the outside air damper shall modulate to maintain desired supply temperature setpoint.

Cooling/ Supply Air Reset

- Supply air temperature shall be reset according to programmable reset schedule below. For all other return air temperatures in between, supply temperature shall be interpolated on a linear scale between these two temperature points.

Table 7.2.3: Supply Air Reset Parameters

Return Air Temp	Supply Discharge Temperature
90 degrees	55 degrees
70 degrees	65 degrees

- Two-way chilled water valve shall modulate to maintain discharge air setpoint. Chilled water valve shall be off when outside air temperatures are below 60 degrees.

Existing VAV Boxes

- For all VAV boxes heating setpoint shall be 70 degrees and cooling setpoint shall be 74 degrees.
- These setpoints are adjustable from the EMS system only and no controls override shall be available at the room thermostat.

7.3 Sequence of Operation City Hall AHU-2

City Hall

System Descriptions

AHU-2
Built-up multizone dual duct constant volume air handler with supply fan only serving four zones (N, S, E, W). No economizer, 100% return air, chilled water coils and hot water coils with 2 heating valves (two stage heating valves 1/3 and 2/3). Dual duct air dampers serve each zone with DDC controls.

Supply Fan (AHU-2)

- Supply fan will be operated by a programmable time clock. Schedules shall be programmed thru the Siemens central building energy management system. Schedule to be programmed as shown in Table 1. Supply fan shall run based on the table below.

Table 7.3.1: AHU Schedule

AHU	Schedule
AHU-1 & AHU-2	Monday-Thursday & every other Friday: 6am – 7pm

Cold Deck

- Cool deck discharge air temperature shall be reset according to programmable reset schedule below. For all other return air temperatures in between, cool deck temperature shall be interpolated on a linear scale between these two temperature points.

Table 7.3.2: Cold Deck Parameters

Return Air Temp	Cool Deck Discharge Temperature
90 degrees	55 degrees
70 degrees	65 degrees

- Two-way chilled water valve shall modulate to maintain discharge air setpoint. Chilled water valve shall be off when cold deck discharge air temperature is satisfied.

Hot Deck

- Hot deck discharge air temperature shall be reset according to programmable reset schedule below. For all other return air temperatures in between, hot deck temperature shall be interpolated on a linear scale between these two temperature points.

Table 7.3.3: Hot Deck Parameters

Return Air Temp	Cool Deck Discharge Temperature
30 degrees	105 degrees
70 degrees	75 degrees

- There are 2 stages of heating with 1/3 and 2/3 heating valves. The 1/3 heating water valve shall modulate to maintain hot deck discharge air setpoint, if the temperature cannot be maintained fully open the 1/3 heating valve and modulate the 2/3 heating valve. Both hot water valves shall be off when hot deck discharge air temperature is satisfied.

Dual Duct airflow control damper

- Dual duct control dampers shall be modulated by a room heating/cooling thermostat. Simultaneous heating and cooling is not allowed. Cooling duct will normally provide the minimum ventilation air. If room temperature falls below heating setpoint, the cooling damper will close and the heating damper will open and modulate to maintain heating setpoint. Heating setpoints are 68 degrees falling and 70 degrees rising. Cooling setpoints are 74 degrees rising and 72 degrees falling.

7.4 Sequence of Operation Police Department AHU-1

Police Department

System Descriptions

AHU-1

Built-up dual duct air handler with supply fan w/VFD, relief fan w/VFD, enthalpy controlled economizer, chilled water coils, heating water coils, outside air/ mixed air/ exhaust air dampers and dual duct VAV air boxes serving each zone/space with DDC controls.

Supply Fan (AHU-1)

- Supply fan will be operating 24-7.
- The supply fan shall vary in speed in response to a static pressure sensor with a 30% minimum speed for ventilation. "Full" speed shall be determined in the field at the time of the air balance, Siemens to coordinate with Mech subcontractor for air balance.
- Minimum air flow will be set based on minimum airflow required for the required ventilation air. Initial supply static air pressure setpoint shall be 1.0" w.c. Perform a static pressure test to determine optimum static pressure set point.

Return Fan (AHU-1)

- Return fan shall be interlocked with the supply fan. They will also vary speed based on building static pressure. "Full" speed shall be determined in the field at the time of the air balance. Building static pressure setpoint shall be +0.05" w.c. (+/-.01).

Economizer

- Economizer shall be based upon outside air dry bulb temperature and relative humidity with both low and high limits.
- When outside air is at the below conditions or less, the economizer cycle shall be enabled

Table 7.4.1: Economizer Temp Parameters

Temp (degrees)	Wet Bulb (degrees)
67.5	61
62.5	57
57.5	53
52.5	49

- When outside air temperature is 2 deg (adjustable) greater than the return air temperature and ambient relative humidity is great than 50%, the economizer cycle shall be disabled. The outside air economizer damper shall be set to minimum.
- When outside air temperature decreases below supply air temperature setpoint (67.5 deg adjustable), the outside air damper shall modulate to maintain desired supply temperature setpoint.

Cold Deck

- Cool deck discharge air temperature shall be reset according to programmable reset schedule below. For all other return air temperatures in between, cool deck temperature shall be interpolated on a linear scale between these two temperature points.

Table 7.4.2: Cold Deck Parameters

Return Air Temp	Cool Deck Discharge Temperature
90 degrees	55 degrees
70 degrees	65 degrees

- Two-way chilled water valve shall modulate to maintain discharge air setpoint. Chilled water valve shall be off when cold deck discharge air temperature is satisfied.

Hot Deck

- Hot deck discharge air temperature shall be reset according to programmable reset schedule below. For all other return air temperatures in between, hot deck temperature shall be interpolated on a linear scale between these two temperature points.

Table 7.4.3: Hot Deck Parameters

Return Air Temp	Cool Deck Discharge Temperature
30 degrees	105 degrees
70 degrees	75 degrees

- Hot water valve shall modulate to maintain discharge air setpoint. Hot water valve shall be off when hot deck discharge air temperature is satisfied.

Dual Duct airflow control damper

- Dual duct control dampers shall be modulated by a room heating/cooling thermostat. Simultaneous heating and cooling is not allowed. Cooling duct will normally provide the minimum ventilation air. If room temperature falls below heating setpoint, the cooling damper will close and the heating damper will open and modulate to maintain heating setpoint. Heating setpoints are 68 degrees falling and 70 degrees rising. Cooling setpoints are 74 degrees rising and 72 degrees falling.

SIEMENS

Certificate of Substantial Completion

PROJECT NAME:	
CLIENT:	
CERTIFICATE DATE (mm/dd/yyyy):	
CERTIFICATE NUMBER:	
PROJECT NUMBER:	

The following portions of the Work are at Substantial Completion in accordance with the Agreement. (Insert unique Work item such as Facility Improvement Measure title, system name, building, etc.)

Work Item:	
Warranty Start Date (mm/dd/yyyy):	
Work Item:	
Warranty Start Date (mm/dd/yyyy):	
Work Item:	
Warranty Start Date (mm/dd/yyyy):	

The Building Technologies Division of Siemens Industry, Inc. guarantees the workmanship and materials of the above Substantially Complete Work in accordance with the Agreement.

The Work indicated above has been reviewed by the CLIENT and has been found, to the best of the CLIENT's knowledge, to be Substantially Complete. Substantial Completion is the milestone in the progress of the Work at which time the Work is sufficiently complete and available for the CLIENT to have beneficial use of the Work for its intended purpose. A list of items to be completed and corrected (if any) shall be identified as the Outstanding Items List, attached to this form, and indicated by checking the appropriate box below:

Outstanding Items List Attached: ☐ **No Outstanding Items Noted:** ☐

The failure of the CLIENT to note items requiring completion or correction does not relieve the contractual responsibility of Building Technologies Division of Siemens Industry, Inc. to complete or correct the Work. Work found to require completion or correction after the Certificate Date of this

Certificate, but within the warranty period shall be corrected in accordance with the Agreement's warranty provisions.

Building Technologies Division of Siemens Industry, Inc. agrees to complete or correct all items indicated on the Outstanding Items in a timely manner.

Building Technologies Division of Siemens Industry, Inc. Representative: _____

Signature: _____ Date: _____

The CLIENT accepts the Work indicated above as Substantially Complete and assumes possession and beneficial use of the Work on the Warranty Start Date indicated above.

CLIENT: _____

CLIENT Representative: _____

Signature: _____ Date: _____

Note: The CLIENT shall, upon execution of this Certificate of Substantial Completion, assume all contractual responsibilities for maintenance, insurance, operation, and protection of the Substantially Complete Work in accordance with the Agreement.

SIEMENS

Certificate of Final Completion

PROJECT NAME:	
CLIENT:	
CERTIFICATE DATE (mm/dd/yyyy):	
PROJECT NUMBER:	

All elements of the project Work have been reviewed by the CLIENT and have been found, to the best of the CLIENT's knowledge, to be at Final Completion. All items noted in the Outstanding Items Lists associated with Certificate(s) of Substantial Completion have been resolved, and all Work as defined in Exhibit A of the Agreement is complete.

The failure of the CLIENT to note items requiring completion or correction does not relieve the contractual responsibility of Building Technologies Division of Siemens Industry, Inc. to complete or correct the Work. Work found to require completion or correction after the date of this Certificate, but within the warranty period shall be promptly corrected in accordance with the Agreement's warranty provisions.

Building Technologies Division of Siemens Industry, Inc. has reviewed the project Work, as well as all contractual requirements, and the requirements for Final Completion have been met.

Building Technologies Division of Siemens Industry, Inc. Representative: _____

Signature: _____ Date: _____

The CLIENT accepts the project Work as meeting the requirements for Final Completion.

CLIENT: _____

CLIENT Representative: _____

Signature: _____ Date: _____

City of Garden Grove
Appendix 1
Lighting Audit

Police Station
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Police Station 1st Floor	Lobby	P	NLEDDI	12		LED (2)T8 10W 2' 2X2 DIRECT/INDIRECT	EXCLUDED/NO CHANGE	20	20	7,774			7,774	0.240	0.240	1,865.76	1,865.76	0.00	0.00	0.00	Y	A	LAY IN
2	Police Station 1st Floor	Records	P	NLEDDI	46		LED (2)T8 10W 2' 2X2 DIRECT/INDIRECT	EXCLUDED/NO CHANGE	20	20	7,774			7,774	0.900	0.900	6,996.60	6,996.60	0.00	0.00	0.00	Y	A	LAY IN
3	Police Station 1st Floor	Report Writing	P	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.165	0.063	1,282.71	489.76	792.95	0.00	792.95	Y	A	LAY IN
4	Police Station 1st Floor	Briefing	P	BT8	15		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774			7,774	1.230	0.473	9,562.02	3,673.22	5,888.81	0.00	5,888.81	Y	A	LAY IN
5	Police Station 1st Floor	Report Writing	P	CT8	5		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.275	0.105	2,137.85	816.27	1,321.58	0.00	1,321.58	Y	A	LAY IN
6	Police Station 1st Floor	Lockers	P2	CT8	7		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	4,235			4,235	0.385	0.147	1,630.48	622.55	1,007.93	0.00	1,007.93	Y	A	HARD CAP
7	Police Station 1st Floor	Lockers	P2	KW70-8	2		MH, (1) 70W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	95	20	4,235			4,235	0.190	0.040	804.65	169.40	635.25	0.00	635.25	Y	A	HARD CAP
8	Police Station 1st Floor	Lockers	P2	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,235			4,235	0.082	0.032	347.27	133.40	213.87	0.00	213.87	Y	A	HARD CAP
9	Police Station 1st Floor	Lockers	P2	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	4,235			4,235	0.165	0.063	698.78	266.81	431.97	0.00	431.97	Y	A	HARD CAP
10	Police Station 1st Floor	Lockers	P2	KW70-8	1		MH, (1) 70W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	95	20	4,235			4,235	0.095	0.020	402.33	84.70	317.63	0.00	317.63	Y	A	HARD CAP
11	Police Station 1st Floor	Lockers	P2	BT8	13		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,235			4,235	1.066	0.410	4,514.51	1,734.23	2,780.28	0.00	2,780.28	Y	A	HARD CAP
12	Police Station 1st Floor	Armory	P1	NLEDDI	4		LED (2)T8 10W 2' 2X2 DIRECT/INDIRECT	EXCLUDED/NO CHANGE	20	20	4,844			4,844	0.080	0.080	387.55	387.55	0.00	0.00	0.00	Y	A	HARD CAP
13	Police Station 1st Floor	Hall Next To Armory	P	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.055	0.021	427.57	163.25	264.32	0.00	264.32	Y	A	LAY IN
14	Police Station 1st Floor	Mechanical	P3	AST6L	1		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	112	42	3,200			3,200	0.112	0.042	358.40	134.40	224.00	0.00	224.00		A	LAY IN
15	Police Station 1st Floor	Custodian	P3	ET8	4		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	3,200	1	AD	2,560	0.220	0.084	704.00	215.04	435.20	53.76	488.96		A	HARD CAP
16	Police Station 1st Floor	Boiler	P3	ET8	4		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	3,200			3,200	0.220	0.084	704.00	268.80	435.20	0.00	435.20		A	HARD CAP
17	Police Station 1st Floor	Shredding	P	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.165	0.063	1,282.71	489.76	792.95	0.00	792.95	Y	A	LAY IN
18	Police Station 1st Floor	Report Writing	P	LED2T8	3		LED (2)T8 18W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	7,774			7,774	0.096	0.096	746.30	746.30	0.00	0.00	0.00	Y	A	LAY IN
19	Police Station 1st Floor	IT	P	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.110	0.042	855.14	326.51	528.63	0.00	528.63	Y	A	LAY IN
20	Police Station 1st Floor	In Car Video	P	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.165	0.063	1,282.71	489.76	792.95	0.00	792.95	Y	A	LAY IN
21	Police Station 1st Floor	Sergeants	P1	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	4,844			4,844	0.220	0.084	1,065.77	406.93	658.84	0.00	658.84	Y	A	LAY IN
22	Police Station 1st Floor	Watch Commander	P1	BT8	9		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,844	1	BT	3,876	0.738	0.284	3,575.17	1,096.71	2,201.78	274.68	2,476.46	Y	A	LAY IN
23	Police Station 1st Floor	Crime Analysis	P1	BT8	4		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,844			4,844	0.328	0.128	1,588.96	610.39	978.57	0.00	978.57	Y	A	LAY IN

Police Station
Room by Room Audit

24	Police Station 1st Floor	Livescan	P1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,844			4,844	0.110	0.042	532.68	203.48	329.42	0.00	329.42	Y	A	LAY IN
25	Police Station 1st Floor	Custody Processing	P	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.220	0.084	1,710.28	653.02	1,057.26	0.00	1,057.26	Y	A	LAY IN
26	Police Station 1st Floor	Interview	P	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.055	0.021	427.57	163.25	264.32	0.00	264.32	Y	A	LAY IN
27	Police Station 1st Floor	Photo	P	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.110	0.042	855.14	326.51	528.63	0.00	528.63	Y	A	LAY IN
28	Police Station 1st Floor	Photo	P	CF23TRK	2		CF. (1) 23W SCREW-IN TRACK	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 8BR30G4DIM/827 (40771))	23	8	7,774			7,774	0.046	0.018	357.60	124.38	233.22	0.00	233.22	Y	A	LAY IN
29	Police Station 1st Floor	Jail Office	P	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.220	0.084	1,710.28	653.02	1,057.26	0.00	1,057.26	Y	A	LAY IN
30	Police Station 1st Floor	Cells	P	W100RCC	3		MH. (1) 100W RECESSED CEILING CANOPY	(LED) NEW INFINILUX 5000K RECESSED CANOPY 12X12 (P/N# CLRPXX18-01-5000K)	128	20	7,774			7,774	0.384	0.080	2,985.22	466.44	2,518.78	0.00	2,518.78	Y	A	HARD CAP
31	Police Station 1st Floor	Cells	P	I75RCC	4		INCAN. (1) 75W CEILING CANOPY	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	75	9	7,774			7,774	0.300	0.036	2,332.20	279.86	2,052.34	0.00	2,052.34	Y	A	HARD CAP
32	Police Station 1st Floor	155 Jail IT	P	ET8	20		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	1.100	0.420	8,551.40	3,265.08	5,286.32	0.00	5,286.32	Y	A	LAY IN
33	Police Station 1st Floor	Jail Hallway	P	DWT8SEC	6		2L F32T8/32W W/ EB 4' WRAP W/SECURITY SCREWS	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.330	0.126	2,565.42	979.52	1,585.90	0.00	1,585.90	Y	A	LAY IN
34	Police Station 1st Floor	Jail Hallway	P	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.055	0.021	427.57	163.25	264.32	0.00	264.32	Y	A	LAY IN
35	Police Station 1st Floor	Communications	P	LED2T8	8		LED (2)T8 16W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	7,774			7,774	0.256	0.256	1,990.14	1,990.14	0.00	0.00	0.00	Y	A	LAY IN
36	Police Station 1st Floor	Communications	P	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774			7,774	0.082	0.032	637.47	244.88	392.59	0.00	392.59	Y	A	LAY IN
37	Police Station 1st Floor	Communications	P	KLED-6	12		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	7,774			7,774	0.144	0.144	1,119.46	1,119.46	0.00	0.00	0.00	Y	A	LAY IN
38	Police Station 1st Floor	Communications	P	CT8	7		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.385	0.147	2,992.99	1,142.78	1,850.21	0.00	1,850.21	Y	A	LAY IN
39	Police Station 1st Floor	Crime Prevention	P	CT8	5		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.275	0.105	2,137.85	816.27	1,321.58	0.00	1,321.58	Y	A	LAY IN
40	Police Station 1st Floor	Forensic	P	CT8	5		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.275	0.105	2,137.85	816.27	1,321.58	0.00	1,321.58	Y	A	HARD CAP
41	Police Station 1st Floor	Restrooms	P2	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,235			4,235	0.220	0.084	931.70	355.74	575.96	0.00	575.96		A	HARD CAP
42	Police Station 1st Floor	Restrooms	P2	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,235			4,235	0.055	0.021	232.93	88.94	143.99	0.00	143.99		A	HARD CAP
43	Police Station 1st Floor	Restrooms	P2	I75RCC	1		INCAN. (1) 75W CEILING CANOPY	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	75	9	4,235			4,235	0.075	0.009	317.63	38.12	279.51	0.00	279.51		A	HARD CAP
44	Police Station 1st Floor	Coffee	P	KCF23TW-4	1		CF. (1) 23W SCREW-IN 4" RECESSED CAN	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 8BR30G4DIM/827 (40771))	23	8	7,774			7,774	0.023	0.008	178.80	62.19	116.61	0.00	116.61	Y	A	LAY IN
45	Police Station 1st Floor	Community	P	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774	1	B1	6,219	0.165	0.063	1,282.71	391.81	792.95	97.95	890.90	Y	A	LAY IN
46	Police Station 1st Floor	Click set	P	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.055	0.021	427.57	163.25	264.32	0.00	264.32	Y	A	LAY IN
47	Police Station 1st Floor	Community Policing	P	CT8	5		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.275	0.105	2,137.85	816.27	1,321.58	0.00	1,321.58	Y	A	LAY IN
48	Police Station 1st Floor	Community Policing	P	H2T8S	1		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	7,774			7,774	0.033	0.016	256.54	124.38	132.16	0.00	132.16	Y	A	LAY IN

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48	Police Station 1st Floor	Hallway	P	CT8	26		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	1.430	0.546	11,116.82	4,244.80	6,872.22	0.00	6,872.22	Y	A	LAY IN
50	Police Station 1st Floor	Hallway	P	N1	1		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	7,774			7,774	0.055	0.024	427.57	188.56	240.99	0.00	240.99	Y	A	LAY IN
51	Police Station 1st Floor	Stairway	P	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	7,774			7,774	0.110	0.042	859.14	326.51	528.63	0.00	528.63	Y	A	LAY IN
52	Police Station 1st Floor	Stairway	P	CF292PWP	3		CF, TWIN, (2) 9W WALL PACK	(LED) SYLVANIA 15 WATT DLC LED PORCH LIGHT	26	15	7,774			7,774	0.052	0.030	404.25	233.22	171.03	0.00	171.03	Y	A	LAY IN
53	Police Station 1st Floor	Penthouse	P3	CF292PWP	2		CF, TWIN, (2) 9W WALL PACK	(LED) SYLVANIA 15 WATT DLC LED PORCH LIGHT	26	15	3,200			3,200	0.052	0.030	166.40	96.00	70.40	0.00	70.40		A	LAY IN
54	Police Station 1st Floor	Penthouse	P3	ET8	11		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	3,200			3,200	0.605	0.231	1,936.00	739.20	1,196.80	0.00	1,196.80		A	LAY IN
55	Police Station 1st Floor	Penthouse	P3	CF23TW	1		CF, (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	3,200			3,200	0.023	0.009	73.60	28.80	44.80	0.00	44.80		A	LAY IN
56	Police Station 1st Floor	Exits	EX	X	8		EXIT INCAN, (2) 20W LAMP EXIT	(LED) NEW MOBERN EXIT RED (PN# MEBDXRWWB1)	40	3	8,760			8,760	0.240	0.018	2,102.40	157.68	1,944.72	0.00	1,944.72		A	LAY IN
57	Police Station 1st Floor	Property and Evidence	P3	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	3,200			3,200	0.110	0.042	352.00	134.40	217.60	0.00	217.60	Y	A	HARD CAP
58	Police Station 1st Floor	Property and Evidence	P3	AST8L	5		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,200			3,200	0.560	0.210	1,792.00	672.00	1,120.00	0.00	1,120.00	Y	A	HARD CAP
59	Police Station 1st Floor	Property and Evidence	P3	FT8S	34		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	3,200			3,200	0.744	0.252	2,380.80	806.40	1,574.40	0.00	1,574.40	Y	A	HARD CAP
60	Police Station 1st Floor	Property and Evidence	P3	ET8S	13		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	3,200			3,200	0.660	0.252	2,112.00	806.40	1,305.60	0.00	1,305.60	Y	A	HARD CAP
61	Police Station 1st Floor	Property and Evidence	P3	CF23TWJJ	5		CF, (1) 23W SCREW-IN JELLY JAR	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	3,200			3,200	0.115	0.045	368.00	144.00	224.00	0.00	224.00	Y	A	HARD CAP
62	Police Station 1st Floor	Property and Evidence	P3	H2T8S	1		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,200			3,200	0.033	0.016	105.60	51.20	54.40	0.00	54.40	Y	A	HARD CAP
63	Police Station 1st Floor	Property and Evidence	P3	ET8	4		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	3,200			3,200	0.220	0.084	704.00	268.80	436.20	0.00	436.20	Y	A	HARD CAP
64	Police Station 1st Floor	Gas Pumps	P4	W250CC	4		MH, (1) 250W CEILING CANOPY	(LED) NEW DECO 60W LED 12 X 12 SQUARE CANOPY 5000K PHOTO CELL (PN# DS36-LED-60-50-UNV-BZ-PC)	295	60	4,745			4,745	1.180	0.240	5,599.10	1,138.80	4,460.30	0.00	4,460.30	Y	A	LAY IN
65	Police Station 2nd Floor	Captain	P1	BT8	4		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	B1	3,878	0.328	0.126	1,588.96	488.32	978.57	122.08	1,100.65	Y	A	LAY IN
66	Police Station 2nd Floor	Lieutenant	P1	BT8	3		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	B1	3,878	0.246	0.095	1,191.72	366.24	733.85	91.56	825.41	Y	A	LAY IN
67	Police Station 2nd Floor	Lieutenant	P1	N1	1		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	4,844			4,844	0.055	0.024	266.44	116.27	150.18	0.00	150.18	Y	A	LAY IN
68	Police Station 2nd Floor	Cold Case	P1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	AD	3,878	0.164	0.063	794.48	244.16	469.28	61.04	550.32	Y	A	LAY IN
69	Police Station 2nd Floor	Sergeant	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.80	244.64	0.00	244.64	Y	A	LAY IN
70	Police Station 2nd Floor	Sergeant	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.80	244.64	0.00	244.64	Y	A	LAY IN
71	Police Station 2nd Floor	Conference East	P	BT8	4		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774	1	B1	6,219	0.328	0.126	2,548.87	783.62	1,570.35	195.90	1,766.25	Y	A	LAY IN
72	Police Station 2nd Floor	Conference East	P	CF23TWWS	4		CF, (1) 23W SCREW-IN WALL SCONCE	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	7,774			7,774	0.092	0.036	715.21	279.86	435.34	0.00	435.34	Y	A	LAY IN
73	Police Station 2nd Floor	Conference West	P	BT8	4		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774	1	B1	6,219	0.328	0.126	2,548.87	783.62	1,570.35	195.90	1,766.25	Y	A	LAY IN

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74	Police Station 2nd Floor	Conference West	P	CF23TWWS	4		CF (1) 23W SCREW-IN WALL SCONCE	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	7,774			7,774	0.092	0.036	715.21	278.66	436.34	0.00	435.34	Y	A	LAY IN
75	Police Station 2nd Floor	CCAT	P1	BT8	6		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,844			4,844	0.492	0.189	2,383.44	915.58	1,467.85	0.00	1,467.85	Y	A	LAY IN
76	Police Station 2nd Floor	Upstairs Lobby	P	BT8	3		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774			7,774	0.248	0.095	1,912.40	734.64	1,177.76	0.00	1,177.76	Y	A	LAY IN
77	Police Station 2nd Floor	Upstairs Lobby	P	N1	1		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	7,774			7,774	0.055	0.024	427.57	186.58	240.99	0.00	240.99	Y	A	LAY IN
78	Police Station 2nd Floor	Interviews	P	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.165	0.063	1,282.71	489.76	792.95	0.00	792.95	Y	A	LAY IN
79	Police Station 2nd Floor	Interview	P	N1	1		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	7,774			7,774	0.055	0.024	427.57	186.58	240.99	0.00	240.99	Y	A	LAY IN
80	Police Station 2nd Floor	Restrooms	P2	ET8	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	4,235			4,235	0.055	0.021	232.93	88.94	143.99	0.00	143.99		A	HARD CAP
81	Police Station 2nd Floor	Restrooms	P2	AWT8	1		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	112	42	4,235			4,235	0.112	0.042	474.32	177.87	296.45	0.00	296.45		A	HARD CAP
82	Police Station 2nd Floor	Restroom	P2	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	4,235			4,235	0.055	0.021	232.93	88.94	143.99	0.00	143.99		A	HARD CAP
83	Police Station 2nd Floor	Storage	P3	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	3,200			3,200	0.110	0.042	352.00	134.40	217.60	0.00	217.60		A	LAY IN
84	Police Station 2nd Floor	Lounge	P	BT8	5		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774	1	B1	8,219	0.410	0.158	3,187.34	979.52	1,962.94	244.86	2,207.82	Y	A	LAY IN
85	Police Station 2nd Floor	Lounge	P	N1	1		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	7,774			7,774	0.055	0.024	427.57	186.58	240.99	0.00	240.99	Y	A	LAY IN
86	Police Station 2nd Floor	Copy	P	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774			7,774	0.082	0.032	637.47	244.88	392.58	0.00	392.58	Y	A	LAY IN
87	Police Station 2nd Floor	Chief	P1	BT8	9		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,844	1	B1	3,876	0.738	0.284	3,575.17	1,098.71	2,201.76	274.68	2,476.46	Y	A	LAY IN
88	Police Station 2nd Floor	Restrooms	P2	BT8	11		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,235			4,235	0.902	0.347	3,819.97	1,467.43	2,352.54	0.00	2,352.54		A	HARD CAP
89	Police Station 2nd Floor	Restrooms	P2	CF262PRCC	1		CF TWIN. (1) 26W RECESSED CEILING CANOPY	(LED)3L GREEN CREATIVE 5.5W 4K 2PIN DIRECT OR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840HYBGX23 (57823))	27	17	4,235			4,235	0.027	0.017	114.35	69.88	44.47	0.00	44.47		A	HARD CAP
90	Police Station 2nd Floor	Restrooms	P2	N1	2		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	4,235			4,235	0.110	0.048	465.85	203.28	262.57	0.00	262.57		A	HARD CAP
91	Police Station 2nd Floor	Captain	P1	BT8	3		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,844	1	B1	3,876	0.246	0.095	1,191.72	366.24	733.83	91.58	825.49	Y	A	LAY IN
92	Police Station 2nd Floor	Captain	P1	HZT8S	1		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40)	33	16	4,844			4,844	0.033	0.016	159.87	77.51	82.35	0.00	82.35	Y	A	LAY IN
93	Police Station 2nd Floor	Proffessional Standards	P1	BT8	14		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,844			4,844	1.148	0.441	5,561.37	2,136.38	3,424.99	0.00	3,424.99	Y	A	LAY IN
94	Police Station 2nd Floor	Utility Closet	P3	HS	1		1L F20T12 W/ MB 2' STRIP	(LED)1L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40)	25	8	3,200			3,200	0.025	0.006	80.00	25.60	54.40	0.00	54.40		A	LAY IN
95	Police Station 2nd Floor	Stairway	P	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.165	0.063	1,282.71	489.76	792.95	0.00	792.95	Y	A	LAY IN
96	Police Station 2nd Floor	Hallway	P	BT8	12		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774			7,774	0.984	0.378	7,649.62	2,938.57	4,711.04	0.00	4,711.04	Y	A	LAY IN
97	Police Station 2nd Floor	Hallway	P	N1	6		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	7,774			7,774	0.275	0.120	2,137.85	932.86	1,204.97	0.00	1,204.97	Y	A	LAY IN
98	Police Station 2nd Floor	Open Office	P	BT8	29		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774			7,774	2.378	0.914	18,488.57	7,101.55	11,385.02	0.00	11,385.02	Y	A	LAY IN

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99	Police Station 2nd Floor	Open Office	P	N1	2		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	7.774			7.774	0.110	0.048	855.14	373.15	481.99	0.00	481.99	Y	A	LAY IN
					508						589.814			586.342	29.569	11.903	181,478.63	73,015.35	106,758.29	1,703.99	108,463.28				

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LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Police Station Exterior	Police Exterior Building Mount	P4	W150WP	7		MH, (1) 150W WALL PACK	(LED) NEW RAB 20 WATT DLC LED WALLPACK	128	20	4,745			4,745	0.896	0.140	4,251.52	664.30	3,587.22	0.00	3,587.22		B	
2	Police Station Exterior	Police Exterior Pole	P4	W400FLPL	3		MH, (1) 400W POLE FLOOD	(LED) NEW MAXLITE 140W AREA LIGHT TYPE 4 5K BRONZE SLIP FITTER KNUCKLE 4" ROUND POLE (PN# AR-MAL-140-U-T4-5-BR-SK-4RPA)	458	140	4,745			4,745	1.374	0.420	6,519.63	1,992.90	4,526.73	0.00	4,526.73		C	
3	Police Station Exterior	Police Exterior Building Mount	P4	H2T8S	3		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	4,745			4,745	0.099	0.048	469.76	227.75	242.00	0.00	242.00		A	
4	Police Station Exterior	Police Exterior Building Mount	P4	W100FL	1		MH, (1) 100W FLOOD	(LED NEW RAB 20 WATT DLC LED FLOOD	128	20	4,745			4,745	0.128	0.020	607.36	94.90	512.46	0.00	512.46		A	
5	Police Station Exterior	Police Exterior Pole	P4	W400SHOEP L	4		MH, (1) 400W SHOEBOX POLE	(LED) AND SUPERIOR LIFE 144W SHOEBOX RETROFIT 5K (PN# LED V5 SHOEBOX RETROFIT(83823))	458	144	4,745			4,745	1.832	0.576	8,692.84	2,733.12	5,959.72	0.00	5,959.72		C	
6	Police Station Exterior	Police Exterior Pole	P4	W250SHOEP L	2		MH, (1) 250W SHOEBOX POLE	(LED) AND SUPERIOR LIFE 72W 5K LED V5 SHOEBOX RETROFIT (PN# LED V5 SHOEBOX RETROFIT(83783))	295	72	4,745			4,745	0.590	0.144	2,799.55	683.28	2,116.27	0.00	2,116.27		C	
7	Police Station Exterior	Police Exterior Walkway	P4	W50BOLL	8		MH, (1) 50W BOLLARD	(LED)1L GREEN CREATIVE 18.5W A21 5K HID BYPASS (NAED 18.5A21/850/277V(97738))	72	19	4,745			4,745	0.432	0.111	2,049.84	526.70	1,523.15	0.00	1,523.15		A	
8	Police Station Exterior	Police Exterior Flag	P4	W70GRNDVL T	10		MH, (1) 70W GROUND VAULT	(LED)1L GREEN CREATIVE 18.5W A21 5K HID BYPASS (NAED 18.5A21/850/277V(97738))	95	19	4,745			4,745	0.950	0.185	4,507.75	877.83	3,629.93	0.00	3,629.93		A	
9	Police Station Exterior	Police Exterior Building Mount	P4	W250CC	2		MH, (1) 250W CEILING CANOPY	(LED) NEW DECO 60W LED 12 X 12 SQUARE CANOPY 5000K PHOTO CELL (PN# DS36-LED-60-50-UNV-BZ-PC)	295	60	4,745			4,745	0.590	0.120	2,799.55	569.40	2,230.15	0.00	2,230.15		A	
10	Police Station Exterior	Police Exterior Pole	P4	W175GLBPT	20		MH, (1) 175W GLOBE POST TOP	(LED 1L SUPEREIOR 45W MOGUL DLC LED RETROFIT	215	45	4,745			4,745	4.300	0.900	20,403.50	4,270.50	16,133.00	0.00	16,133.00		A	
					58						47,450			47,450	11.191	2.664	53,101.30	12,640.68	40,460.62	0.00	40,460.62			

Juvenile Justice
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Juvenile Justice	Conference	P	BPBT8	4		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774	1	B1	6,219	0.328	0.128	2,549.87	783.62	1,570.35	195.90	1,766.25	Y	A	LAY IN
2	Juvenile Justice	Storage	P3	BWT8	1		3L F32T8/32W W/ EB 4' WRAP	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	3,200			3,200	0.082	0.032	262.40	100.80	161.60	0.00	161.60		A	LAY IN
3	Juvenile Justice	Breakroom	P	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774	1	B1	6,219	0.164	0.063	1,274.94	391.81	785.17	97.95	883.13	Y	A	LAY IN
4	Juvenile Justice	Investigator	P1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	AD	3,875	0.164	0.063	794.48	244.16	489.28	61.04	550.32	Y	A	LAY IN
5	Juvenile Justice	Investigator	P1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	AD	3,875	0.164	0.063	794.48	244.16	489.28	61.04	550.32	Y	A	LAY IN
6	Juvenile Justice	Investigator	P1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	AD	3,875	0.164	0.063	794.48	244.16	489.28	61.04	550.32	Y	A	LAY IN
7	Juvenile Justice	Sergeant	P1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	AD	3,875	0.164	0.063	794.48	244.16	489.28	61.04	550.32	Y	A	LAY IN
8	Juvenile Justice	Office	P1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	AD	3,875	0.164	0.063	794.48	244.16	489.28	61.04	550.32	Y	A	LAY IN
9	Juvenile Justice	Open Office	P	BT8	10		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774			7,774	1.476	0.587	11,474.42	4,407.86	7,066.57	0.00	7,066.57	Y	A	LAY IN
10	Juvenile Justice	Open Office	P	N1	2		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	55	24	7,774			7,774	0.110	0.048	855.14	373.15	481.99	0.00	481.99	Y	A	LAY IN
11	Juvenile Justice	Lobby	P	BT8	7		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774			7,774	0.574	0.221	4,462.28	1,714.17	2,748.11	0.00	2,748.11	Y	A	LAY IN
12	Juvenile Justice	Lobby	EX	X1	1		EXIT CF (2) 7W LAMP EXIT	(LED) NEW MOBERN EXIT RED (PN# MEBDXRWWB1)	21	3	8,760			8,760	0.021	0.003	183.96	26.28	157.68	0.00	157.68	Y	A	LAY IN
13	Juvenile Justice	Restrooms	P2	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,236			4,236	0.110	0.042	466.85	177.87	287.98	0.00	287.98		A	LAY IN
14	Juvenile Justice	Hallway	P3	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	3,200			3,200	0.165	0.063	528.00	201.60	326.40	0.00	326.40	Y	A	LAY IN
15	Juvenile Justice	Conference	P1	BPBT8	2		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844	1	B1	3,875	0.164	0.063	794.48	244.16	489.28	61.04	550.32	Y	A	LAY IN
16	Juvenile Justice	15	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.60	244.64	0.00	244.64	Y	A	LAY IN
17	Juvenile Justice	16	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.60	244.64	0.00	244.64	Y	A	LAY IN
18	Juvenile Justice	17	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.60	244.64	0.00	244.64	Y	A	LAY IN
19	Juvenile Justice	18	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.60	244.64	0.00	244.64	Y	A	LAY IN
20	Juvenile Justice	File	P1	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,844			4,844	0.055	0.021	268.44	101.73	164.71	0.00	164.71	Y	A	LAY IN
21	Juvenile Justice	Play Rm	P	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	7,774			7,774	0.164	0.063	1,274.94	489.76	785.17	0.00	785.17	Y	A	LAY IN
22	Juvenile Justice	18	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.60	244.64	0.00	244.64	Y	A	LAY IN
23	Juvenile Justice	19	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.60	244.64	0.00	244.64	Y	A	LAY IN

Juvenile Justice
Room by Room Audit

24	Juvenile Justice	22	P1	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	4,844			4,844	0.082	0.032	397.24	152.80	244.64	0.00	244.64	Y	A	LAY IN
25	Juvenile Justice	Mail	P3	BT8	1		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	3,200			3,200	0.082	0.032	262.40	100.80	161.60	0.00	161.60	Y	A	LAY IN
26	Juvenile Justice	Kitchen	P	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774			7,774	0.164	0.063	1,274.94	489.76	785.17	0.00	785.17	Y	A	LAY IN
27	Juvenile Justice	Hallway	P	CT8	5		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	55	21	7,774			7,774	0.275	0.105	2,137.85	816.27	1,321.58	0.00	1,321.58	Y	A	LAY IN
28	Juvenile Justice	Family Rm	P	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	82	32	7,774			7,774	0.164	0.063	1,274.94	489.76	785.17	0.00	785.17	Y	A	LAY IN
					72						180,383			151,458	5.492	2.108	36,095.93	13,198.38	22,237.46	660.09	22,897.55			

Juvenile Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Juvenile Justice Exterior	Building Mount	P4	LED20WP	12		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	4,745			4,745	0.240	0.240	1,138.80	1,138.80	0.00	0.00	0.00		A	
2	Juvenile Justice Exterior	Pole	P4	W175GLBPT	4		MH, (1) 175W GLOBE POST TOP	(LED 1L SUPEREIOR 45W MOGUL DLC LED RETROFIT	215	45	4,745			4,745	0.860	0.180	4,080.70	854.10	3,226.60	0.00	3,226.60		A	
3	Juvenile Justice Exterior	Building Mount	P4	CF2X2PFL	1		CF TWIN, (1) 26W FLOOD	(LED)3L GREEN CREATIVE 5.5W 4K 2PIN DIRECT OR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840/HYB/GX23 (57823))	27	17	4,745			4,745	0.027	0.017	128.12	78.29	49.82	0.00	49.82		A	
4	Juvenile Justice Exterior	Building Mount	P4	W70RCC	6		MH, (1) 70W RECESSED CEILING CANOPY	(LED) NEW INFINILUX 5000K RECESSED CANOPY 12X12 (PNF CLRPX18-01-5000K)	95	20	4,745			4,745	0.475	0.100	2,253.88	474.50	1,779.38	0.00	1,779.38		A	
					22						18,980			18,980	1.802	0.537	7,601.49	2,545.69	5,056.80	0.00	5,056.80			

Police Annex
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LUMINAIRE LAMP / BALLAST /	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Police Annex	Hallway	PA	CT6	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	2,721			2,721	0.177	0.063	481.80	171.42	310.18	0.00	310.18	Y	A	LAY IN
2	Police Annex	Hallway	PA	K2132P-6	1		CF, TWIN, (2) 13W 6" RECESSED CAN	(LED) AND GE 6INCH 15.5W 4K RETROFIT DOWNLIGHT (PNF RC-6-10-6-40-WD-SD-CL-MR-1V-10)	28	16	2,721			2,721	0.028	0.016	76.19	42.17	34.01	0.00	34.01	Y	A	LAY IN
3	Police Annex	Office	PA	BT8	6		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	2,721	1	B1	2,177	0.522	0.189	1,420.31	411.40	906.06	102.85	1,008.91	Y	A	LAY IN
4	Police Annex	Office	PA	BT8	6		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	2,721	1	B1	2,177	0.522	0.189	1,420.31	411.40	906.06	102.85	1,008.91	Y	A	LAY IN
5	Police Annex	Office	PA1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	1,541	1	AD	1,233	0.174	0.063	268.20	77.69	171.10	19.42	190.52	Y	A	LAY IN
6	Police Annex	Office	PA1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	1,541	1	AD	1,233	0.174	0.063	268.20	77.69	171.10	19.42	190.52	Y	A	LAY IN
7	Police Annex	Office	PA1	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	1,541	1	AD	1,233	0.174	0.063	268.20	77.69	171.10	19.42	190.52	Y	A	LAY IN
8	Police Annex	Conference	PA	BT8	6		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	2,721	1	B1	2,177	0.522	0.189	1,420.31	411.40	906.06	102.85	1,008.91	Y	A	LAY IN
9	Police Annex	Closet	PA3	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	1,120			1,120	0.174	0.063	194.88	70.56	124.32	0.00	124.32		A	LAY IN
10	Police Annex	Restroom	PA2	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	1,348			1,348	0.174	0.063	234.47	84.89	149.57	0.00	149.57		A	LAY IN
11	Police Annex	Restroom	PA2	BT8	2		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	1,348			1,348	0.174	0.063	234.47	84.89	149.57	0.00	149.57		A	LAY IN
12	Police Annex	Garage	PA	BT8	19		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	2,721			2,721	1.653	0.589	4,497.65	1,628.46	2,869.19	0.00	2,869.19	Y	A	LAY IN
13	Police Annex	Mechanical	PA3	CT6	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	1,120			1,120	0.059	0.021	66.08	23.52	42.56	0.00	42.56		A	LAY IN
14	Police Annex	Open Office	PA	BT8	14		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	87	32	2,721			2,721	1.218	0.441	3,314.06	1,199.92	2,114.14	0.00	2,114.14	Y	A	LAY IN
					68						28,606			26,048	5.745	2.084	14,184.92	4,773.09	9,025.01	366.81	9,391.83			

Police Annex Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Police Annex Exterior	Pole	PA4	W250SHOEPL	1		MH, (1) 250W SHOEBOX POLE	(LED) AND SUPERIOR LIFE 72W 5K LED V5 SHOEBOX RETROFIT (PN# LED V5 SHOEBOX RETROFIT(63783))	295	72	1,661			1,661	0.295	0.072	489.92	119.57	370.35	0.00	370.35		C	
2	Police Annex Exterior	Building Mount	PA4	CT8	6		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	58	21	1,661			1,661	0.295	0.105	489.92	174.38	315.54	0.00	315.54		A	
3	Police Annex Exterior	Building Mount	PA4	CF2262PCC	4		CF, TWIN, (2) 26W CEILING CANOPY	(LED) NEW INFINILUX 5000K RECESSED CANOPY 12X12 (PN# CLRPXX18-01-5000K)	51	20	1,661			1,661	0.204	0.080	338.79	132.86	205.93	0.00	205.93		A	
4	Police Annex Exterior	Building Mount	PA4	S150FL	2		HPS, (1) 150W FLOOD	(LED) NEW DECO 30W FLOOD 5K BRONZE YOKE MOUNT (PN# D211-30-50-UNV-YM-BZ-PC)	188	30	1,661			1,661	0.376	0.060	624.44	99.65	524.80	0.00	524.80		B	
					12						6,643			6,643	1.170	0.317	1,943.08	526.46	1,416.62	0.00	1,416.62			

City Hall
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	City Hall 1st Floor	Lobby	CH1	K2262P10	22		CF TWIN, (2) 26W 10" RECESSED CAN	(LED) AND GE 24W 10 INCH 4K RECESSED CAN RETRO FIT KIT (PN# RC-10-20-8-40-WD-SD-CL-MR-1V-10)	51	24	4,300			4,300	1.122	0.528	4,824.60	2,270.40	2,554.20	0.00	2,554.20	Y	A	LAY IN
2	City Hall 1st Floor	Lobby	CH1	K264P-6	23		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WH9940)	33	13	4,300			4,300	0.759	0.304	3,263.70	1,305.48	1,958.22	0.00	1,958.22	Y	A	LAY IN
3	City Hall 1st Floor	Lobby	CH1	K2262P-8	14		CF, TWIN, (2) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	51	20	4,300			4,300	0.714	0.280	3,070.20	1,204.00	1,866.20	0.00	1,866.20	Y	A	LAY IN
4	City Hall 1st Floor	Lobby Restrooms	CH3S	ET8VAN	6		2L F32T8/32W W/ EB VANITY	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,440			1,440	0.354	0.126	509.76	181.44	328.32	0.00	328.32	Y	A	LAY IN
5	City Hall 1st Floor	Back Hallway	CH1	K2262P-8	11		CF, TWIN, (2) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	51	20	4,300			4,300	0.561	0.220	2,412.30	946.00	1,466.30	0.00	1,466.30	Y	A	LAY IN
6	City Hall 1st Floor	Employee Restrooms	CH3S	K2262P-8	7		CF, TWIN, (2) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	51	20	1,440			1,440	0.357	0.140	514.08	201.60	312.48	0.00	312.48	Y	A	LAY IN
7	City Hall 1st Floor	Employee Restrooms	CH3S	FT8S	2		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	1,440			1,440	0.062	0.021	89.28	30.24	59.04	0.00	59.04	Y	A	LAY IN
8	City Hall 1st Floor	Employee Restrooms	CH3S	K2262P-8	7		CF, TWIN, (2) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	51	20	1,440			1,440	0.357	0.140	514.08	201.60	312.48	0.00	312.48	Y	A	LAY IN
9	City Hall 1st Floor	Employee Restrooms	CH3S	FT8S	2		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	1,440			1,440	0.062	0.021	89.28	30.24	59.04	0.00	59.04	Y	A	LAY IN
10	City Hall 1st Floor	Open Office	CH1	NPB2FB31	30		2L FBO31T8 W/ EB 2X2 PARABOLIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PARABOLIC/DEEP KIT (PN# RKT22-317WI)	56	24	4,300			4,300	1.680	0.720	7,224.00	3,096.00	4,128.00	0.00	4,128.00	Y	A	LAY IN
11	City Hall 1st Floor	Open Office	CH1	AT6LPEN	3		4L F32T8/32W W/ EB 8' PENDANT	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,300			4,300	0.336	0.126	1,444.80	541.80	903.00	0.00	903.00	Y	A	LAY IN
12	City Hall 1st Floor	Open Office	CH1	K264P-6	12		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WH9940)	33	13	4,300			4,300	0.396	0.156	1,702.80	681.12	1,021.68	0.00	1,021.68	Y	A	LAY IN
13	City Hall 1st Floor	Open Office	CH1	LED2T8	160		LED (2)T8 18W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	4,300			4,300	5.120	5.120	22,016.00	22,016.00	0.00	0.00	0.00	Y	A	LAY IN
14	City Hall 1st Floor	Open Office	CH1	NPB2FB32	3		2L FB32T8 U-LAMP W/ EB 2X2 PARABOLIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	56	24	4,300			4,300	0.177	0.072	761.10	309.60	451.50	0.00	451.50	Y	A	LAY IN
15	City Hall 1st Floor	Open Office	CH1	K2262P-8	3		CF, TWIN, (2) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	51	20	4,300			4,300	0.153	0.060	657.90	258.00	399.90	0.00	399.90	Y	A	LAY IN
16	City Hall 1st Floor	Open Office	CH1	FT8S	10		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	4,300			4,300	0.310	0.105	1,333.00	451.50	881.50	0.00	881.50	Y	A	LAY IN
17	City Hall 3rd Floor	Restrooms	CH3S	ET8VAN	8		2L F32T8/32W W/ EB VANITY	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,440			1,440	0.472	0.168	678.68	241.92	437.76	0.00	437.76	Y	A	LAY IN
18	City Hall 3rd Floor	Lobby Restrooms	CH3S	K2132P-8	3		CF, TWIN, (2) 13W 8" RECESSED CAN	(LED) AND GE 8INCH 15.5W 4K RETROFIT DOWNLIGHT (PN# RC-8-10-8-40-WD-SD-CL-MR-1V-10)	28	18	1,440			1,440	0.084	0.047	120.96	68.96	54.00	0.00	54.00	Y	A	LAY IN
19	City Hall 2nd Floor	Open Office	CH1	NPB2FB31	16		2L FBO31T8 W/ EB 2X2 PARABOLIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PARABOLIC/DEEP KIT (PN# RKT22-317WI)	56	24	4,300			4,300	0.896	0.384	3,852.80	1,651.20	2,201.60	0.00	2,201.60	Y	A	LAY IN
20	City Hall 2nd Floor	Open Office	CH1	K2262P10	14		CF TWIN, (2) 26W 10" RECESSED CAN	(LED) AND GE 24W 10 INCH 4K RECESSED CAN RETRO FIT KIT (PN# RC-10-20-8-40-WD-SD-CL-MR-1V-10)	51	24	4,300			4,300	0.714	0.336	3,070.20	1,444.80	1,625.40	0.00	1,625.40	Y	A	LAY IN
21	City Hall 2nd Floor	Open Office	CH1	K2262P-8	6		CF, TWIN, (2) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 20W 4K RETROFIT DOWNLIGHT (PN# RC-8-20-8-40-WD-SD-CL-MR-1V-10)	51	20	4,300			4,300	0.306	0.120	1,315.80	516.00	799.80	0.00	799.80	Y	A	LAY IN
22	City Hall 2nd Floor	Open Office	CH1	ET8S	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,300			4,300	0.059	0.021	253.70	90.30	163.40	0.00	163.40	Y	A	LAY IN
23	City Hall 2nd Floor	Open Office	CH1	LED2T8	160		LED (2)T8 18W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	4,300			4,300	5.120	5.120	22,016.00	22,016.00	0.00	0.00	0.00	Y	A	LAY IN

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24	City Hall 2nd Floor	Lobby Restrooms	CH3S	ET8VAN	8		2L F32T8/32W W/ EB VANITY	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,440			1,440	0.472	0.168	679.68	241.92	437.76	0.00	437.76	Y	A	LAY IN
25	City Hall 3rd Floor	3rd Floor	CH1	LED2T8	160		LED (2)T8 16W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	4,300			4,300	5.120	5.120	22,016.00	22,016.00	0.00	0.00	0.00	Y	A	LAY IN
26	City Hall 3rd Floor	3rd Floor	CH1	K2262P10	16		CF TWIN, (2) 26W 10" RECESSED CAN	(LED) AND GE 24W 10 INCH 4K RECESSED CAN RETRO FIT KIT (PN# RC-10-20-8-40-WD-SD-CL-MR-1V-10)	51	24	4,300			4,300	0.816	0.384	3,508.80	1,651.20	1,857.60	0.00	1,857.60	Y	A	LAY IN
27	City Hall 3rd Floor	3rd Floor	CH1	NPB2FB31	48		2L FBO31T8 W/ EB 2X2 PARABOLIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PARABOLIC/DEEP KIT (PN# RKT22-317WI)	56	24	4,300			4,300	2.240	0.960	9,632.00	4,128.00	5,504.00	0.00	5,504.00	Y	A	LAY IN
28	City Hall 3rd Floor	3rd Floor	CH1	AST8L	2		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,300			4,300	0.224	0.084	963.20	361.20	602.00	0.00	602.00	Y	A	LAY IN
29	City Hall 3rd Floor	3rd Floor	CH1	K2262P-6	14		CF TWIN, (2) 26W 6" RECESSED CAN	(LED) AND GE 6INCH 26W 4K RETROFIT DOWNLIGHT (PN# RC-6-20-8-40-WD-SD-CL-MR-1V-10)	51	20	4,300			4,300	0.714	0.280	3,670.20	1,204.80	1,866.20	0.00	1,866.20	Y	A	LAY IN
30	City Hall 3rd Floor	Penthouse		ET8S	14		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	0			0	0.826	0.294	0.00	0.00	0.00	0.00	0.00		A	HARD CAP
31	City Hall 3rd Floor	Penthouse		DVT8	4		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	0			0	0.236	0.084	0.00	0.00	0.00	0.00	0.00		A	HARD CAP
32	City Hall 3rd Floor	Penthouse		AST8L	2		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	0			0	0.224	0.084	0.00	0.00	0.00	0.00	0.00		A	HARD CAP
33	City Hall 3rd Floor	Penthouse		DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	0			0	0.059	0.021	0.00	0.00	0.00	0.00	0.00		A	HARD CAP
34	City Hall 3rd Floor	Penthouse		FT8S	1		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	0			0	0.031	0.011	0.00	0.00	0.00	0.00	0.00		A	HARD CAP
					785						101,820			101,820	31.133	21.826	121,605.90	89,354.52	32,251.38	0.00	32,251.38			

City Hall Ext.
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LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	City Hall Exterior	Building Mount	CH6	W100WP	1		MH, (1) 100W WALL PACK	(LED) NEW RAB 20 WATT DLC LED WALLPACK	128	20	4,745			4,745	0.128	0.020	607.36	94.90	512.46	0.00	512.46		A	
2	City Hall Exterior	Pole	CH6	W250SHOEPL	9		MH, (1) 250W SHOEBOX POLE	(LED) AND SUPERIOR LIFE 72W 5K LED V5 SHOEBOX RETROFIT (PN# LED V5 SHOEBOX RETROFIT(83793))	295	72	4,745			4,745	2.655	0.648	12,597.98	3,074.76	9,523.22	0.00	9,523.22		C	
3	City Hall Exterior	Pole	CH6	LED60SHOEPL	2		LED (1)60W FIXTURE SHOEBOX POLE	EXCLUDED/NO CHANGE	60	60	4,745			4,745	0.120	0.120	569.40	569.40	0.00	0.00	0.00		C	
4	City Hall Exterior	Building Mount	CH6	KW150-8	6		MH, (1) 150W 8" RECESSED CAN	(LED)1L GREEN CREATIVE 18.5W A21 5K HID BYPASS (NAED 18.5A21/850/277V(67734))	190	19	4,745			4,745	1.140	0.111	5,408.30	526.70	4,882.61	0.00	4,882.61		A	
5	City Hall Exterior	Building Mount	CH6	P2T12HO	1		FLUO, (2) 96" HO 8' STRIP	(LED)4L RVLT 18.5W 4FT BYPASS LED T8 (NAED SEPG4 48-18.5-N-40) AND MOBERN 8FT INDUSTRIAL/STRIP TO 4- 4FT LAMP KIT (PN# RKSC-432TANWH)	207	42	4,745			4,745	0.207	0.042	982.22	199.29	782.93	0.00	782.93		A	
					19						23,725			23,725	4.250	0.941	20,166.25	4,465.05	15,701.21	0.00	15,701.21			

Gem Theatre
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-36 D: 36-44 E: 45-60 F: 60+	CEILING TYPE
1	Gem Theatre	Equipment Storage	G3	DVT8	16		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	910			910	1.062	0.378	966.42	343.98	622.44	0.00	622.44		A	OPEN TRUSS
2	Gem Theatre	Restrooms	G3	FT8S	4		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	31	11	910			910	0.124	0.042	112.84	38.22	74.62	0.00	74.62		A	HARD CAP
3	Gem Theatre	Restrooms	G3	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	910			910	0.354	0.126	322.14	114.66	207.48	0.00	207.48		A	HARD CAP
4	Gem Theatre	Hot Water	G3	CF23TW	1		CF, (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	910			910	0.023	0.009	20.93	8.19	12.74	0.00	12.74		A	HARD CAP
5	Gem Theatre	Dressing	G1	DWT8	5		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	1,820			1,820	0.295	0.105	536.90	191.10	345.80	0.00	345.80	Y	A	HARD CAP
6	Gem Theatre	Dressing	G1	FT8S	10		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	31	11	1,820			1,820	0.310	0.105	564.20	191.10	373.10	0.00	373.10	Y	A	HARD CAP
7	Gem Theatre	Dressing	G1	HT8S	24		1L F17T8 W/ EB 2' STRIP	(LED)1L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40)	20	8	1,820			1,820	0.480	0.192	873.60	349.44	524.16	0.00	524.16	Y	A	HARD CAP
8	Gem Theatre	Storage	G1	I75	7		INCAN, (1) 75W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	75	9	1,820			1,820	0.525	0.063	955.50	114.66	840.84	0.00	840.84		A	HARD CAP
9	Gem Theatre	Back Stage	G1	DWT8	16		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	1,820			1,820	1.062	0.378	1,932.84	687.96	1,244.88	0.00	1,244.88	Y	A	HARD CAP
10	Gem Theatre	Theatre	G1	DWT8	14		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	1,820			1,820	0.826	0.294	1,503.32	535.08	968.24	0.00	968.24	Y	B	OPEN TRUSS
11	Gem Theatre	Lobby	G2	KI75-6	32		INCAN, (1) 75W 6" RECESSED CAN	(LED)1L GREEN CREATIVE 14BR403K 120V DIM (NAED 14BR40G4DIM/830 (40637))	75	14	910			910	2.400	0.448	2,184.00	407.68	1,776.32	0.00	1,776.32	Y	A	HARD CAP
12	Gem Theatre	Lobby	G2	I75WS	4		INCAN, (1) 75W WALL SCONCE	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	75	9	910			910	0.300	0.036	273.00	32.76	240.24	0.00	240.24	Y	A	HARD CAP
13	Gem Theatre	Lobby	G2	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	910			910	0.177	0.063	161.07	57.33	103.74	0.00	103.74	Y	A	HARD CAP
14	Gem Theatre	Restroom	G3	K264P-6	1		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (P/N# RL560WH-W940)	33	13	910			910	0.033	0.013	30.03	12.01	18.02	0.00	18.02		A	HARD CAP
15	Gem Theatre	Restrooms	G3	DWT8	4		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	910			910	0.236	0.084	214.76	76.44	138.32	0.00	138.32		A	HARD CAP
16	Gem Theatre	Restrooms	G3	H2T8S	2		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24 8-N-40)	33	16	910			910	0.066	0.032	60.06	29.12	30.94	0.00	30.94		A	HARD CAP
17	Gem Theatre	Lobby Restrooms	G3	ET8VAN	6		2L F32T8/32W W/ EB VANITY	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	910			910	0.354	0.126	322.14	114.66	207.48	0.00	207.48		A	HARD CAP
18	Gem Theatre	2nd Floor	G2	KI75-6	25		INCAN, (1) 75W 6" RECESSED CAN	(LED)1L GREEN CREATIVE 14BR403K 120V DIM (NAED 14BR40G4DIM/830 (40637))	75	14	910			910	1.875	0.350	1,706.25	318.50	1,387.75	0.00	1,387.75	Y	A	HARD CAP
19	Gem Theatre	2nd Floor	G2	DWT8	13		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	910			910	0.767	0.273	697.97	248.43	449.54	0.00	449.54	Y	A	HARD CAP
20	Gem Theatre	2nd Floor	G2	I75WS	6		INCAN, (1) 75W WALL SCONCE	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	75	9	910			910	0.450	0.054	409.50	49.14	360.36	0.00	360.36	Y	A	HARD CAP
21	Gem Theatre	2nd Floor	G2	I25B10C	28		INCAN. (1)25W B10C CANDELABRA CHANDELIER	(LED)1L GREEN CREATIVE LED B11 CANDELABRA BASE LAMP 5W 300 LM 2700K DIM (NAED 5B11DIM/SCCTD (57684))	25	5	910			910	0.650	0.130	591.50	118.30	473.20	0.00	473.20	Y	A	HARD CAP
22	Gem Theatre	2nd Floor	G2	I25B10C	16		INCAN. (1)25W B10C CANDELABRA CHANDELIER	(LED)1L GREEN CREATIVE LED B11 CANDELABRA BASE LAMP 5W 300 LM 2700K DIM (NAED 5B11DIM/SCCTD (57684))	25	5	910			910	0.400	0.080	364.00	72.80	291.20	0.00	291.20	Y	A	HARD CAP
23	Gem Theatre	2nd Floor	G2	FT8COVE	9		1L F32T8/32W W/ EB 4' COVE	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	31	11	910			910	0.248	0.084	225.68	76.44	149.24	0.00	149.24	Y	A	HARD CAP

Gem Theatre
Room by Room Audit

24	Gem Theatre	2nd Floor	G2	K264P-6	8		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WH9940)	33	13	910			910	0.196	0.079	180.18	72.07	108.11	0.00	108.11	Y	A	HARD CAP
25	Gem Theatre	Restrooms	G3	FT8S	8		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	31	11	910			910	0.186	0.063	169.26	57.33	111.93	0.00	111.93		A	HARD CAP
26	Gem Theatre	Storage	G3	DWT8	8		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	910			910	0.531	0.189	483.21	171.99	311.22	0.00	311.22		A	HARD CAP
27	Gem Theatre	Stairway	G1	FWT8	4		1L F32T8/32W W/ EB WRAP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	31	11	1,820			1,820	0.124	0.042	225.68	76.44	149.24	0.00	149.24		A	HARD CAP
28	Gem Theatre	Dressing Rooms	G1	I40VAN	44		INCAN, (1) 40W VANITY	(LED)1L GREEN CREATIVE 6W G25 27K 120V DIM ENERGY* (NAED 6G25DIM/827 (87729))	40	6	1,820			1,820	1.760	0.264	3,203.20	480.48	2,722.72	0.00	2,722.72	Y	A	HARD CAP
					322						32,760			32,760	15.816	4.102	19,290.16	5,046.31	14,243.87	0.00	14,243.87			

Gem Theatre Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Gem Theatre Exterior	Building Mount	G4	W150WP	9		MH, (1) 150W WALL PACK	(LED) NEW MAXLITE LED WALLMAX SMALL WALL PACK 50W 4800 LM 5000K BRONZE UNV DLC WI120V BUTTON PHOTOCELL (PN# WPS50BU50BPC(140896))	190	50	3,322			3,322	1.710	0.450	5,679.77	1,494.68	4,185.09	0.00	4,185.09		A	
2	Gem Theatre Exterior	Building Mount	G4	PT8FL	4		1L F96T8 W/ EB 8' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40) AND MOBERN 8FT INDUSTRIAL/STRIP TO 4FT LAMP KIT (PN# RK3C-232-TANWI)	58	21	3,322			3,322	0.232	0.084	770.50	279.01	491.58	0.00	491.58		A	
3	Gem Theatre Exterior	Building Mount	G4	KCF23-8	2		CF, (1) 23W SCREW-IN 8" RECESSED CAN	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 8BR30G4DIM/827 (40771))	23	8	3,322			3,322	0.046	0.016	152.79	53.14	99.65	0.00	99.65		A	
4	Gem Theatre Exterior	Building Mount	G4	CF23TWWP	1		CF, (1) 23W SCREW-IN WALL PACK	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	3,322			3,322	0.023	0.009	76.39	29.89	46.50	0.00	46.50		A	
5	Gem Theatre Exterior	Pole	G4	S150SHOEPL	4		HPS, (1) 150W SHOEBOX POLE	(LED) AND SUPERIOR LIFE 72W 5K LED V5 SHOEBOX RETROFIT (PN# LED V5 SHOEBOX RETROFIT(83783))	186	72	3,322			3,322	0.752	0.288	2,497.77	958.59	1,541.18	0.00	1,541.18		B	
					20						16,608			16,608	2.763	0.847	9,177.30	2,813.31	6,363.99	0.00	6,363.99			

Amphitheatre
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-60 F: 60+	CEILING TYPE
1	Amphitheatre	Open Area	AM	CT8	11		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,424			1,424	0.649	0.231	923.85	328.83	595.02	0.00	595.02	Y	A	LAY IN
2	Amphitheatre	Locked Office	AM1	CT8	6		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,660			1,660	0.354	0.126	587.78	209.21	378.57	0.00	378.57	Y	A	LAY IN
3	Amphitheatre	Storage	AM1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,660			1,660	0.118	0.042	195.93	69.74	126.19	0.00	126.19		A	LAY IN
4	Amphitheatre	Open Area	AM	CT8	28		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,424			1,424	1.652	0.588	2,351.82	837.02	1,514.80	0.00	1,514.80	Y	A	LAY IN
5	Amphitheatre	Open Area	AM	HOVAN	76		INCAN. (1) 40W VANITY	(LED)1L GREEN CREATIVE 6W G25 27K 120V DIM ENERGY* (NAED 6G25DIM827 (87729))	40	6	1,424			1,424	3.040	0.456	4,327.44	649.12	3,678.32	0.00	3,678.32	Y	A	LAY IN
6	Amphitheatre	Restrooms	AM	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,424			1,424	0.177	0.063	251.96	89.68	162.28	0.00	162.28		A	LAY IN
7	Amphitheatre	Snack Bar	AM1	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,660			1,660	0.354	0.126	587.78	209.21	378.57	0.00	378.57		A	LAY IN
8	Amphitheatre	Restrooms	AM	DWT8	10		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,424			1,424	0.590	0.210	839.87	298.94	540.93	0.00	540.93		A	LAY IN
9	Amphitheatre	Custodian	AM1	ET8	3		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,660			1,660	0.177	0.063	293.89	104.61	189.29	0.00	189.29		A	LAY IN
					145						13,759			13,759	7.111	1.905	10,360.12	2,796.34	7,563.78	0.00	7,563.78			

Amphitheatre Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-60	CEILING TYPE
1	Amphitheater Exterior	Building Mount	AM2	I75FL	2		INCAN, (1) 75W FLOOD	(LED)1L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (18164))	75	17	1,898			1,898	0.150	0.034	284.70	64.53	220.17	0.00	220.17		A	
2	Amphitheater Exterior	Building Mount	AM2	CF23TW	1		CF, (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	1,898			1,898	0.023	0.009	43.65	17.08	26.57	0.00	26.57		A	
3	Amphitheater Exterior	Building Mount	AM2	W175WP	3		MH, (1) 175W WALL PACK	(LED) NEW MAXLITE LED WALLMAX SMALL WALL PACK 50W 4800 LM 5000K BRONZE UNV DLC W/120V BUTTON PHOTOCELL (PN# WPS50BUS08PC(140996))	215	50	1,898			1,898	0.645	0.150	1,224.21	284.70	939.51	0.00	939.51		A	
4	Amphitheater Exterior	Building Mount	AM2	FWT8	3		, 1L F32T8/32W W/ EB WRAP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED 5EP04-48-10.5-N-40)	31	11	1,898			1,898	0.093	0.032	176.51	59.79	116.73	0.00	116.73		A	
5	Amphitheater Exterior	Building Mount	AM2	W70WP	6		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	95	20	1,898			1,898	0.475	0.100	901.55	189.80	711.75	0.00	711.75		A	
6	Amphitheater Exterior	Building Mount	AM2	CF2132PWP	2		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	1,898			1,898	0.056	0.030	106.29	56.94	49.35	0.00	49.35		A	
					16						11,388			11,388	1.442	0.355	2,736.92	672.84	2,064.08	0.00	2,064.08			

Courtyard Center
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-69 F: ...	CEILING TYPE
1	Courtyard Center	Activity Center	CY	DWT8	10		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,968			1,968	0.590	0.210	1,161.12	413.28	747.84	0.00	747.84	Y	A	LAY IN
2	Courtyard Center	Activity Center	CY	KLED-6	34		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	1,968			1,968	0.288	0.288	566.78	566.78	0.00	0.00	0.00	Y	A	LAY IN
3	Courtyard Center	Activity Center	CY	KI75-6	1		INCAN. (1) 75W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WH9940)	75	13	1,968			1,968	0.075	0.013	147.60	25.98	121.62	0.00	121.62	Y	A	LAY IN
4	Courtyard Center	Activity Center	EX	X1	2		EXIT CF, (2) 7W LAMP EXIT	(LED) NEW MOBERN EXIT RED (PN# MEBDXRWWB1)	21	3	8,760			8,760	0.042	0.006	367.92	52.56	315.36	0.00	315.36	Y	A	LAY IN
5	Courtyard Center	Outside Restrooms	CY1	AWT8	2		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	984			984	0.224	0.084	220.42	82.66	137.76	0.00	137.76		A	HARD CAP
6	Courtyard Center	Outside Restrooms	CY1	I75WP	2		INCAN. (1) 75W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	75	15	984			984	0.150	0.030	147.60	29.52	118.08	0.00	118.08		A	HARD CAP
7	Courtyard Center	Outside Restrooms	CY1	2I40CC	2		INCAN. (2) 40W CEILING CANOPY	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	80	9	984			984	0.160	0.018	157.44	17.71	139.73	0.00	139.73		A	HARD CAP
8	Courtyard Center	Plumbing Chase	CY1	ET8S	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	984			984	0.059	0.021	58.06	20.68	37.39	0.00	37.39		A	HARD CAP
9	Courtyard Center	Plumbing Chase	CY1	CF23TW	2		CF. (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	984			984	0.046	0.018	45.26	17.71	27.55	0.00	27.55		A	HARD CAP
10	Courtyard Center	Meeting Rm	CY	KLED-6	20		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	1,968			1,968	0.240	0.240	472.32	472.32	0.00	0.00	0.00	Y	A	LAY IN
11	Courtyard Center	Kitchen	CY	AST8L	3		4L F32T8/32W W/ EB 6' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	1,968			1,968	0.336	0.126	661.25	247.97	413.28	0.00	413.28	Y	A	LAY IN
12	Courtyard Center	Kitchen	CY	I75JJ	1		INCAN. (1) 75W JELLY JAR	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	75	9	1,968			1,968	0.075	0.009	147.60	17.71	129.89	0.00	129.89	Y	A	LAY IN
13	Courtyard Center	Restroom	CY1	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	984			984	0.059	0.021	58.06	20.68	37.39	0.00	37.39		A	HARD CAP
14	Courtyard Center	Office	CY1	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	984			984	0.177	0.063	174.17	61.99	112.18	0.00	112.18	Y	A	LAY IN
15	Courtyard Center	Office	CY1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	984			984	0.118	0.042	116.11	41.33	74.78	0.00	74.78	Y	A	LAY IN
16	Courtyard Center	Hallway	CY	K13ZP-6	13		CF. TWIN, (1) 13W 6" RECESSED CAN	(LED)1L GREEN CREATIVE 5.5W 4K 2PIN DIRECT OR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840/HYB/GX23 (57823))	15	6	1,968			1,968	0.195	0.072	383.76	140.71	243.05	0.00	243.05	Y	A	LAY IN
17	Courtyard Center	Hallway	CY	25B10CWS	8		INCAN. (1)25W B10C CANDELABRA WALL SCONCE	(LED)1L GREEN CREATIVE LED B11 CANDELABRA BASE LAMP 5W 300 LM 2700K DIM (NAED 5B11DIM/6CCTD (57884))	25	5	1,968			1,968	0.200	0.040	393.60	78.72	314.88	0.00	314.88	Y	A	LAY IN
18	Courtyard Center	Open Area	CY	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,968			1,968	0.295	0.105	580.56	206.64	373.92	0.00	373.92	Y	A	LAY IN
19	Courtyard Center	Restrooms	CY1	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	984			984	0.354	0.126	348.34	123.98	224.35	0.00	224.35		A	LAY IN
20	Courtyard Center Exterior	Exterior	CY2	CF23TWCC	1		CF. (1) 23W SCREW-IN CEILING CANOPY	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	5,110			5,110	0.023	0.009	117.53	45.99	71.54	0.00	71.54		A	
21	Courtyard Center Exterior	Exterior	CY2	K13ZP-6	3		CF. TWIN, (1) 13W 6" RECESSED CAN	(LED)1L GREEN CREATIVE 5.5W 4K 2PIN DIRECT OR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840/HYB/GX23 (57823))	15	6	5,110			5,110	0.045	0.017	229.95	84.32	145.64	0.00	145.64		A	
22	Courtyard Center Exterior	Exterior	CY2	W70WP	9		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	85	20	5,110			5,110	0.855	0.180	4,369.05	919.80	3,449.25	0.00	3,449.25		A	
23	Courtyard Center Exterior	Exterior	CY2	W70WP	1		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	85	20	5,110			5,110	0.085	0.020	485.45	102.20	383.25	0.00	383.25		A	

Courtyard Center
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24	Courtyard Center Exterior	Exterior	CY2	ET8	3		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	5.110			5.110	0.177	0.063	904.47	321.93	582.54	0.00	582.54		A	
25	Courtyard Center Exterior	Exterior	CY2	2I40CC	1		INCAN, (2) 40W CEILING CANOPY	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM840 (97782))	80	8	5.110			5.110	0.060	0.009	408.80	45.99	362.81	0.00	362.81		A	
26	Courtyard Center Exterior	Exterior	CY2	I75GRNDFL	8		INCAN, (1) 75WPAR38 GROUND FLOOD	(LED)1L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (16184))	75	17	5.110			5.110	0.500	0.136	3,066.00	694.96	2,371.04	0.00	2,371.04		A	
27	Courtyard Center Exterior	Exterior	CY2	I75FL	6		INCAN, (1) 75W FLOOD	(LED)1L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (16184))	75	17	5.110			5.110	0.450	0.102	2,299.50	521.22	1,778.28	0.00	1,778.28		A	
					140						76.208			76.208	6.008	2.067	18,088.71	5,375.31	12,713.40	0.00	12,713.40			

Village Green
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-34 C: 35-34 D: 36-44 E: 45-60	CEILING TYPE
1	Village Green Park	Park Poles	VG	W1000SHOE PL	22		MH, (1) 1000W SHOEBOX POLE	(LED) NEW DECO 300W LED AREA/FLOOD 5000K TYPE 3 ROUND POLE MOUNT PHOTOCELL (P/N# D823-LED-300-50-UNV-T3-RPM-BZ-PC)	1,080	300	1,825			1,825	23.760	8,600	43,362.00	12,045.00	31,317.00	0.00	31,317.00		D	
					22						1,825			1,825	23.760	8,600	43,362.00	12,045.00	31,317.00	0.00	31,317.00			

CMC
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LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-60 F: 60+	CEILING TYPE
1	CMC	Dining	CMC	CT8	32		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110			3,110	1.888	0.672	5,871.68	2,089.92	3,781.76	0.00	3,781.76	Y	A	LAY IN
2	CMC	Kitchen	CMC	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110			3,110	0.177	0.063	550.47	195.93	354.54	0.00	354.54	Y	A	LAY IN
3	CMC	Kitchen	CMC	AST8L	5		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,110			3,110	0.560	0.210	1,741.60	653.10	1,088.50	0.00	1,088.50	Y	A	LAY IN
4	CMC	Kitchen	CMC	I75JJ	1		INCAN, (1) 75W JELLY JAR	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	75	9	3,110			3,110	0.075	0.009	233.25	27.99	205.26	0.00	205.26	Y	A	LAY IN
5	CMC	Game Room	CMC	K2132P-6	12		CF, TWIN, (2) 13W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WH9940)	28	13	3,110			3,110	0.336	0.156	1,044.96	492.82	552.34	0.00	552.34	Y	A	LAY IN
6	CMC	Game Room	CMC	CT8	26		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110			3,110	1.534	0.546	4,770.74	1,698.06	3,072.68	0.00	3,072.68	Y	A	LAY IN
7	CMC	Game Room	CMC	FWT8	2		1L F32T8/32W W/ EB WRAP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	3,110			3,110	0.062	0.021	192.82	65.31	127.51	0.00	127.51	Y	A	LAY IN
8	CMC	Restrooms	CMC2	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,555			1,555	0.236	0.084	366.98	130.62	236.36	0.00	236.36	Y	A	HARD CAP
9	CMC	Restrooms	CMC2	KLED-6	7		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	1,555			1,555	0.084	0.084	130.62	130.62	0.00	0.00	0.00	Y	A	HARD CAP
10	CMC	Activity Room	CMC	CT8	30		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110			3,110	1.770	0.630	5,504.70	1,959.30	3,545.40	0.00	3,545.40	Y	A	LAY IN
11	CMC	Activity Room	CMC	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110			3,110	0.059	0.021	183.49	65.31	118.18	0.00	118.18	Y	A	LAY IN
12	CMC	Activity Room	CMC	FT8S	4		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	3,110			3,110	0.124	0.042	385.64	130.62	255.02	0.00	255.02	Y	A	LAY IN
13	CMC	Hallway	CMC	N217	8		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,110			3,110	0.264	0.128	821.04	398.08	422.96	0.00	422.96	Y	A	LAY IN
14	CMC	Office	CMC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	AD	2,488	0.118	0.042	366.98	104.50	236.36	26.12	262.48	Y	A	LAY IN
15	CMC	Office	CMC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	AD	2,488	0.118	0.042	366.98	104.50	236.36	26.12	262.48	Y	A	LAY IN
16	CMC	Conference	CMC	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	B1	2,488	0.118	0.042	366.98	104.50	236.36	26.12	262.48	Y	A	LAY IN
17	CMC	Conference	CMC	N217	2		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,110	X		2,488	0.066	0.032	205.26	79.62	105.74	19.90	125.64	Y	A	LAY IN
18	CMC	Open Office	CMC	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	B1	2,488	0.236	0.084	733.96	208.99	472.72	52.25	524.97	Y	A	LAY IN
19	CMC	Open Office	CMC	N217	4		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,110	X		2,488	0.132	0.064	410.52	159.23	211.48	39.81	251.29	Y	A	LAY IN
20	CMC	Staff Office	CMC	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	B1	2,488	0.177	0.063	550.47	156.74	354.54	39.19	393.73	Y	A	LAY IN
21	CMC	Office	CMC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	AD	2,488	0.118	0.042	366.98	104.50	236.36	26.12	262.48	Y	A	LAY IN

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22	CMC	Office	CMC1	N217	2		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,110	1	AD	2,488	0.066	0.032	205.26	79.62	105.74	19.90	125.64	Y	A	LAY IN
23	CMC	Office	CMC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	AD	2,488	0.118	0.042	366.96	104.50	236.36	26.12	262.48	Y	A	LAY IN
24	CMC	Office	CMC1	N217	2		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,110	1	AD	2,488	0.066	0.032	205.26	79.62	105.74	19.90	125.64	Y	A	LAY IN
25	CMC	Mechanical	CMC3	FT8S	1		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	1,200			1,200	0.031	0.011	37.20	12.60	24.60	0.00	24.60		A	HARD CAP
26	CMC	Community Center Rm A	CMC	AT8	46		4L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,110			3,110	5.376	2.016	16,719.36	6,269.76	10,449.60	0.00	10,449.60	Y	A	LAY IN
27	CMC	Community Center Rm A	CMC	LEDT8DEC	8		LED (1)T8 16W DIRECT WIRE DECORATIVE	EXCLUDED/NO CHANGE	16	16	3,110			3,110	0.096	0.096	298.56	298.56	0.00	0.00	0.00	Y	A	LAY IN
28	CMC	Community Center Rm A	CMC	I75TRK	4		INCAN, (1) 75W R40 TRACK	(LED)1L GREEN CREATIVE 14BR40/3K 120V DIM (NAED 14BR40G4DIM/830 (40637))	75	14	3,110			3,110	0.300	0.056	933.00	174.16	758.84	0.00	758.84	Y	A	LAY IN
29	CMC	Chair Storage	CMC3	ET8S	5		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200	1	B1	960	0.295	0.105	354.00	100.80	228.00	25.20	253.20		A	HARD CAP
30	CMC	B Room	CMC	AT8	23		4L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,110			3,110	2.576	0.968	8,011.36	3,004.26	5,007.10	0.00	5,007.10	Y	A	LAY IN
31	CMC	B Room	CMC	LEDT8DEC	2		LED (1)T8 16W DIRECT WIRE DECORATIVE	EXCLUDED/NO CHANGE	16	16	3,110			3,110	0.032	0.032	99.52	99.52	0.00	0.00	0.00	Y	A	LAY IN
32	CMC	B Room	CMC	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110			3,110	0.059	0.021	183.49	65.31	118.18	0.00	118.18	Y	A	LAY IN
33	CMC	B Room	CMC	K2132P-6	1		CF, TWIN, (2) 13W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WH9940)	28	13	3,110			3,110	0.028	0.013	87.08	41.05	46.03	0.00	46.03	Y	A	LAY IN
34	CMC	Kitchen	CMC	INDUCT70CC	10		INDUCTION (1)70W ROUND CEILING CANOPY	(LED) NEW DECO 40W SURFACE CANOPY 4K BRONZE (PN# DS36-LED-40-40-UNV-WH)	79	40	3,110			3,110	0.790	0.400	2,456.90	1,244.00	1,212.90	0.00	1,212.90		A	HARD CAP
35	CMC	Kitchen	CMC	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110			3,110	0.059	0.021	183.49	65.31	118.18	0.00	118.18		A	HARD CAP
36	CMC	Constitution	CMC	NLEDDI	12		LED (2)T8 10W 2' 2X2 DIRECT/INDIRECT	EXCLUDED/NO CHANGE	20	20	3,110			3,110	0.240	0.240	746.40	746.40	0.00	0.00	0.00	Y	A	LAY IN
37	CMC	Counsel Chambers	CMC	NLEDDI	12		LED (2)T8 10W 2' 2X2 DIRECT/INDIRECT	EXCLUDED/NO CHANGE	20	20	3,110			3,110	0.240	0.240	746.40	746.40	0.00	0.00	0.00	Y	A	LAY IN
38	CMC	Counsel Chambers	CMC	LEDTRK	12		LED (1) 8W SCREW IN TRACK	EXCLUDED/NO CHANGE	8	8	3,110			3,110	0.096	0.096	298.56	298.56	0.00	0.00	0.00	Y	A	LAY IN
39	CMC	Counsel Chambers	CMC	KLED-6	16		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	3,110			3,110	0.216	0.216	671.76	671.76	0.00	0.00	0.00	Y	A	LAY IN
40	CMC	Electrical	CMC3	ET8S	3		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.177	0.063	212.40	75.60	136.80	0.00	136.80		A	HARD CAP
41	CMC	Electrical	CMC3	FT8S	1		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	1,200			1,200	0.031	0.011	37.20	12.60	24.60	0.00	24.60		A	HARD CAP
42	CMC	Electrical	CMC3	ET8	2		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.118	0.042	141.60	50.40	91.20	0.00	91.20		A	HARD CAP
43	CMC	Founders	CMC	NLEDDI	9		LED (2)T8 10W 2' 2X2 DIRECT/INDIRECT	EXCLUDED/NO CHANGE	20	20	3,110			3,110	0.180	0.180	559.80	559.80	0.00	0.00	0.00	Y	A	LAY IN
44	CMC	Founders	CMC	KLED-8	12		LED (1)16W 8" RECESSED CAN 8" RECESSED CAN	EXCLUDED/NO CHANGE	16	16	3,110			3,110	0.192	0.192	597.12	597.12	0.00	0.00	0.00	Y	A	LAY IN

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45	CMC	Office	CMC1	KLED-6	12		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	3,110			3,110	0.144	0.144	447.84	447.84	0.00	0.00	0.00	Y	A	LAY IN
46	CMC	Office	CMC1	CT8	18		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	B1	2,488	0.590	0.210	1,834.90	522.48	1,181.80	130.62	1,312.42	Y	A	LAY IN
47	CMC	Office	CMC1	FT8S	4		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	3,110			3,110	0.124	0.042	385.64	130.62	255.02	0.00	255.02	Y	A	LAY IN
48	CMC	Office	CMC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	AD	2,488	0.118	0.042	368.96	104.50	236.36	26.12	262.48	Y	A	LAY IN
49	CMC	Office	CMC1	N217	2		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,110	1	AD	2,488	0.066	0.032	205.26	79.62	105.74	19.90	125.64	Y	A	LAY IN
50	CMC	Office	CMC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	1	AD	2,488	0.118	0.042	368.96	104.50	236.36	26.12	262.48	Y	A	LAY IN
51	CMC	Office	CMC1	N217	2		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	3,110	1	AD	2,488	0.066	0.032	205.26	79.62	105.74	19.90	125.64	Y	A	LAY IN
52	CMC	Open Area	CMC	KLED-6	24		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	3,110			3,110	0.288	0.288	895.68	895.68	0.00	0.00	0.00	Y	A	LAY IN
53	CMC	Open Area	CMC	LED T8DEC	3		LED (1)T8 16W DIRECT WIRE DECORATIVE	EXCLUDED/NO CHANGE	16	16	3,110			3,110	0.048	0.048	149.28	149.28	0.00	0.00	0.00	Y	A	LAY IN
54	CMC	Restrooms	CMC2	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,555			1,555	0.236	0.064	366.98	130.62	236.36	0.00	236.36		A	HARD CAP
55	CMC	Restrooms	CMC2	KLED-6	6		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	1,555			1,555	0.072	0.072	111.96	111.96	0.00	0.00	0.00		A	HARD CAP
56	CMC	2nd Floor	CMC	CT8	18		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,110	2	B1	2,488	1.062	0.378	3,302.82	940.46	2,127.24	235.12	2,362.36	Y	A	LAY IN
					434						158,390			147,576	22.566	9.618	67,958.40	28,154.92	38,998.91	804.57	39,803.48			

CMC Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59	CEILING TYPE
1	CMC Exterior	Building Mount	CMC4	KLED-6	6		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	5,110			5,110	0.072	0.072	367.92	367.92	0.00	0.00	0.00		A	
2	CMC Exterior	Building Mount	CMC4	LED40WP	6		LED (1)40W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	40	40	5,110			5,110	0.240	0.240	1,226.40	1,226.40	0.00	0.00	0.00		A	
3	CMC Exterior	Building Mount	CMC4	CF42FL	2		CF, QUAD, (1) 42W FLOOD	(LED) NEW RAB 20 WATT DLC LED FLOOD	46	20	5,110			5,110	0.092	0.040	470.12	204.40	265.72	0.00	265.72		A	
4	CMC Exterior	Building Mount	CMC4	FT8	3		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	5,110			5,110	0.093	0.032	475.23	160.97	314.27	0.00	314.27		A	
5	CMC Exterior	Building Mount	CMC4	KI75-6	2		INCAN, (1) 75W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (P/N# RL560WH9940)	75	13	5,110			5,110	0.150	0.026	766.50	134.90	631.60	0.00	631.60		A	
6	CMC Exterior	Exterior Handrail	CMC4	FT8COVE	3		- 1L F32T8/32W W/ EB 4' COVE	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	5,110			5,110	0.093	0.032	475.23	160.97	314.27	0.00	314.27		A	
7	CMC Exterior	Senior Center Parking	CMC4	W175GLBPT	6		MH, (1) 175W GLOBE POST TOP	(LED) 1L SUPERIOR 45W MOGUL LED DLC RETROFIT	215	45	5,110			5,110	1.290	0.270	6,591.90	1,379.70	5,212.20	0.00	5,212.20		A	
					28						35,770			35,770	2.830	0.711	10,373.30	3,635.25	6,738.05	0.00	6,738.05			

Buena Community Center
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 36-44 E: 45-69 F: 60+	CEILING TYPE
1	Buenaventura Clinton Community Center	Office	BC1	N1PBSM	2		2L FB32T8 U-LAMP W/ EB 2X2 PARABOLIC SURFACE MNT	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PARABOLIC/DEEP KIT (PN# RKT22-317WI)	59	24	2,340			2,340	0.118	0.048	276.12	112.32	163.80	0.00	163.80	Y	A	LAY IN
2	Buenaventura Clinton Community Center	Office	BC1	BPBT8	1		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	96	32	2,340			2,340	0.096	0.032	224.64	73.71	150.93	0.00	150.93	Y	A	LAY IN
3	Buenaventura Clinton Community Center	Stairs	BC	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.118	0.042	276.12	98.28	177.84	0.00	177.84	Y	A	LAY IN
4	Buenaventura Clinton Community Center	Stairs	BC	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.118	0.042	276.12	98.28	177.84	0.00	177.84	Y	A	LAY IN
5	Buenaventura Clinton Community Center	Storage	BC2	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.059	0.021	70.80	25.20	45.60	0.00	45.60		A	LAY IN
6	Buenaventura Clinton Community Center	Storage	BC2	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.059	0.021	70.80	25.20	45.60	0.00	45.60		A	LAY IN
7	Buenaventura Clinton Community Center	Kitchen	BC	NPB2FB32	2		2L FB32T8 U-LAMP W/ EB 2X2 PARABOLIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	59	24	2,340			2,340	0.118	0.048	276.12	112.32	163.80	0.00	163.80		A	LAY IN
8	Buenaventura Clinton Community Center	Front Desk	BC	CPBT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.059	0.021	138.06	49.14	88.92	0.00	88.92	Y	A	LAY IN
9	Buenaventura Clinton Community Center	Front Desk	BC	NPB2FB32	1		2L FB32T8 U-LAMP W/ EB 2X2 PARABOLIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	59	24	2,340			2,340	0.059	0.024	138.06	56.16	81.90	0.00	81.90	Y	A	LAY IN
10	Buenaventura Clinton Community Center	Front Desk	BC	K264P-6	6		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WHI940)	33	13	2,340			2,340	0.198	0.079	463.32	185.13	277.99	0.00	277.99	Y	A	LAY IN
11	Buenaventura Clinton Community Center	Stairs	BC	K264P-6	1		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WHI940)	33	13	2,340			2,340	0.033	0.013	77.22	30.89	46.33	0.00	46.33	Y	A	LAY IN
12	Buenaventura Clinton Community Center	Stairs	BC	CPBT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.118	0.042	276.12	98.28	177.84	0.00	177.84	Y	A	LAY IN
13	Buenaventura Clinton Community Center	Hallway	BC	CPBT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.118	0.042	276.12	98.28	177.84	0.00	177.84	Y	A	LAY IN
14	Buenaventura Clinton Community Center	Janitor	BC2	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.059	0.021	70.80	25.20	45.60	0.00	45.60		A	LAY IN
15	Buenaventura Clinton Community Center	Restrooms	BC3	K264P-6	12		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WHI940)	33	13	1,300			1,300	0.396	0.158	514.80	205.92	308.88	0.00	308.88		A	LAY IN
16	Buenaventura Clinton Community Center	Restrooms	BC3	FT8S	2		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	1,300			1,300	0.062	0.021	80.60	27.30	53.30	0.00	53.30		A	LAY IN
17	Buenaventura Clinton Community Center	Elevator Rm	BC2	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.059	0.021	70.80	25.20	45.60	0.00	45.60		A	LAY IN
18	Buenaventura Clinton Community Center	Rm 114	BC	BPBT8	14		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	96	32	2,340			2,340	1.344	0.441	3,144.96	1,031.94	2,113.02	0.00	2,113.02	Y	A	LAY IN
19	Buenaventura Clinton Community Center	Rm 114	BC	BPBT8	2		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	96	32	2,340			2,340	0.192	0.063	449.28	147.42	301.86	0.00	301.86	Y	A	LAY IN
20	Buenaventura Clinton Community Center	Rm 114	BC	K264P-6	8		CF, QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WHI940)	33	13	2,340			2,340	0.264	0.106	617.76	247.10	370.66	0.00	370.66	Y	A	LAY IN
21	Buenaventura Clinton Community Center	Open Area	BC	CF442HB	6		CF, QUAD, (4) 42W HIGH BAY	(LED)4L LUMERA LED DIR. VIR. 11W 4K 1319L (NAED HN-V-G2NQ-B-11W-840-G4)	164	44	2,340			2,340	1.104	0.264	2,583.36	617.76	1,965.60	0.00	1,965.60	Y	A	LAY IN
22	Buenaventura Clinton Community Center	Open Area	BC	NPB2FB32	3		2L FB32T8 U-LAMP W/ EB 2X2 PARABOLIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	59	24	2,340			2,340	0.177	0.072	414.18	168.48	245.70	0.00	245.70	Y	A	LAY IN
23	Buenaventura Clinton Community Center	Storage	BC3	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,300			1,300	0.059	0.021	76.70	27.30	49.40	0.00	49.40		A	LAY IN

Buena Community Center
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24	Buenaventura Clinton Community Center	207	BC	BPBT8	10		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	98	32	2,340			2,340	0.960	0.315	2,246.40	737.10	1,509.30	0.00	1,509.30	Y	A	LAY IN
25	Buenaventura Clinton Community Center	207	BC	K264P-6	4		CF_QUAD_(1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560WH9940)	33	13	2,340			2,340	0.132	0.053	308.88	123.55	185.33	0.00	185.33	Y	A	LAY IN
26	Buenaventura Clinton Community Center	Teen Rm	BC	BPBT8	6		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	98	32	2,340			2,340	0.576	0.189	1,347.84	442.26	905.58	0.00	905.58	Y	A	LAY IN
27	Buenaventura Clinton Community Center	Teen Rm	BC	NPB2FB32	2		2L FB32T8 U-LAMP W/ EB 2X2 PARABOLIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317W1)	59	24	2,340			2,340	0.118	0.048	276.12	112.32	163.80	0.00	163.80	Y	A	LAY IN
28	Buenaventura Clinton Community Center	Teen Rm	BC	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.118	0.042	276.12	98.28	177.84	0.00	177.84	Y	A	LAY IN
29	Buenaventura Clinton Community Center	Office	BC1	BPBT8	2		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	98	32	2,340			2,340	0.192	0.063	449.28	147.42	301.86	0.00	301.86	Y	A	LAY IN
30	Buenaventura Clinton Community Center	Hallway	BC	CPBT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.177	0.063	414.18	147.42	266.76	0.00	266.76	Y	A	LAY IN
31	Buenaventura Clinton Community Center	Hallway	BC	CPBT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.059	0.021	138.06	49.14	88.92	0.00	88.92	Y	A	LAY IN
32	Buenaventura Clinton Community Center	Office	BC1	BPBT8	3		3L F32T8/32W W/ EB 2X4 TROFFER PARABOLIC	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	98	32	2,340			2,340	0.288	0.095	673.92	221.13	452.79	0.00	452.79	Y	A	LAY IN
33	Buenaventura Clinton Community Center	Mechanical	BC2	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.059	0.021	70.80	25.20	45.60	0.00	45.60		A	LAY IN
34	Buenaventura Clinton Community Center	Storage	BC2	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,200			1,200	0.118	0.042	141.60	50.40	91.20	0.00	91.20		A	LAY IN
					110						69,600			69,600	7.784	2.614	17,206.06	5,741.23	11,464.83	0.00	11,464.83			

Buena Community Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LUMINAIRE LAMP / BALLAST /	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Buenaventura Clinton Community Center 12661 sun swept Ave.	Exterior Pillars	BC4	W150UP	6		MH. (1) 150W CYLINDER UP LIGHT	(LED)1L GREEN CREATIVE 18.5W A21 5K HID BYPASS (NAED 18.5A21/850/277V(97738))	190	19	4,271			4,271	1.140	0.111	4,868.37	474.03	4,394.34	0.00	4,394.34		A	
2	Buenaventura Clinton Community Center 12661 sun swept Ave.	Exterior Pillars	BC4	W100WP	6		MH. (1) 100W WALL PACK	(LED) NEW RAB 20 WATT DLC LED WALLPACK	128	20	4,271			4,271	0.768	0.120	3,279.74	512.46	2,767.28	0.00	2,767.28		A	
3	Buenaventura Clinton Community Center 12661 sun swept Ave.	Exterior Pillars	BC4	LED20WP	3		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	4,271			4,271	0.060	0.060	256.23	256.23	0.00	0.00	0.00		A	
					15						12,812			12,812	1.968	0.291	8,404.34	1,242.72	7,161.63	0.00	7,161.63			

Municipal Service Center
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-69 F: 69+	CEILING TYPE
1	Municipal Service Center	Main Entrance	MC	LEDTRK	8		LED (1) 8W SCREW IN TRACK	EXCLUDED/NO CHANGE	8	8	3,734			3,734	0.064	0.064	238.98	238.98	0.00	0.00	0.00	Y	A	LAY IN
2	Municipal Service Center	Open Office	MC	CT8	28		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	1.534	0.546	5,727.96	2,038.76	3,689.19	0.00	3,689.19	Y	A	LAY IN
3	Municipal Service Center	Office	MC	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734	1	B1	2,967	0.118	0.042	440.61	125.46	283.78	31.37	315.15	Y	A	LAY IN
4	Municipal Service Center	Office	MC	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734	1	B1	2,967	0.118	0.042	440.61	125.46	283.78	31.37	315.15	Y	A	LAY IN
5	Municipal Service Center	Office	MC	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734	1	B1	2,967	0.118	0.042	440.61	125.46	283.78	31.37	315.15	Y	A	LAY IN
6	Municipal Service Center	IT	MC	CF23TW	1		CF, (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	3,734			3,734	0.023	0.009	85.88	33.61	52.28	0.00	52.28	Y	A	LAY IN
7	Municipal Service Center	Janior	MC2	CF23TW	1		CF, (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	1,200			1,200	0.023	0.009	27.60	10.80	16.80	0.00	16.80		A	LAY IN
8	Municipal Service Center	Kitchenette	MC	CF292PCC	1		CF, TWIN, (2) 9W CEILING CANOPY	(LED)2L GREEN CREATIVE 5.5W 4K 2PIN DIRECT DR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840/HYB/GX23 (57823))	26	6	3,734			3,734	0.026	0.006	97.08	20.54	76.55	0.00	76.55	Y	A	LAY IN
9	Municipal Service Center	Office	MC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,600			2,600	0.118	0.042	306.80	109.20	197.60	0.00	197.60	Y	A	LAY IN
10	Municipal Service Center	Office	MC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,600			2,600	0.118	0.042	306.80	109.20	197.60	0.00	197.60	Y	A	LAY IN
11	Municipal Service Center	Restroom	MC3	CF292PCC	1		CF, TWIN, (2) 9W CEILING CANOPY	(LED)2L GREEN CREATIVE 5.5W 4K 2PIN DIRECT DR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840/HYB/GX23 (57823))	26	6	2,375			2,375	0.026	0.006	61.75	13.06	48.69	0.00	48.69		A	LAY IN
12	Municipal Service Center	Restroom	MC3	H2T8VAN	5		2L F17T8 W/ EB 2' VANITY	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	2,375			2,375	0.165	0.080	391.88	190.00	201.88	0.00	201.88		A	LAY IN
13	Municipal Service Center	Restroom	MC3	LED2T8	2		LED (2)T8 16W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	2,375			2,375	0.064	0.064	152.00	152.00	0.00	0.00	0.00		A	LAY IN
14	Municipal Service Center	Restroom	MC3	CF23TW	5		CF, (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	23	9	2,375			2,375	0.115	0.045	273.13	106.88	166.25	0.00	166.25		A	LAY IN
15	Municipal Service Center	Restroom	MC3	LEDT8S	8		LED (1)T8 16W DIRECT WIRE 4' STRIP	EXCLUDED/NO CHANGE	16	16	2,375			2,375	0.128	0.128	304.00	304.00	0.00	0.00	0.00		A	LAY IN
16	Municipal Service Center	Restroom	MC3	HT8S	3		1L F17T8 W/ EB 2' STRIP	(LED)1L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	20	8	2,375			2,375	0.060	0.024	142.50	57.00	85.50	0.00	85.50		A	LAY IN
17	Municipal Service Center	Restroom	MC3	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,375			2,375	0.177	0.063	420.38	149.63	270.75	0.00	270.75		A	LAY IN
18	Municipal Service Center	Training	MC	LED2T8	8		LED (2)T8 16W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	3,734			3,734	0.256	0.256	955.90	955.90	0.00	0.00	0.00	Y	A	LAY IN
19	Municipal Service Center	Training	MC	LED2T8	12		LED (2)T8 16W DIRECT WIRE 4' LED FIXTURE	EXCLUDED/NO CHANGE	32	32	3,734			3,734	0.384	0.384	1,433.86	1,433.86	0.00	0.00	0.00	Y	A	LAY IN
20	Municipal Service Center	Restroom	MC3	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,375			2,375	0.118	0.042	280.25	99.75	180.50	0.00	180.50		A	HARD CAP
21	Municipal Service Center	Restroom	MC3	CF13TWVAN	6		CF, (1) 13W SCREW-IN VANITY	(LED)1L GREEN CREATIVE 6W G25 27K 120V DIM ENERGY* (NAED 9G25DIM/827 (97729))	13	6	2,375			2,375	0.078	0.036	185.25	85.50	99.75	0.00	99.75		A	HARD CAP
22	Municipal Service Center	Warehouse	MC	AST8L	42		4L F32T8/32W W/ EB 6' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	4.704	1.764	17,564.74	6,586.78	10,977.96	0.00	10,977.96		B	OPEN TRUSS
23	Municipal Service Center	Warehouse	MC	FT8	1		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	3,734			3,734	0.031	0.011	115.75	39.21	76.55	0.00	76.55		B	OPEN TRUSS

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24	Municipal Service Center	Water Dept Storage	MC	INDUCT150H B	8		INDUCTION (1)150W OVAL HIGH BAY	(LED) 1L SUPERIOR 45W MOGUL LED DLC RETROFIT	161	45	3,734			3,734	1.288	0.360	4,809.39	1,344.24	3,465.15	0.00	3,465.15		A	OPEN TRUSS
25	Municipal Service Center	Water Dept Storage	MC	AST8L	5		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.560	0.210	2,091.04	784.14	1,306.90	0.00	1,306.90		A	OPEN TRUSS
26	Municipal Service Center	Water Dept Storage	MC	CF23TW	2		CF, (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIMM40 (97782))	23	9	3,734			3,734	0.046	0.018	171.78	67.21	104.56	0.00	104.56		A	OPEN TRUSS
27	Municipal Service Center	Parking Control	MC	CT8	9		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.531	0.189	1,982.75	705.73	1,277.03	0.00	1,277.03		A	HARD CAP
28	Municipal Service Center	Water Dept Bldn Restroom	MC	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.059	0.021	220.31	78.41	141.89	0.00	141.89		A	HARD CAP
29	Municipal Service Center	Entrance	MC	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.059	0.021	220.31	78.41	141.89	0.00	141.89		A	HARD CAP
30	Municipal Service Center	Water Dept 2nd Floor	MC	CT8	23		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	1.357	0.483	5,067.84	1,803.52	3,263.52	0.00	3,263.52		A	HARD CAP
31	Municipal Service Center	Office	MC1	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,600	1	B1	2,080	0.236	0.084	613.60	174.72	395.20	43.68	438.88	Y	A	LAY IN
32	Municipal Service Center	Office	MC1	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,600	1	B1	2,080	0.236	0.084	613.60	174.72	395.20	43.68	438.88	Y	A	LAY IN
33	Municipal Service Center	Breakroom	MC	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.059	0.021	220.31	78.41	141.89	0.00	141.89	Y	A	LAY IN
34	Municipal Service Center	Copy	MC	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.059	0.021	220.31	78.41	141.89	0.00	141.89	Y	A	LAY IN
35	Municipal Service Center	Restrooms	MC3	I60DRUM	2		INCAN, (1) 60W DRUM	(LED)1L GREEN CREATIVE 9A16DIM 4000K ENCLOSED FIX. (NAED 9A19DIMM40 (97782))	60	9	2,375			2,375	0.120	0.018	285.00	42.75	242.25	0.00	242.25		A	LAY IN
36	Municipal Service Center	Server Security	MC1	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,600			2,600	0.118	0.042	306.80	109.20	197.60	0.00	197.60	Y	A	LAY IN
37	Municipal Service Center	Restrooms	MC3	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,375			2,375	0.236	0.084	560.50	199.50	361.00	0.00	361.00		A	LAY IN
38	Municipal Service Center	Restrooms	MC3	CF292PCC	1		CF TWIN, (2) 9W CEILING CANOPY	(LED)2L GREEN CREATIVE 5.5W 4K 2PIN DIRECT OR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840/HYB/GX23 (57823))	28	8	2,375			2,375	0.028	0.006	61.75	13.06	48.69	0.00	48.69		A	LAY IN
39	Municipal Service Center	Restrooms	MC3	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,375			2,375	0.059	0.021	140.13	49.88	90.25	0.00	90.25		A	LAY IN
40	Municipal Service Center	Lounge	MC	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734	1	B1	2,987	0.236	0.084	881.22	250.92	567.57	62.73	630.30	Y	A	LAY IN
41	Municipal Service Center	Conference Rm	MC	CT8	8		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734	1	B1	2,987	0.472	0.168	1,762.45	501.85	1,135.14	125.46	1,260.60	Y	A	LAY IN
42	Municipal Service Center	Facilities Office	MC	CT8	8		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734	1	B1	2,987	0.472	0.168	1,762.45	501.85	1,135.14	125.46	1,260.60	Y	A	LAY IN
43	Municipal Service Center	Facilities Office	MC	I60	1		INCAN, (1) 60W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIMM40 (97782))	60	9	3,734	X		2,987	0.060	0.009	224.04	26.88	190.43	6.72	197.16	Y	A	LAY IN
44	Municipal Service Center	Signal Shop	MC	AST8L	8		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.896	0.336	3,345.66	1,254.82	2,091.04	0.00	2,091.04		A	HARD CAP
45	Municipal Service Center	Sign Shop	MC	AST8L	1		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.112	0.042	418.21	156.83	261.38	0.00	261.38		A	HARD CAP
46	Municipal Service Center	Sign Shop	MC	AST8LLED	9		LED (4)T8 18W DIRECT WIRE 8' INDUSTRUAL	EXCLUDEDNO CHANGE	64	64	3,734			3,734	0.576	0.576	2,150.78	2,150.78	0.00	0.00	0.00		A	HARD CAP
47	Municipal Service Center	Sign Shop	MC	ET8	2		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.118	0.042	440.61	156.83	283.78	0.00	283.78		A	HARD CAP
48	Municipal Service Center	Paint Storage	MC	AST8L	3		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.336	0.126	1,254.62	470.48	784.14	0.00	784.14		A	HARD CAP

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49	Municipal Service Center	Breakroom	MC	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.236	0.084	881.22	313.86	567.57	0.00	567.57		A	HARD CAP
50	Municipal Service Center	Carpenter	MC	DVT8	33		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	1.947	0.693	7,270.10	2,587.66	4,682.44	0.00	4,682.44		A	HARD CAP
51	Municipal Service Center	Carpenter	MC	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.118	0.042	440.61	156.83	283.78	0.00	283.78		A	HARD CAP
52	Municipal Service Center	Meter Shop	MC	ET8S	9		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.531	0.189	1,982.75	705.73	1,277.03	0.00	1,277.03		A	HARD CAP
53	Municipal Service Center	Meter Shop	MC	AST8L	9		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	1.008	0.378	3,763.87	1,411.45	2,352.42	0.00	2,352.42		A	HARD CAP
54	Municipal Service Center	Trees Dept	MC	AST8L	1		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.112	0.042	418.21	156.83	261.38	0.00	261.38		A	HARD CAP
55	Municipal Service Center	Trees Dept	MC	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.177	0.063	660.92	235.24	425.68	0.00	425.68		A	HARD CAP
56	Municipal Service Center	Trees Dept	MC	AST8L	5		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.560	0.210	2,091.84	784.14	1,308.90	0.00	1,308.90		A	HARD CAP
57	Municipal Service Center	Electrical	MC	AST8L	4		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.448	0.168	1,672.83	627.31	1,045.52	0.00	1,045.52		A	HARD CAP
58	Municipal Service Center	Sanitation	MC	ET8	4		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.236	0.084	881.22	313.86	567.57	0.00	567.57		A	HARD CAP
59	Municipal Service Center	Sanitation	MC	AST8L	4		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.448	0.168	1,672.83	627.31	1,045.52	0.00	1,045.52		A	HARD CAP
60	Municipal Service Center	Fire Barn	MC	AST8L	17		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	1.904	0.714	7,109.54	2,666.08	4,443.46	0.00	4,443.46		A	HARD CAP
61	Municipal Service Center	Fire Barn	MC	AWT8	2		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.224	0.084	836.42	313.86	522.76	0.00	522.76		A	HARD CAP
62	Municipal Service Center	Vehicle Maintenance	MC	AST8LLED	16		LED (4)T8 16W DIRECT WIRE 8' INDUSTRUAL	EXCLUDED/NO CHANGE	64	64	3,734			3,734	1.024	1.024	3,823.62	3,823.62	0.00	0.00	0.00		A	HARD CAP
63	Municipal Service Center	Vehicle Maintenance	MC	AST8L	28		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	2.912	1.092	10,873.41	4,077.53	6,795.88	0.00	6,795.88		B	OPEN TRUSS
64	Municipal Service Center	Vehicle Maintenance	MC	F2T8S	1		2L F96T8 W/ EB 8' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40) AND MOBERN 8FT INDUSTRIAL/STRIP TO 4FT LAMP KIT (PN# MOBERN 8' KIT RKSC-232-TANWI)	109	21	3,734			3,734	0.109	0.021	407.01	78.41	328.59	0.00	328.59		B	OPEN TRUSS
65	Municipal Service Center	Vehicle Maintenance	MC	ET8	10		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.590	0.210	2,203.06	784.14	1,418.92	0.00	1,418.92		B	OPEN TRUSS
66	Municipal Service Center	Vehicle Maintenance	MC	H300FL	1		CITZ HAL 300W DE (4 11/16" LENGTH) FLOOD	(LED) NEW RAB 20 WATT DLC LED FLOOD	300	20	3,734			3,734	0.300	0.020	1,120.20	74.68	1,045.52	0.00	1,045.52		B	OPEN TRUSS
67	Municipal Service Center	Vehicle Maintenance	MC	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.118	0.042	440.61	156.83	283.78	0.00	283.78	Y	A	HARD CAP
68	Municipal Service Center	Vehicle Maintenance	MC	CT8	8		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.472	0.168	1,762.45	627.31	1,135.14	0.00	1,135.14	Y	A	HARD CAP
69	Municipal Service Center	Vehicle Maintenance	MC	H2T8VAN	1		2L F17T8 W/ EB 2' VANITY	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	18	3,734			3,734	0.033	0.018	123.22	59.74	63.48	0.00	63.48		A	HARD CAP
70	Municipal Service Center	Sanitation	MC	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,734			3,734	0.118	0.042	440.61	156.83	283.78	0.00	283.78	Y	A	LAY IN
71	Municipal Service Center	Sanitation	MC	AT8	4		4L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,734			3,734	0.448	0.168	1,672.83	627.31	1,045.52	0.00	1,045.52	Y	A	LAY IN
72	Municipal Service Center	Sanitation	MC	N1	3		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	59	24	3,734			3,734	0.118	0.048	440.61	179.23	261.38	0.00	261.38	Y	A	LAY IN
73	Municipal Service Center	Water Engineering	MC	BT8	4		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	87	32	3,734			3,734	0.348	0.128	1,299.43	470.48	828.95	0.00	828.95	Y	A	LAY IN

Municipal Service Center
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74	Municipal Service Center	Water Engineering	MC	N1	1		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED)3L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40) AND MOBERN 2X2 3L T8 PRISMATIC/SHALLOW KIT (PN# RKT22-317WI)	59	24	3,734			3,734	0.059	0.024	220.31	89.62	130.69	0.00	130.69	Y	A	LAY IN
75	Municipal Service Center	Water Engineering	MC	BT8	23		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	87	32	3,734			3,734	2.001	0.725	7,471.73	2,705.28	4,766.45	0.00	4,766.45	Y	A	LAY IN
76	Municipal Service Center	Water Engineering	MC	K132F-6	4		CF. TWIN, (1) 13W 6" RECESSED CAN	(LED)1L GREEN CREATIVE 5.5W 4K 2PIN DIRECT OR BYPASS GX23 2-pin CFL (NAED 5.5PLS/840/HYB/GX23 (57823))	15	6	3,734			3,734	0.060	0.022	224.04	82.15	141.89	0.00	141.89	Y	A	LAY IN
77	Municipal Service Center	Car Wash	MC1	ET8	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,600			2,600	0.059	0.021	153.40	54.60	98.80	0.00	98.80		A	HARD CAP
78	Municipal Service Center	Car Wash	MC1	AST8L	3		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	2,600			2,600	0.336	0.126	873.60	327.60	546.00	0.00	546.00		A	HARD CAP
					484						263,113			258,845	33.847	13.793	123,450.65	49,639.32	73,309.50	501.83	73,811.34			

Municipal Service Center Ext.
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LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	SCM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-60 F: 60+	CEILING TYPE
1	Municipal Service Center Exterior	Exterior Building Mount	MC4	LED20PEN	22		LED (1)20W FIXTURE PENDANT	EXCLUDED/NO CHANGE	20	20	4,015			4,015	0.440	0.440	1,766.60	1,766.60	0.00	0.00	0.00		A	
2	Municipal Service Center Exterior	Exterior Building Mount	MC4	LED40WP	4		LED (1)40W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	40	40	4,015			4,015	0.160	0.160	642.40	642.40	0.00	0.00	0.00		A	
3	Municipal Service Center Exterior	Exterior Building Mount	MC4	W250FL	2		MH, (1) 250W FLOOD	(LED) NEW DECO 60W FLOOD 5K PC 120/277V YOKE MOUNT PHOTO CONTROL DLC (PN# D211-LED-60-50-UNV-T3/4-YM-BZ-PC)	295	60	4,015			4,015	0.590	0.120	2,368.85	481.80	1,887.05	0.00	1,887.05		A	
4	Municipal Service Center Exterior	Exterior Building Mount	MC4	W175WP	1		MH, (1) 175W WALL PACK	(LED) NEW MAXLITE LED WALLMAX SMALL WALL PACK 50W 4800 LM 5000K BRONZE UNV DLC W/120V BUTTON PHOTOCELL (PN# WPS50BU50BPC(140986))	215	50	4,015			4,015	0.215	0.050	863.23	200.75	662.48	0.00	662.48		A	
5	Municipal Service Center Exterior	Exterior Building Mount	MC4	INDUCT70CC	9		INDUCTION (1)70W ROUND CEILING CANOPY	(LED) NEW DECO 40W SURFACE CANOPY 4K BRONZE (PN# DS38-LED-40-40-UNV-WH)	79	40	4,015			4,015	0.711	0.360	2,854.67	1,445.40	1,409.27	0.00	1,409.27		A	
					38						20,075			20,075	2.116	1.130	8,495.74	4,536.95	3,958.79	0.00	3,958.79			

FS #1
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LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOUR	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOUR	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-16 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Fire Station #1	Apparatus Rm	F	6LT84X4	24		6L F32T8/32W W/ EB 4X4	(LED)6L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	174	63	4,818			4,818	4.176	1.512	20,119.97	7,284.82	12,835.15	0.00	12,835.15		B	HARD CAP
2	Fire Station #1	Gear Bag	F1	ET8	4		2L F32T8/32W W/ EB 4' STRP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.220	0.084	1,059.96	404.71	655.25	0.00	655.25		A	HARD CAP
3	Fire Station #1	Gear Bag	F1	AWT8	1		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,818			4,818	0.112	0.042	539.62	202.36	337.26	0.00	337.26		A	HARD CAP
4	Fire Station #1	Storage	F1	ET8	1		2L F32T8/32W W/ EB 4' STRP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.055	0.021	264.99	101.18	163.81	0.00	163.81		A	HARD CAP
5	Fire Station #1	Office	F	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.165	0.063	794.97	303.53	491.44	0.00	491.44	Y	A	HARD CAP
6	Fire Station #1	Storage	F1	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.165	0.063	794.97	303.53	491.44	0.00	491.44		A	HARD CAP
7	Fire Station #1	Kitchen	F	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.165	0.063	794.97	303.53	491.44	0.00	491.44	Y	A	HARD CAP
8	Fire Station #1	Kitchen	F	GZT8S	2		2L F25T8 W/ EB 3' STRP	(LED)2L ESPEN 3' 12W LED T8 4K INTERNAL DRIVER DIRECT WIRE (NAED L36T8/840/12G-ID)	46	24	4,818			4,818	0.092	0.048	443.26	231.26	211.99	0.00	211.99	Y	A	HARD CAP
9	Fire Station #1	Open Area	F	N1	3		2L FB32T8 U-LAMP W/ EB 2X2 PRISMATIC	(LED) ((2)ESPEN 2' 9W 4K T8 LED INTERNAL DRIVER DIRECT WIRE AND (1)MODERN 2X2 KIT RKT22-217) (PN# L24T8/840/9G-ID-DSRKT22-217)	55	18	4,818			4,818	0.165	0.054	794.97	260.17	534.80	0.00	534.80	Y	A	HARD CAP
10	Fire Station #1	Open Area	F	CT8	32		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	1.760	0.672	8,479.68	3,237.70	5,241.98	0.00	5,241.98	Y	A	HARD CAP
11	Fire Station #1	Open Area	F	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.165	0.063	794.97	303.53	491.44	0.00	491.44	Y	A	HARD CAP
12	Fire Station #1	Chief	F	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.220	0.084	1,059.96	404.71	655.25	0.00	655.25	Y	A	HARD CAP
13	Fire Station #1	Battalion Chief	F	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.220	0.084	1,059.96	404.71	655.25	0.00	655.25	Y	A	HARD CAP
14	Fire Station #1	Fire Marshal	F	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.220	0.084	1,059.96	404.71	655.25	0.00	655.25	Y	A	HARD CAP
15	Fire Station #1	Conference	F	CT8	10		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.550	0.210	2,649.90	1,011.78	1,638.12	0.00	1,638.12	Y	A	HARD CAP
16	Fire Station #1	Restrooms	F2	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	2,190			2,190	0.055	0.021	120.45	45.99	74.46	0.00	74.46		A	HARD CAP
17	Fire Station #1	Restrooms	F2	GZT8S	3		2L F25T8 W/ EB 3' STRP	(LED)2L ESPEN 3' 12W LED T8 4K INTERNAL DRIVER DIRECT WIRE (NAED L36T8/840/12G-ID)	46	24	2,190			2,190	0.138	0.072	302.22	157.68	144.54	0.00	144.54		A	HARD CAP
18	Fire Station #1	Restrooms	F2	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	2,190			2,190	0.055	0.021	120.45	45.99	74.46	0.00	74.46		A	HARD CAP
19	Fire Station #1	Restrooms	F2	GZT8S	3		2L F25T8 W/ EB 3' STRP	(LED)2L ESPEN 3' 12W LED T8 4K INTERNAL DRIVER DIRECT WIRE (NAED L36T8/840/12G-ID)	46	24	2,190			2,190	0.138	0.072	302.22	157.68	144.54	0.00	144.54		A	HARD CAP
20	Fire Station #1	Locked Storage	F1	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.165	0.063	794.97	303.53	491.44	0.00	491.44		A	HARD CAP
21	Fire Station #1	Compressor	F1	ET8	3		2L F32T8/32W W/ EB 4' STRP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.165	0.063	794.97	303.53	491.44	0.00	491.44		A	HARD CAP
22	Fire Station #1	2nd Floor	F	CT8	5		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.275	0.105	1,324.95	505.89	819.06	0.00	819.06	Y	A	HARD CAP
23	Fire Station #1	2nd Floor Hallway	F	DWT8	4		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.220	0.084	1,059.96	404.71	655.25	0.00	655.25	Y	A	HARD CAP

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24	Fire Station #1	2nd Floor Excersize	F	K264P-6	3		CF. QUAD, (1) 26W 6" RECESSED CAN	(LED) AND HALO 6" RECESSED CAN RETROFIT LED 13.2W 4K (PN# RL560W1-8940)	33	13	4,818			4,818	0.099	0.040	478.98	190.79	288.19	0.00	288.19	Y	A	HARD CAP
25	Fire Station #1	Stairs	F	KPH R20-4	2		INCAN. (1) 50W R20 4" RECESSED CAN	(LED)1L GREEN CREATIVE 6.5R20G4DIM827 (NAED 6.5R20G4DIM827 (40512))	50	7	4,818			4,818	0.100	0.013	481.80	62.63	419.17	0.00	419.17	Y	A	HARD CAP
26	Fire Station #1	Attic	F1	CF23TW	1		CF. (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM840 (18177))	23	12	4,818			4,818	0.023	0.012	110.81	57.82	53.00	0.00	53.00		A	HARD CAP
27	Fire Station #1	2nd Floor Dorms	F2	N217	32		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	18	2,190			2,190	1.056	0.512	2,312.64	1,121.28	1,191.36	0.00	1,191.36	Y	A	HARD CAP
28	Fire Station #1	2nd Floor Dorms	F2	CF23TW	9		CF. (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM840 (18177))	23	12	2,190			2,190	0.184	0.096	402.86	210.24	192.72	0.00	192.72	Y	A	HARD CAP
29	Fire Station #1	2nd Floor Dorms	F2	ET8	11		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	2,190			2,190	0.605	0.231	1,324.95	505.89	819.06	0.00	819.06	Y	A	HARD CAP
30	Fire Station #1	2nd Floor Dorms	F2	H2T8S	1		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	18	2,190			2,190	0.033	0.016	72.27	35.04	37.23	0.00	37.23	Y	A	HARD CAP
31	Fire Station #1	2nd Floor Dorms	F2	CT8	12		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	2,190			2,190	0.660	0.252	1,445.40	551.88	893.52	0.00	893.52	Y	A	HARD CAP
32	Fire Station #1	Electrical Under Stairs	F1	ET8	2		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	55	21	4,818			4,818	0.110	0.042	529.98	202.36	327.62	0.00	327.62		A	HARD CAP
					198						130,524			130,524	12.531	4.862	52,680.09	20,025.18	32,654.90	0.00	32,654.90			

FS #1 Ext.

Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOUR	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOUR	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-55 F: 56+	Rebate Amount
1	Fire Station #1 Exterior	Building Mount	F3	ET8	8		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,745			4,745	0.472	0.168	2,239.64	797.16	1,442.48	0.00	1,442.48		A	
2	Fire Station #1 Exterior	Exterior	F3	H500FL	1		QTZ HAL 500W DE (4 11/16" LENGTH) FLOOD	(LED) NEW DECO 30W FLOOD 5K BRONZE YOKE MOUNT (P/N# D211-30-50-UNV-YM-BZ-PC)	500	30	4,745			4,745	0.500	0.030	2,372.50	142.35	2,230.15	0.00	2,230.15		A	
3	Fire Station #1 Exterior	Walkway	F3	W175GLBPT	4		MH (1) 175W GLOBE POST TOP	(LED) 1L SUPERIOR 45W LED MODUL DLC RETROFIT	215	45	4,745			4,745	0.860	0.180	4,080.70	854.10	3,226.60	0.00	3,226.60		A	
4	Fire Station #1 Exterior	Building Mount	F3	W250CC	2		MH (1) 250W CEILING CANOPY	(LED) NEW DECO 60W LED 12 X 12 SQUARE CANOPY 5000K PHOTO CELL (P/N# D536-LED-60-50-UNV-BZ-PC)	295	60	4,745			4,745	0.590	0.120	2,799.55	569.40	2,230.15	0.00	2,230.15		A	
5	Fire Station #1 Exterior	Building Mount	F3	LED20WP	3		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	4,745			4,745	0.060	0.060	284.70	284.70	0.00	0.00	0.00		A	
6	Fire Station #1 Exterior	Building Mount	F3	LED12-FL	2		LED (1)12W SCREW IN FLOOD	EXCLUDED/NO CHANGE	12	12	4,745			4,745	0.024	0.024	113.88	113.88	0.00	0.00	0.00		A	
7	Fire Station #1 Exterior	Building Mount	F3	W150CC	1		MH (1) 150W CEILING CANOPY	(LED) NEW DECO 40W SURFACE CANOPY 5K BRONZE (P/N# D536-LED-40-50-UNV-BZ-C)	190	40	4,745			4,745	0.190	0.040	901.55	189.80	711.75	0.00	711.75		A	
8	Fire Station #1 Exterior	Building Mount	F3	W150WP	1		MH (1) 150W WALL PACK	(LED) NEW MAXLITE LED WALLMAX SMALL WALL PACK 50W 4800 LM 5000K BRONZE UNV DLC W/120V BUTTON PHOTOCELL (P/N# WPSS50L50BPC(140899))	190	50	4,745			4,745	0.190	0.050	901.55	237.25	664.30	0.00	664.30		A	
					22						37,960			37,960	2.886	0.672	13,694.07	3,188.64	10,505.43	0.00	10,505.43			

FS #4

Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-60 F: 60+	CEILING TYPE
1	Fire Station #4	Laundry	F	DWT8	4		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,818			4,818	0.236	0.084	1,137.65	404.71	732.34	0.00	732.34		A	HARD CAP
2	Fire Station #4	Laundry	F	I60	1		INCAN, (1) 60W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM840 (97782))	60	9	4,818			4,818	0.060	0.009	289.08	43.36	245.72	0.00	245.72		A	HARD CAP
3	Fire Station #4	Garage	F1	AWT8L	16		4L F32T8/32W W/ EB 8' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,818			4,818	1.120	0.420	5,396.16	2,023.56	3,372.60	0.00	3,372.60		A	HARD CAP
4	Fire Station #4	Garage	F1	CF2132PWP	1		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,818			4,818	0.028	0.015	134.90	72.27	62.63	0.00	62.63		A	HARD CAP
5	Fire Station #4	Garage	F1	LED20WP	1		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	4,818			4,818	0.020	0.020	96.36	96.36	0.00	0.00	0.00		A	HARD CAP
6	Fire Station #4	Living Quarters	F4	CT8	11		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,068			3,068	0.649	0.231	1,989.83	708.25	1,281.58	0.00	1,281.58	Y	A	HARD CAP
7	Fire Station #4	Living Quarters	F4	CF2132PWP	2		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	3,068			3,068	0.056	0.030	171.70	91.98	79.72	0.00	79.72	Y	A	HARD CAP
8	Fire Station #4	Living Quarters	F4	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,068			3,068	0.177	0.063	542.88	193.16	349.52	0.00	349.52	Y	A	HARD CAP
9	Fire Station #4	Living Quarters	F4	I60	1		INCAN, (1) 60W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM840 (97782))	60	9	3,068			3,068	0.060	0.009	183.98	27.59	156.37	0.00	156.37	Y	A	HARD CAP
10	Fire Station #4	Living Quarters	F4	AWT8L	1		4L F32T8/32W W/ EB 8' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,068			3,068	0.112	0.042	343.39	128.77	214.62	0.00	214.62	Y	A	HARD CAP
11	Fire Station #4	Living Quarters	F4	KCF23TW-6	2		CF, (1) 23W SCREW-IN 6" RECESSED CAN	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM840 (16177))	23	12	3,068			3,068	0.046	0.024	141.04	73.58	67.45	0.00	67.45	Y	A	HARD CAP
12	Fire Station #4	Living Quarters	F4	BT8	7		3L F32T8/32W W/ EB 2X4 TROFFER	(LED)3L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	87	32	3,068			3,068	0.609	0.221	1,867.19	676.05	1,191.14	0.00	1,191.14	Y	A	HARD CAP
13	Fire Station #4	Exterior	F3	INDUCT70CC	4		INDUCTION (1)70W ROUND CEILING CANOPY	(LED) NEW DECO 40W SURFACE CANOPY 5K BRONZE (P/N# DS36-LED-40-50-UNV-BZ-O)	79	40	4,745			4,745	0.316	0.160	1,499.42	759.20	740.22	0.00	740.22		A	
14	Fire Station #4	Exterior	F3	LED20FL	1		LED (1)20W FIXTURE FLOOD	EXCLUDED/NO CHANGE	20	20	4,745			4,745	0.020	0.020	94.90	94.90	0.00	0.00	0.00		A	
15	Fire Station #4	Exterior	F3	CF2132PWP	1		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,745			4,745	0.028	0.015	132.86	71.18	61.68	0.00	61.68		A	
16	Fire Station #4	Exterior	F3	W70FL	4		MH, (1) 70W FLOOD	(LED) NEW DECO 26W FLOOD 5K PHOTO CELL (P/N# DECO D211-LED-20-50-UNV-PC)	95	26	4,745			4,745	0.380	0.080	1,803.10	379.60	1,423.50	0.00	1,423.50		A	
17	Fire Station #4	Exterior	F3	LED20CC	1		LED (1)20W FIXTURE CEILING CANOPY	EXCLUDED/NO CHANGE	20	20	4,745			4,745	0.020	0.020	94.90	94.90	0.00	0.00	0.00		A	
18	Fire Station #4	Exterior	F3	CF23JJ	2		CF, (1) 23W SCREW-IN JELLY JAR	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM840 (16177))	23	12	4,745			4,745	0.046	0.024	218.27	113.88	104.39	0.00	104.39		A	
19	Fire Station #4	Exterior	F3	CF42FL	1		CF, QUAD, (1) 42W FLOOD	(LED) NEW RAB 20 WATT LED DLC FLOOD	48	20	4,745			4,745	0.048	0.020	218.27	94.90	123.37	0.00	123.37		A	
20	Fire Station #4	Exterior	F3	I75FL	2		INCAN, (1) 75W FLOOD	(LED)1L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (16164))	75	17	4,745			4,745	0.150	0.034	711.75	161.33	550.42	0.00	550.42		A	
21	Fire Station #4	Sign	F3	FT8	2		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	4,745			4,745	0.062	0.021	294.19	99.65	194.56	0.00	194.56		A	
					82						88,257			88,257	4.241	1.582	17,361.01	6,409.18	10,951.83	0.00	10,951.83			

FS #5
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-89 F: 90+	CEILING TYPE
1	Fire Station #5	Apparatus Room	F1	AST6L	11		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,818			4,818	1.232	0.462	5,935.78	2,225.92	3,709.86	0.00	3,709.86		A	HARD CAP
2	Fire Station #5	Apparatus Room	F1	2I75CC	1		INCAN. (2) 75W CEILING CANOPY	(LED)2L GREEN CREATIVE 9A18DIM 4000K ENCLOSED FIX. (NAED 9A18DIM/840 (97782))	150	18	4,818			4,818	0.150	0.018	722.70	86.72	635.98	0.00	635.98		A	HARD CAP
3	Fire Station #5	Living Quarters	F	CT8	19		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,818			4,818	1.121	0.399	5,400.98	1,922.38	3,478.60	0.00	3,478.60	Y	A	HARD CAP
4	Fire Station #5	Living Quarters	F	N217	1		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	4,818			4,818	0.033	0.016	158.99	77.09	81.91	0.00	81.91	Y	A	HARD CAP
5	Fire Station #5	Living Quarters	F	DWT8	15		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,818			4,818	0.885	0.315	4,263.93	1,517.67	2,746.26	0.00	2,746.26	Y	A	HARD CAP
6	Fire Station #5	Living Quarters	F	2I75CC	1		INCAN. (2) 75W CEILING CANOPY	(LED)2L GREEN CREATIVE 9A18DIM 4000K ENCLOSED FIX. (NAED 9A18DIM/840 (97782))	150	18	4,818			4,818	0.150	0.018	722.70	86.72	635.98	0.00	635.98	Y	A	HARD CAP
7	Fire Station #5	Living Quarters	F	CF2132PWP	2		CF, TWIN. (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,818			4,818	0.056	0.030	269.81	144.54	125.27	0.00	125.27	Y	A	HARD CAP
8	Fire Station #5	Living Quarters	F	KCF23TW-4	2		CF (1) 23W SCREW-IN 4" RECESSED CAN	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM/840 (18177))	23	12	4,818			4,818	0.046	0.024	221.63	115.63	106.00	0.00	106.00	Y	A	HARD CAP
9	Fire Station #5	Living Quarters	F	N217	2		2L F17T8 W/ EB 2X2 PRISMATIC	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	4,818			4,818	0.066	0.032	317.99	154.18	163.81	0.00	163.81	Y	A	HARD CAP
10	Fire Station #5	Exterior	F3	H150FL	2		INCAN. (1)150W A LINE FLOOD	(LED) NEW DECO 20W FLOOD SK PHOTO CELL (P/N# DECO D211-LED-20-50-UNV-PC)	150	20	4,745			4,745	0.300	0.040	1,423.50	189.80	1,233.70	0.00	1,233.70		A	
11	Fire Station #5	Exterior	F3	W70WP	2		MH. (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT SK BRONZE PHOTO CELL (P/N# D410-LED-20-50-UNV-BZ-PC)	95	20	4,745			4,745	0.190	0.040	901.55	189.80	711.75	0.00	711.75		A	
12	Fire Station #5	Exterior	F3	W100FL	2		MH. (1) 100W FLOOD	(LED) NEW DECO 20W FLOOD SK PHOTO CELL (P/N# DECO D211-LED-20-50-UNV-PC)	128	20	4,745			4,745	0.256	0.040	1,214.72	189.80	1,024.92	0.00	1,024.92		A	
13	Fire Station #5	Exterior	F3	2I75CC	1		INCAN. (2) 75W CEILING CANOPY	(LED)2L GREEN CREATIVE 9A18DIM 4000K ENCLOSED FIX. (NAED 9A18DIM/840 (97782))	150	18	4,745			4,745	0.150	0.018	711.75	85.41	626.34	0.00	626.34		A	
14	Fire Station #5	Exterior	F3	W150WP	1		MH. (1) 150W WALL PACK	(LED) NEW MAXLITE LED WALLMAX SMALL WALL PACK 50W 4800 LM 5000K BRONZE UNV DLC W/120V BUTTON PHOTOCELL (P/N# WPS50BU50IBPC(140896))	190	50	4,745			4,745	0.190	0.050	901.55	237.25	664.30	0.00	664.30		A	
15	Fire Station #5	Exterior	F3	LED40WP	2		LED (1)40W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	40	40	4,745			4,745	0.080	0.080	379.60	379.60	0.00	0.00	0.00		A	
					64						71,832			71,832	4.905	1.542	23,547.17	7,602.51	15,944.66	0.00	15,944.66			

FS #2
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Fire Station #2	Apperatus	F2G	AT8	14		4L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,618			4,618	1.568	0.588	7,564.62	2,832.96	4,721.64	0.00	4,721.64		A	HARD CAP
2	Fire Station #2	Apperatus	F2G	AST8L	2		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,618			4,618	0.224	0.084	1,079.23	404.71	674.52	0.00	674.52		A	HARD CAP
3	Fire Station #2	Apperatus	F2G	CF2132PWP	2		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	26	15	4,618			4,618	0.056	0.030	269.81	144.54	125.27	0.00	125.27		A	HARD CAP
4	Fire Station #2	Living Quarters	F2G	CT8	24		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,618			4,618	1.416	0.504	6,822.29	2,428.27	4,394.02	0.00	4,394.02	Y	A	HARD CAP
5	Fire Station #2	Living Quarters	F2G	ET8S	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,618			4,618	0.059	0.021	284.26	101.18	183.08	0.00	183.08	Y	A	HARD CAP
6	Fire Station #2	Living Quarters	F2G	KCF23TW-4	2		CF, (1) 23W SCREW-IN 4" RECESSED CAN	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM/840 (18177))	23	12	4,618			4,618	0.046	0.024	221.83	115.63	106.00	0.00	106.00	Y	A	HARD CAP
7	Fire Station #2	Living Quarters	F2G	I60	1		INCAN, (1) 60W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	60	9	4,618			4,618	0.060	0.009	289.08	43.36	245.72	0.00	245.72	Y	A	HARD CAP
8	Fire Station #2	Exterior	F2E	I60WP	2		INCAN, (1) 60W WALL PACK	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	60	9	4,745			4,745	0.120	0.018	569.40	86.41	483.99	0.00	483.99		A	
9	Fire Station #2	Exterior	F2E	W100FL	3		MH, (1) 100W FLOOD	(LED) NEW DECO 20W FLOOD 5K PHOTO CELL (PN# DECO D211-LED-20-50-UNV-PC)	128	20	4,745			4,745	0.384	0.060	1,822.68	284.70	1,537.38	0.00	1,537.38		A	
10	Fire Station #2	Exterior	F2E	I75FL	2		INCAN, (1) 75W FLOOD	(LED)1L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (15164))	75	17	4,745			4,745	0.150	0.034	711.75	161.33	550.42	0.00	550.42		A	
11	Fire Station #2	Sign	F2E	FT8	2		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	4,745			4,745	0.062	0.021	294.19	99.65	194.55	0.00	194.55		A	
					55						52,708			52,708	4.145	1.383	19,918.34	6,701.77	13,216.58	0.00	13,216.58			

FS #3
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LUMINAIRE LAMP / BALLAST /	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Fire Station #3	Apparatus	F1	AST8L	10		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,818			4,818	1.120	0.420	5,396.16	2,023.56	3,372.60	0.00	3,372.60		A	HARD CAP
2	Fire Station #3	Apparatus	F1	CF2132PWP	3		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,818			4,818	0.084	0.045	404.71	216.81	187.90	0.00	187.90		A	HARD CAP
3	Fire Station #3	Apparatus	F1	INDUCT70CC	3		INDUCTION (1)70W ROUND CEILING CANOPY	(LED) NEW DECO 40W SURFACE CANOPY 5K BRONZE (P/N# D538-LED-40-50-UNV-BZ-C)	79	40	4,818			4,818	0.237	0.120	1,141.87	578.16	563.71	0.00	563.71		A	HARD CAP
4	Fire Station #3	Laundry	F	AST8L	2		4L F32T8/32W W/ EB 8' INDUSTRIAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,818			4,818	0.224	0.084	1,079.23	404.71	674.52	0.00	674.52		A	HARD CAP
5	Fire Station #3	Laundry	F	I60	1		INCAN. (1) 60W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	60	9	4,818			4,818	0.060	0.009	289.08	43.36	245.72	0.00	245.72		A	HARD CAP
6	Fire Station #3	Living Quarters	F	AWT8	1		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	4,818			4,818	0.112	0.042	539.62	202.36	337.26	0.00	337.26	Y	A	HARD CAP
7	Fire Station #3	Living Quarters	F	CF213TWCC	2		CF (2) 13W SCREW-IN CEILING CANOPY	(LED)2L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	26	18	4,818			4,818	0.052	0.036	250.54	173.45	77.09	0.00	77.09	Y	A	HARD CAP
8	Fire Station #3	Living Quarters	F	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,818			4,818	0.177	0.063	852.79	303.53	549.25	0.00	549.25	Y	A	HARD CAP
9	Fire Station #3	Living Quarters	F	CT8	21		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,818			4,818	1.239	0.441	5,969.50	2,124.74	3,844.76	0.00	3,844.76	Y	A	HARD CAP
10	Fire Station #3	Living Quarters	F	I60	2		INCAN. (1) 60W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	60	9	4,818			4,818	0.120	0.018	578.16	86.72	491.44	0.00	491.44	Y	A	HARD CAP
11	Fire Station #3	Living Quarters	F	ET8S	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,818			4,818	0.059	0.021	284.26	101.18	183.08	0.00	183.08	Y	A	HARD CAP
12	Fire Station #3	Living Quarters	F	CFJJJJ	2		CF (1) 23W SCREW-IN JELLY JAR	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM/840 (16177))	23	12	4,818			4,818	0.046	0.024	221.63	115.63	106.00	0.00	106.00	Y	A	HARD CAP
13	Fire Station #3	Living Quarters	F	CF13TWWS	4		CF (1) 13W SCREW-IN WALL SCONCE	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	13	42	4,818			4,818	0.052	0.168	250.54	808.42	-558.89	0.00	-558.89	Y	A	HARD CAP
14	Fire Station #3	Exterior	F3	W70FL	1		MH, (1) 70W FLOOD	(LED) NEW DECO 20W FLOOD 5K PHOTO CELL (P/N# DECO D211-LED-20-50-UNV-PC)	95	20	4,745			4,745	0.095	0.020	450.78	94.90	355.88	0.00	355.88		A	
15	Fire Station #3	Exterior	F3	I60JJ	1		INCAN. (1) 60W JELLY JAR	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	60	9	4,745			4,745	0.060	0.009	284.70	42.71	242.00	0.00	242.00		A	
16	Fire Station #3	Exterior	F3	W100FL	2		MH, (1) 100W FLOOD	(LED) NEW DECO 20W FLOOD 5K PHOTO CELL (P/N# DECO D211-LED-20-50-UNV-PC)	128	20	4,745			4,745	0.256	0.040	1,214.72	189.80	1,024.92	0.00	1,024.92		A	
17	Fire Station #3	Exterior	F3	FT8	2		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	4,745			4,745	0.062	0.021	294.19	99.65	194.55	0.00	194.55		A	
18	Fire Station #3	Exterior	F3	212TWCC	1		CF, (2) 13W SCREW-IN CEILING CANOPY	(LED)2L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	26	18	4,745			4,745	0.026	0.018	123.37	85.41	37.96	0.00	37.96		A	
19	Fire Station #3	Exterior	F3	LED40FL	3		LED (1)40W FIXTURE FLOOD	EXCLUDED/NO CHANGE	40	40	4,745			4,745	0.120	0.120	569.40	569.40	0.00	0.00	0.00		A	
					85						91,104			91,104	4.201	1.719	20,195.23	8,265.50	11,929.73	0.00	11,929.73			

FS #7
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-89 F: 90+	CEILING TYPE
1	Fire Station #7	Living Quarters	F7	CT8	4		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	8,760			8,760	0.236	0.084	2,067.36	735.84	1,331.52	0.00	1,331.52		A	HARD CAP
2	Fire Station #7	Living Quarters	F7	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	8,760			8,760	0.354	0.126	3,101.04	1,103.76	1,997.28	0.00	1,997.28		A	HARD CAP
3	Fire Station #7	Living Quarters	F7	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	8,760			8,760	0.059	0.021	516.84	183.96	332.88	0.00	332.88		A	HARD CAP
4	Fire Station #7	Living Quarters	F7	CF413TWVAN	2		CF, (4) 13W SCREW-IN VANITY	(LED)4L GREEN CREATIVE 6W G25 27K 120V DIM ENERGY* (NAED 6G25DIM827 (97729))	52	24	8,760			8,760	0.104	0.048	911.04	420.48	490.56	0.00	490.56		A	HARD CAP
5	Fire Station #7	Living Quarters	F7	I50DEC	1		QTZ HAL 150W DE (3" LENGTH) DECORATIVE	(LED)1L GREEN CREATIVE 17A21G4DIM/840 LED A21 E26 (NAED 17A21G4DIM/840 (16161))	150	17	8,760			8,760	0.150	0.017	1,314.00	148.92	1,165.08	0.00	1,165.08		A	HARD CAP
6	Fire Station #7	Apparatus	F1	AST4L	9		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	112	42	4,818			4,818	0.896	0.336	4,318.93	1,618.85	2,686.08	0.00	2,686.08		A	HARD CAP
7	Fire Station #7	Apparatus	F1	ET8	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	4,818			4,818	0.059	0.021	284.26	101.18	183.08	0.00	183.08		A	HARD CAP
8	Fire Station #7	Exterior	F3	CF2132PWP	6		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,745			4,745	0.140	0.075	664.30	355.88	308.43	0.00	308.43		A	
9	Fire Station #7	Exterior	F3	2I75FL	1		INCAN, (2) 75W FLOOD	(LED)2L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (16164))	150	34	4,745			4,745	0.150	0.034	711.75	161.33	550.42	0.00	550.42		A	
10	Fire Station #7	Exterior	F3	CF23JJ	1		CF, (1) 23W SCREW-IN JELLY JAR	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1150 LM DIM (NAED 12A19G4DIM/840 (16177))	23	12	4,745			4,745	0.023	0.012	109.14	56.94	52.20	0.00	52.20		A	
11	Fire Station #7	Exterior	F3	CF23FL	3		CF, (1) 23W SCREW-IN FLOOD	(LED)1L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (16164))	23	17	4,745			4,745	0.069	0.051	327.41	242.00	85.41	0.00	85.41		A	
					33						72,418			72,418	2.240	0.825	14,324.06	5,129.13	9,194.93	0.00	9,194.93			

Woodbury Park
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Woodbury Park	Restrooms	WP	W70WP	4		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (P/N# D410-LED-20-50-UNV-BZ-PC)	95	20	4,380			4,380	0.380	0.080	1,664.40	350.40	1,314.00	0.00	1,314.00		A	HARD CAP
2	Woodbury Park	Restrooms	WP	DVT8	1		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.059	0.021	258.42	91.98	166.44	0.00	166.44		A	HARD CAP
3	Woodbury Park	Pool Pump	WP	DVT8	5		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.295	0.105	1,292.10	459.90	832.20	0.00	832.20		A	HARD CAP
4	Woodbury Park	Pool Pump	WP	HZT8S	1		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	4,380			4,380	0.033	0.016	144.54	70.08	74.46	0.00	74.46		A	HARD CAP
5	Woodbury Park	Pool Pump	WP	ET8	3		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88		A	HARD CAP
6	Woodbury Park	Pool Pump	WP	CF23TWCC	3		CF (1) 23W SCREW-IN CEILING CANOPY	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4D8M840 (18177))	23	12	4,380			4,380	0.069	0.036	302.22	157.68	144.54	0.00	144.54		A	HARD CAP
7	Woodbury Park	Restrooms	WP	DWT8	4		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.236	0.084	1,033.68	367.92	665.76	0.00	665.76		A	HARD CAP
8	Woodbury Park	Restrooms	WP	HZT8S	1		2L F17T8 W/ EB 2' STRIP	(LED)2L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	33	16	4,380			4,380	0.033	0.016	144.54	70.08	74.46	0.00	74.46		A	HARD CAP
					21						35,040			35,040	1.223	0.400	5,358.74	1,752.00	3,604.74	0.00	3,604.74			

Woodbury Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Woodbury Park Exterior	Building Mount	WP1	W70WP	3		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	95	20	4,745			4,745	0.285	0.060	1,352.33	284.70	1,067.63	0.00	1,067.63		A	
2	Woodbury Park Exterior	Building Mount	WP1	LED40WP	1		LED (1)40W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	40	40	4,745			4,745	0.040	0.040	189.80	189.80	0.00	0.00	0.00		A	
3	Woodbury Park Exterior	Pole	WP2	W1000SHOEPL	6		MH, (1) 1000W SHOEBOX POLE	(LED) NEW DECO 300W LED AREA/FLOOD 5000K TYPE 3 SLIP FITTER PHOTOCELL (PN# D623-LED-300-50-UNV-T3-SF-BZ-PC)	1,080	300	1,460			1,460	6.480	1.800	9,460.80	2,628.00	6,832.80	0.00	6,832.80		D	
4	Woodbury Park Exterior	Pole	WP2	W1000FLPL	4		MH, (1) 1000W POLE FLOOD	(LED) NEW 300W LED SHOEBOX/FLOOD ADJ YOKE MNT 5K 120/277V BRONZE PHOTO CONTROL DLC (PN# D623-LED-300-50-UNV-T3A-YM-BZ-PC)	1,080	300	1,460			1,460	4.320	1.200	6,307.20	1,752.00	4,555.20	0.00	4,555.20		D	
5	Woodbury Park Exterior	Pole	WP2	W250FLPL	3		MH, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 69W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	69	1,460			1,460	0.590	0.138	861.40	175.20	686.20	0.00	686.20		C	
6	Woodbury Park Exterior	Pool	WP2	W400FLPL	2		MH, (1) 400W POLE FLOOD	(LED) NEW MAXLITE 140W AREA LIGHT TYPE 4 5K BRONZE SLIP FITTER KNUCKLE 4" ROUND POLE (PN# AR-MAL-140-U-T4-8-BR-SK-4RPA)	458	140	1,460			1,460	0.916	0.280	1,337.36	408.80	928.56	0.00	928.56		C	
					18						15,330			15,330	12.631	3.500	19,508.89	5,438.50	14,070.39	0.00	14,070.39			

Westgrove Park
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-60	CEILING TYPE
1	Westgrove Park	Basketball Courts	WGP1	S250FLPL	4		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	1,898			1,898	1.180	0.240	2,239.64	455.52	1,784.12	0.00	1,784.12		C	
2	Westgrove Park	Soccer	WGP1	W250SHOEP L	10		MH, (1) 250W SHOEBOX POLE	(LED) AND SUPERIOR LIFE 72W 5K LED VS SHOEBOX RETROFIT (PN# LED VS SHOEBOX RETROFIT(83793))	295	72	1,898			1,898	2.950	0.720	5,599.10	1,366.56	4,232.54	0.00	4,232.54		C	
3	Westgrove Park	Soccer	WGP1	LED60SHOEP L	1		LED (1)60W FIXTURE SHOEBOX POLE	EXCLUDED/NO CHANGE	60	60	1,898			1,898	0.060	0.060	113.88	113.88	0.00	0.00	0.00		C	
4	Westgrove Park	Playground	WGP1	S250FLPL	2		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	1,898			1,898	0.590	0.120	1,119.82	227.76	892.06	0.00	892.06		C	
5	Westgrove Park	Playground	WGP1	LED60FLPL	1		LED (1)60W FIXTURE POLE FLOOD	EXCLUDED/NO CHANGE	60	60	1,898			1,898	0.060	0.060	113.88	113.88	0.00	0.00	0.00		C	
6	Westgrove Park	Community Srvcs Bldn Exterior	WGP1	LED20WP	4		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	1,898			1,898	0.080	0.080	151.84	151.84	0.00	0.00	0.00		A	
7	Westgrove Park	Community Srvcs Bldn Exterior	WGP1	W70WP	3		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	95	20	1,898			1,898	0.285	0.060	540.93	113.88	427.05	0.00	427.05		A	
8	Westgrove Park	Community Services Bldn	WGP2	DVT8	1		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,752			1,752	0.059	0.021	103.37	36.79	66.58	0.00	66.58		A	HARD CAP
9	Westgrove Park	Community Services Bldn	WGP2	CT8	14		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,752			1,752	0.826	0.294	1,447.15	515.09	932.06	0.00	932.06		A	HARD CAP
10	Westgrove Park	Community Services Bldn	WGP2	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,752			1,752	0.118	0.042	206.74	73.58	133.15	0.00	133.15		A	HARD CAP
11	Westgrove Park	Community Services Bldn	EX	X	1		EXIT INCAN, (2) 20W LAMP EXIT	(LED) NEW MOBERN EXIT RED (PN# MEBDXRWWB1)	40	3	8,760			8,760	0.040	0.003	350.40	26.28	324.12	0.00	324.12		A	HARD CAP
					43						27,302			27,302	6.248	1.700	11,966.75	3,195.06	8,791.68	0.00	8,791.68			

Eastgate Park
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Eastgate Park	Restrooms	EG	LED20WP	3		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	4,380			4,380	0.060	0.060	262.80	262.80	0.00	0.00	0.00		A	HARD CAP
2	Eastgate Park	Restrooms	EG	CF26PWP	3		CF, QUAD, (1) 26W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	33	15	4,380			4,380	0.099	0.045	433.62	197.10	236.52	0.00	236.52		A	HARD CAP
3	Eastgate Park	Storage	EG	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.059	0.021	258.42	91.98	166.44	0.00	166.44		A	HARD CAP
4	Eastgate Park	Kitchen	EG	DVT8	2		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88		A	HARD CAP
5	Eastgate Park	Pipe Chase	EG	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88		A	HARD CAP
6	Eastgate Park	Storage	EG	ET8S	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.059	0.021	258.42	91.98	166.44	0.00	166.44		A	HARD CAP
7	Eastgate Park	Pool Bldn Restrooms	EG	DWT8	4		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.236	0.084	1,033.68	367.92	665.76	0.00	665.76		A	HARD CAP
8	Eastgate Park	Pool Equipment	EG	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.059	0.021	258.42	91.98	166.44	0.00	166.44		A	HARD CAP
9	Eastgate Park	Pool Bldn Interior	EG	DVT8	7		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.413	0.147	1,808.94	643.86	1,165.08	0.00	1,165.08		A	HARD CAP
10	Eastgate Park	Pump House	EG	ET8	2		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88		A	HARD CAP
11	Eastgate Park	Pump House	EG	FT8S	1		1L F32T8/32W W/ EB 4' STRIP	(LED)1L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	31	11	4,380			4,380	0.031	0.011	135.78	45.99	89.79	0.00	89.79		A	HARD CAP
12	Eastgate Park	Teen Center	EG	KCF23TW-4	1		CF (1) 23W SCREW-IN 4" RECESSED CAN	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 8BR30G4DIM/827 (40771))	23	8	4,380			4,380	0.023	0.008	100.74	35.04	65.70	0.00	65.70	Y	A	HARD CAP
13	Eastgate Park	Teen Center	EG	KR30-4	3		INCAN, (1) 65W R30 4" RECESSED CAN	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 8BR30G4DIM/827 (40771))	65	8	4,380			4,380	0.195	0.024	854.10	105.12	748.98	0.00	748.98	Y	A	HARD CAP
14	Eastgate Park	Teen Center	EG	I75TRK	16		INCAN, (1) 75W R40 TRACK	(LED)1L GREEN CREATIVE 14BR40/3K 120V DIM (NAED 14BR40G4DIM/830 (40637))	75	14	4,380			4,380	1.350	0.252	5,913.00	1,103.76	4,809.24	0.00	4,809.24	Y	A	HARD CAP
15	Eastgate Park	Teen Center	EG	ET12S	2		2L F40T12 W/ MB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	72	21	4,380			4,380	0.144	0.042	630.72	183.96	446.76	0.00	446.76	Y	A	HARD CAP
16	Eastgate Park	Teen Center	EG	DWT8	4		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.236	0.084	1,033.68	367.92	665.76	0.00	665.76	Y	A	HARD CAP
17	Eastgate Park	Teen Center	EG	HS	1		1L F29T12 W/ MB 2' STRIP	(LED)1L RVLT 8W 2FT BYPASS LED T8 (NAED SEPG4-24-8-N-40)	25	8	4,380			4,380	0.025	0.008	109.50	35.04	74.46	0.00	74.46	Y	A	HARD CAP
18	Eastgate Park	Teen Center	EG	I50	6		INCAN, (1) 50W KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	60	9	4,380			4,380	0.360	0.054	1,576.80	236.52	1,340.28	0.00	1,340.28	Y	A	HARD CAP
19	Eastgate Park	Teen Center	EG	MR16TRK	3		1L 50WMR16 TRACK	(LED)1L GREEN CREATIVE 6MR16G4DIM/830FL36 LED (NAED 6MR16G4DIM/830FL36 (40758))	60	6	4,380			4,380	0.180	0.018	788.40	78.84	709.56	0.00	709.56	Y	A	HARD CAP
					65						83,220			83,220	3.883	1.026	17,007.54	4,491.69	12,515.85	0.00	12,515.85			

Eastgate Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	EASTGATE PARK EXTERIOR	Walkway	EG2	LED40POST	7		LED (1)40W FIXTURE POST TOP	EXCLUDED/NO CHANGE	40	40	4,745			4,745	0.280	0.280	1,328.60	1,328.60	0.00	0.00	0.00		A	
2	EASTGATE PARK EXTERIOR	Restroom Exterior	EG2	CF26PWP	7		CF, QUAD, (1) 26W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	33	15	4,745			4,745	0.231	0.105	1,096.10	498.23	597.87	0.00	597.87		A	
3	EASTGATE PARK EXTERIOR	Picnic Shelter	EG2	INDUCT70CC	4		INDUCTION (1)70W ROUND CEILING CANOPY	(LED) NEW DECO 40W SURFACE CANOPY 4K WHITE (P/N# D536-LED-40-50-UNV-WH)	79	40	4,745			4,745	0.316	0.190	1,499.42	759.20	740.22	0.00	740.22		A	
4	EASTGATE PARK EXTERIOR	Pool Bldn. Exterior	EG2	CF2132PWP	4		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,745			4,745	0.112	0.060	531.44	284.70	246.74	0.00	246.74		A	
5	EASTGATE PARK EXTERIOR	Pool Bldn. Exterior	EG2	W70WP	1		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (P/N# D410-LED-20-50-UNV-BZ-PC)	95	20	4,745			4,745	0.095	0.020	450.78	94.90	355.88	0.00	355.88		A	
6	EASTGATE PARK EXTERIOR	Pump House Exterior	EG2	CF2132PWP	1		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,745			4,745	0.028	0.015	132.86	71.18	61.69	0.00	61.69		A	
7	EASTGATE PARK EXTERIOR	High Mast	EG1	W1000FLPL	6		MH, (1) 1000W POLE FLOOD	(LED) NEW DECO 300W LED AREA/FLOOD 5000K TYPE 3 SLIP FITTER PHOTOCELL (P/N# D823-LED-300-50-UNV-T3-SF-BZ-PC)	1,080	300	1,241			1,241	6.480	1.800	8,041.68	2,233.80	5,807.88	0.00	5,807.88		E	
8	EASTGATE PARK EXTERIOR	Teen Exterior	EG2	CF2132PWP	7		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	4,745			4,745	0.196	0.105	930.02	498.23	431.80	0.00	431.80		A	
9	EASTGATE PARK EXTERIOR	Teen Exterior	EG2	W70FL	2		MH, (1) 70W FLOOD	(LED) NEW DECO 20W FLOOD 5K PHOTO CELL (P/N# DECO D211-LED-20-50-UNV-PC)	95	20	4,745			4,745	0.190	0.040	901.55	189.80	711.75	0.00	711.75		A	
10	EASTGATE PARK EXTERIOR	Teen Exterior	EG2	W70RCC	4		MH, (1) 70W RECESSED CEILING CANOPY	(LED) NEW INFINILUX 5000K RECESSED CANOPY 12X12 (P/N# CLRPXX18-01-5000K)	95	20	4,745			4,745	0.380	0.080	1,803.10	379.60	1,423.50	0.00	1,423.50		A	
					43						43,948			43,948	8.308	2.665	18,715.54	6,338.23	12,377.32	0.00	12,377.32			

Gutosky Park
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Gutosky Park	Poles	GY	W250SHOEP L	4		MH, (1) 250W SHOEBOX POLE	(LED) AND SUPERIOR LIFE 72W 5K LED V5 SHOEBOX RETROFIT (PN# LED V5 SHOEBOX RETROFIT(83793))	295	72	4,380			4,380	1.180	0.288	5,168.40	1,261.44	3,906.96	0.00	3,906.96		B	
2	Gutosky Park	Poles	GY	S250FLPL	2		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	4,380			4,380	0.590	0.120	2,584.20	525.60	2,058.60	0.00	2,058.60		B	
3	Gutosky Park	Restrooms Exterior	GY	W70WP	4		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	95	20	4,380			4,380	0.380	0.080	1,664.40	350.40	1,314.00	0.00	1,314.00		A	
4	Gutosky Park	Restrooms	GY	W70WP	2		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	95	20	4,380			4,380	0.190	0.040	832.20	175.20	657.00	0.00	657.00		A	
5	Gutosky Park	Plumb Chase	GY	DVT8	2		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88		A	
					14						21,900			21,900	2.458	0.570	10,766.04	2,496.60	8,269.44	0.00	8,269.44			

Atlantis and Garden Grove Park
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LUMINAIRE LAMP / BALLAST /	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Atlantis Park	Exterior	GG2	W70WP	1		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (PN# D410-LED-20-50-UNV-BZ-PC)	95	20	2,847			2,847	0.095	0.020	270.47	56.94	213.53	0.00	213.53		A	
2	Atlantis Park	Exterior	GG2	KCF23TW-4	1		CF, (1) 23W SCREW-IN 4" RECESSED CAN	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 8BR30G4DIM/827 (40771))	23	8	2,847			2,847	0.023	0.008	65.48	22.78	42.71	0.00	42.71		A	
3	Atlantis Park	Exterior	GG2	CF2132PWP	2		CF, TWIN, (2) 13W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	28	15	2,847			2,847	0.056	0.030	159.43	85.41	74.02	0.00	74.02		A	
4	Atlantis Park	Exterior	GG2	I75FL	14		INCAN, (1) 75W FLOOD	(LED)1L GREEN CREATIVE 17W PAR38 4K LAMP 120/277V (NAED 17PAR38G4/940FL40/277V (16164))	75	17	2,847			2,847	1.050	0.238	2,989.35	677.58	2,311.78	0.00	2,311.78		A	
5	Atlantis Park	Exterior	GG2	KW70-6	8		MH, (1) 70W 6" RECESSED CAN	(LED)1L GREEN CREATIVE 18.5W A21 5K HID BYPASS (NAED 18.5A21/850/277V(97736))	95	19	2,847			2,847	0.760	0.148	2,163.72	421.36	1,742.36	0.00	1,742.36		A	
6	Atlantis Park	Restrooms	GG	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.118	0.042	335.95	119.57	216.37	0.00	216.37		A	
7	Atlantis Park	Snackbar	GG	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.177	0.063	503.92	179.36	324.56	0.00	324.56		A	
8	Atlantis Park	Snackbar	GG	KLED-6	6		LED (1)12W 6" RECESSED CAN 6" RECESSED CAN	EXCLUDED/NO CHANGE	12	12	2,847			2,847	0.096	0.096	273.31	273.31	0.00	0.00	0.00		A	
9	Atlantis Park	Electrical	GG	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.059	0.021	167.97	59.79	108.19	0.00	108.19		A	
10	Atlantis Park	Walkway	GG2	W175POST	14		MH, (1) 175W POST TOP	(LED) 1L SUPERIOR 45 WATT LED MOGUL DLC RETROFIT	215	45	2,847			2,847	3.010	0.630	8,569.47	1,793.61	6,775.86	0.00	6,775.86		A	
11	Atlantis Park	Walkway	GG2	LED40POST	4		LED (1)40W FIXTURE POST TOP	EXCLUDED/NO CHANGE	40	40	2,847			2,847	0.160	0.160	455.52	455.52	0.00	0.00	0.00		A	
12	Atlantis Park	Office	GG	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.354	0.126	1,007.84	358.72	649.12	0.00	649.12		A	
13	Garden Grove Park	East Parking Lot	GG2	S250FLPL	4		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	2,847			2,847	1.180	0.240	3,359.46	683.28	2,676.18	0.00	2,676.18		B	
14	Garden Grove Park	Basketball	GG1	LED60FLPL	4		LED (1)60W FIXTURE POLE FLOOD	EXCLUDED/NO CHANGE	60	60	1,460			1,460	0.240	0.240	350.40	350.40	0.00	0.00	0.00		B	
15	Garden Grove Park	Middle Field	GG1	S250FLPL	23		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	1,460			1,460	6.785	1.380	9,906.10	2,014.80	7,891.30	0.00	7,891.30		B	
16	Garden Grove Park	Middle Field	GG1	LED60FLPL	1		LED (1)60W FIXTURE POLE FLOOD	EXCLUDED/NO CHANGE	60	60	1,460			1,460	0.060	0.060	87.60	87.60	0.00	0.00	0.00		B	
17	Garden Grove Park	Pavilion	GG2	W150WP	12		MH, (1) 150W WALL PACK	(LED) NEW MAXLITE LED WALLMAX SMALL WALL PACK 50W 4800 LM 5000K BRONZE UNV DLC W/120V BUTTON PHOTOCELL (PN# WPS50BU50BPC(140696))	190	50	2,847			2,847	2.280	0.600	6,491.16	1,708.20	4,782.96	0.00	4,782.96		B	
18	Garden Grove Park	West Parking	GG2	S250FLPL	7		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	2,847			2,847	2.065	0.420	5,879.06	1,195.74	4,683.32	0.00	4,683.32		B	
19	Garden Grove Park	Middle Field Parking	GG2	S250FLPL	7		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	2,847			2,847	2.065	0.420	5,879.06	1,195.74	4,683.32	0.00	4,683.32		B	
20	Garden Grove Park	Front Field Restroom	GG	LED40WP	3		LED (1)40W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	40	40	2,847			2,847	0.120	0.120	341.64	341.64	0.00	0.00	0.00		B	
21	Garden Grove Park	Front Field Restroom	GG	CF264PWP	6		CF, QUAD, (1) 26W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	33	15	2,847			2,847	0.198	0.090	563.71	256.23	307.48	0.00	307.48		A	
22	Garden Grove Park	Front Field Restroom Exterior	GG2	CF264PWP	3		CF, QUAD, (1) 26W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	33	15	2,847			2,847	0.099	0.045	281.85	128.12	153.74	0.00	153.74		A	
23	Garden Grove Park	Snack Bar	GG	DVT8	2		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.118	0.042	335.95	119.57	216.37	0.00	216.37		A	
24	Garden Grove Park	Pipe Chase	GG	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.118	0.042	335.95	119.57	216.37	0.00	216.37		A	

Atlantis and Garden Grove Park
Room by Room Audit

25	Garden Grove Park	Storage	GG	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.059	0.021	167.97	59.79	108.19	0.00	108.19		A	
26	Garden Grove Park	Compound Exterior	GG2	S250FL	4		HPS. (1) 250W FLOOD	(LED) NEW DECO FLOOD 89W 5K T4 BRONZE SLIP FITTER (PN# D211-LED-80-50-UNV-T4-SF-BZ)	295	89	2,847			2,847	1.180	0.240	3,358.46	683.28	2,676.18	0.00	2,676.18		B	
27	Garden Grove Park	Compound Exterior	GG2	60WP	1		INCAN. (1) 60W WALL PACK	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	60	9	2,847			2,847	0.060	0.009	170.82	25.62	145.20	0.00	145.20		A	
28	Garden Grove Park	Compound Exterior	GG2	CF23TW	4		CF. (1) 23W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE LED A19 E26 LAMP 12W 4000K 1180 LM DIM (NAED 12A19G4DIM/840 (16177))	23	12	2,847			2,847	0.092	0.048	261.92	136.66	125.27	0.00	125.27		A	
29	Garden Grove Park	Compound	GG	CF13TW	1		CF. (1) 13W SCREW-IN KEYLESS	(LED)1L GREEN CREATIVE 9A19DIM 4000K ENCLOSED FIX. (NAED 9A19DIM/840 (97782))	13	9	2,847			2,847	0.013	0.009	37.01	25.62	11.39	0.00	11.39		A	
30	Garden Grove Park	Compound	GG	ET8S	3		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.177	0.063	503.92	179.36	324.56	0.00	324.56		A	
31	Garden Grove Park	Compound	GG	AWT8L	1		4L F32T8/32W W/ EB 8' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	2,847			2,847	0.112	0.042	318.86	119.57	199.29	0.00	199.29		A	
32	Garden Grove Park	Compound	GG	AST8L	8		4L F32T8/32W W/ EB 8' INDUSTRUAL	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	2,847			2,847	0.896	0.336	2,550.91	956.59	1,594.32	0.00	1,594.32		A	
33	Garden Grove Park	Compound	GG	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,847			2,847	0.354	0.126	1,007.84	358.72	649.12	0.00	649.12		A	
					167						89 790			89 790	24.228	6.175	59,163.07	15,250.07	43,903.00	0.00	43,903.00			

Magnolia Community
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-99 F: 99+	CEILING TYPE
1	Magnolia Park Community Center	Open Area	MP	AWT8	16		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	112	42	4,380			4,380	2.016	0.756	8,830.08	3,311.28	5,518.80	0.00	5,518.80	Y	A	HARD CAP
2	Magnolia Park Community Center	Open Area	MP	KCF23TW-6	12		CF, (1) 23W SCREW-IN 6" RECESSED CAN	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 6BR30G4DIM/827 (40771))	23	8	4,380			4,380	0.276	0.096	1,206.84	420.48	786.40	0.00	786.40	Y	A	HARD CAP
3	Magnolia Park Community Center	Open Area	EX	X	2		EXIT INCAN. (2) 20W LAMP EXIT	(LED) NEW MOBERN EXIT RED (PN# MEBDXRWWB1)	40	3	8,760			8,760	0.080	0.006	700.80	52.56	648.24	0.00	648.24	Y	A	HARD CAP
4	Magnolia Park Community Center	Open Area	MP	P2T8S	2		2L F96T8 W/ EB 8' STRIP	(LED) AND ((4)ESPEN 4' 14W LED T8 4K DIRECT WIRE INTERNAL DRIVER AND (1)MOBERN 8' KIT RKSC-232-TANWI) (PN# L48T8/840/14G-IDRKSC-432-TANWI)	109	56	4,380			4,380	0.218	0.112	954.84	490.56	464.28	0.00	464.28	Y	A	HARD CAP
5	Magnolia Park Community Center	Open Area	MP	ET8	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	4,380			4,380	0.059	0.021	258.42	91.98	166.44	0.00	166.44	Y	A	HARD CAP
6	Magnolia Park Community Center	Office	MP	AWT8	1		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	112	42	4,380			4,380	0.112	0.042	490.56	183.96	306.60	0.00	306.60	Y	A	HARD CAP
7	Magnolia Park Community Center	Restrooms	MP	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88	Y	A	HARD CAP
8	Magnolia Park Community Center	Office	MP	AWT8	2		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	112	42	4,380			4,380	0.224	0.084	981.12	367.92	613.20	0.00	613.20	Y	A	HARD CAP
9	Magnolia Park Community Center	Restrooms	MP	DVT8	2		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88	Y	A	HARD CAP
10	Magnolia Park Community Center	Plumbing Chase	MP	DVT8	1		2L F32T8/32W W/ EB 4' VAPOR TIGHT	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	4,380			4,380	0.059	0.021	258.42	91.98	166.44	0.00	166.44		A	HARD CAP
11	Magnolia Park Pool Building	Pool Equipment	MP	P2T12S	2		2L F96T12 W/ MB 8' STRIP	(LED) AND ((4)ESPEN 4' 14W LED T8 4K DIRECT WIRE INTERNAL DRIVER AND (1)MOBERN 8' KIT RKSC-232-TANWI) (PN# L48T8/840/14G-IDRKSC-432-TANWI)	123	56	4,380			4,380	0.246	0.112	1,077.48	490.56	586.92	0.00	586.92		A	HARD CAP
12	Magnolia Park Pool Building	Pool Equipment	MP	ET8	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	4,380			4,380	0.059	0.021	258.42	91.98	166.44	0.00	166.44		A	HARD CAP
13	Magnolia Park Pool Building	Pool Equipment	MP	AWT8L	1		4L F32T8/32W W/ EB 8' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	112	42	4,380			4,380	0.112	0.042	490.56	183.96	306.60	0.00	306.60		A	HARD CAP
14	Magnolia Park Pool Building	Pool Equipment	MP	DWT8	2		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4 48-10.5-N-40)	59	21	4,380			4,380	0.118	0.042	516.84	183.96	332.88	0.00	332.88		A	HARD CAP
					49						65,700			65,700	3.815	1.439	17,060.10	6,329.10	10,731.00	0.00	10,731.00			

Magnolia Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LUMINAIRE LAMP / BALLAST /	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Magnolia Park Community Center Exterior	Building Mount	MP2	KCF23TW-6	2		CF, (1) 23W SCREW-IN 6" RECESSED CAN	(LED)1L GREEN CREATIVE 8W BR30 27K DIM (NAED 8BR30G4DIM/827 (40771))	23	8	4,745			4,745	0.046	0.016	218.27	75.92	142.35	0.00	142.35		A	
2	Magnolia Park Community Center Exterior	Building Mount	MP2	LED20WP	6		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	4,745			4,745	0.120	0.120	569.40	569.40	0.00	0.00	0.00		A	
3	Magnolia Park Community Center Exterior	Building Mount	MP2	W100WP	1		MH, (1) 100W WALL PACK	(LED) NEW RAB 20 WATT DLC LED WALLPACK	128	20	4,745			4,745	0.128	0.020	607.36	94.90	512.46	0.00	512.46		A	
4	Magnolia Park Community Center Exterior	Walkway	MP2	W175POST	2		MH, (1) 175W POST TOP	(LED) 1L SUPERIOR 45 WATT LED MOGUL DLC RETROFIT	215	45	4,745			4,745	0.430	0.090	2,040.35	427.05	1,613.30	0.00	1,613.30		A	
5	Magnolia Park Community Center Exterior	Walkway	MP2	LED40POST	3		LED (1)40W FIXTURE POST TOP	EXCLUDED/NO CHANGE	40	40	4,745			4,745	0.120	0.120	569.40	569.40	0.00	0.00	0.00		A	
6	Magnolia Park Pool	Pool Poles	MP2	S250FLPL	6		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (P/N# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	4,745			4,745	1.770	0.360	8,398.65	1,708.20	6,690.45	0.00	6,690.45		B	
7	Magnolia Park Pool	Pool Bldn Exterior	MP2	W70WP	3		MH, (1) 70W WALL PACK	(LED) NEW DECO 20W PORCH LIGHT 5K BRONZE PHOTO CELL (P/N# D419-LED-20-50-UNV-BZ-PC)	95	20	4,745			4,745	0.285	0.060	1,352.33	284.70	1,067.63	0.00	1,067.63		A	
8	Magnolia Park Pool	Pool Bldn Exterior	MP2	LED40WP	1		LED (1)40W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	40	40	4,745			4,745	0.040	0.040	189.80	189.80	0.00	0.00	0.00		A	
9	Magnolia Park Sports Lighting	Park Poles	MP2	S250FLPL	4		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (P/N# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	4,745			4,745	1.180	0.240	5,598.10	1,138.80	4,460.30	0.00	4,460.30		B	
10	Magnolia Park Sports Lighting	Park Poles	MP1	W1000SHOE PL	5		MH, (1) 1000W SHOEBOX POLE	(LED) NEW DECO 300W LED AREA/FLOOD 5000K TYPE 3 SLIP FITTER PHOTOCELL (P/N# D823-LED-300-50-UNV-T3-SF-BZ-PC)	1,080	300	1,460			1,460	5.400	1.500	7,884.00	2,190.00	5,694.00	0.00	5,694.00		E	
11	Magnolia Park Sports Lighting	Park Poles	MP1	LED186SHOE PL	1		LED (1)186W FIXTURE SHOEBOX POLE	EXCLUDED/NO CHANGE	186	186	1,460			1,460	0.186	0.186	271.56	271.56	0.00	0.00	0.00		E	
12	Magnolia Park Sports Lighting	Tennis Courts	MP1	W1000FLPL	14		MH, (1) 1000W POLE FLOOD	(LED) NEW DECO 300W LED AREA/FLOOD 5000K TYPE 3 SLIP FITTER PHOTOCELL (P/N# D823-LED-300-50-UNV-T3-SF-BZ-PC)	1,080	300	1,460			1,460	15.120	4.200	22,075.20	6,132.00	15,943.20	0.00	15,943.20		E	
13	Magnolia Park Sports Lighting	Tennis Courts	MP1	LED135FLPL	2		LED (1)135W FIXTURE POLE FLOOD	EXCLUDED/NO CHANGE	135	135	1,460			1,460	0.270	0.270	394.20	394.20	0.00	0.00	0.00		E	
14	Magnolia Park Sports Lighting	Handball Court	MP1	LED135FLPL	2		LED (1)135W FIXTURE POLE FLOOD	EXCLUDED/NO CHANGE	135	135	1,460			1,460	0.270	0.270	394.20	394.20	0.00	0.00	0.00		E	
15	Magnolia Park Sports Lighting	Handball Court	MP1	W1000FLPL	1		MH, (1) 1000W POLE FLOOD	(LED) NEW DECO 300W LED AREA/FLOOD 5000K TYPE 3 SLIP FITTER PHOTOCELL (P/N# D823-LED-300-50-UNV-T3-SF-BZ-PC)	1,080	300	1,460			1,460	1.080	0.300	1,576.80	438.00	1,138.80	0.00	1,138.80		E	
16	Magnolia Park Sports Lighting	Basketball Court	MP1	W250FLPL	4		MH, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 60W 5K T4 BRONZE SLIP FITTER (P/N# D211-LED-60-50-UNV-T4-SF-BZ)	295	60	1,460			1,460	1.180	0.240	1,722.80	350.40	1,372.40	0.00	1,372.40		B	
					57						52,925			52,925	27.625	8.032	53,883.42	15,228.53	38,634.89	0.00	38,634.89			

Faylane Park
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LUMINAIRE LAMP / BALLAST /	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Faylane Park	Restroom	FP	LED20WP	1		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	3,504			3,504	0.020	0.020	70.08	70.08	0.00	0.00	0.00		A	HARD CAP
2	Faylane Park	Storage	FP	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,504			3,504	0.059	0.021	206.74	73.58	133.15	0.00	133.15		A	HARD CAP
3	Faylane Park	Restroom	FP	LED20WP	1		LED (1)20W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	20	20	3,504			3,504	0.020	0.020	70.08	70.08	0.00	0.00	0.00		A	HARD CAP
4	Faylane Park	Storage	FP	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,504			3,504	0.059	0.021	206.74	73.58	133.15	0.00	133.15		A	HARD CAP
5	Faylane Park	Storage	FP	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,504			3,504	0.059	0.021	206.74	73.58	133.15	0.00	133.15		A	HARD CAP
6	Faylane Park	Storage	FP	DWT8	1		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,504			3,504	0.059	0.021	206.74	73.58	133.15	0.00	133.15		A	HARD CAP
7	Faylane Park	Storage	FP	ET8S	1		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	3,504			3,504	0.059	0.021	206.74	73.58	133.15	0.00	133.15		A	HARD CAP
8	Faylane Park	Storage	FP	AWT8	1		4L F32T8/32W W/ EB 4' WRAP	(LED)4L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	112	42	3,504			3,504	0.112	0.042	392.45	147.17	245.28	0.00	245.28		A	HARD CAP
9	Faylane Park	Exterior	FP1	W175POST	12		MH, (1) 175W POST TOP	(LED) 1L SUPERIOR 45 WATT LED MOGUL DLC RETROFIT	215	45	2,610			2,610	2.580	0.540	6,733.16	1,409.27	5,323.89	0.00	5,323.89		A	
10	Faylane Park	Exterior	FP1	LED40WP	4		LED (1)40W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	40	40	2,610			2,610	0.160	0.160	417.56	417.56	0.00	0.00	0.00		A	
11	Faylane Park	Exterior	FP1	LED60FLPL	7		LED (1)60W FIXTURE POLE FLOOD	EXCLUDED/NO CHANGE	60	60	2,610			2,610	0.420	0.420	1,096.10	1,096.10	0.00	0.00	0.00		C	
12	Faylane Park	Exterior	FP1	S250FLPL	3		HPS, (1) 250W POLE FLOOD	(LED) NEW DECO FLOOD 69W 5K T4 BRONZE SLIP FITTER (P/N# D211-LED-60-50-UNV-T4-SF-BZ)	295	69	2,610			2,610	0.885	0.180	2,309.63	469.76	1,839.87	0.00	1,839.87		C	
13	Faylane Park	Exterior	FP1	LED60FLPL	1		LED (1)60W FIXTURE POLE FLOOD	EXCLUDED/NO CHANGE	60	60	2,610			2,610	0.060	0.060	156.58	156.58	0.00	0.00	0.00		C	
14	Faylane Park	Exterior	FP1	INDUCT70CC	1		INDUCTION (1)70W ROUND CEILING CANOPY	(LED) NEW DECO 40W SURFACE CANOPY 4K WHITE (P/N# D536-LED-40-50-UNV-WH)	79	40	2,610			2,610	0.079	0.040	206.17	104.39	101.78	0.00	101.78		B	
					36						43,691			43,691	4.631	1.587	12,485.48	4,308.90	8,176.58	0.00	8,176.58			

Chapman Sports Complex
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Chapman Sports Complex	Restrooms Exterior	CS	LED26WP	4		LED (1)26W FIXTURE WALL PACK	EXCLUDED/NO CHANGE	26	26	1,824			1,824	0.090	0.090	145.92	145.92	0.00	0.00	0.00		A	
2	Chapman Sports Complex	Restrooms	CS	ET8	3		2L F32T8/32W W/ EB 4' STRIP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	1,824			1,824	0.177	0.063	322.85	114.91	207.94	0.00	207.94		A	
3	Chapman Sports Complex	Tennis	A	W1000SPORTPL	37		MH. (1) 1000W SPORTS LIGHTER	(LED) NEW DECO 350W 5000K SPORTS FLOOD POST TOP MOUNT BRONZE (PN# D230-LED-350-50-UNV-PT-BZ)	1,000	350	1,000			1,000	39.900	12.950	39,900.00	12,950.00	27,010.00	0.00	27,010.00		E	
4	Chapman Sports Complex	Tennis	A	LED280SPORTSPL	11		LED (1)280W FIXTURE SPORTS LIGHTER	EXCLUDED/NO CHANGE	280	280	1,000			1,000	3.080	3.080	3,080.00	3,080.00	0.00	0.00	0.00		E	
5	Chapman Sports Complex	Handball	A	W1000SPORTPL	6		MH. (1) 1000W SPORTS LIGHTER	(LED) NEW DECO 350W 5000K SPORTS FLOOD POST TOP MOUNT BRONZE (PN# D230-LED-350-50-UNV-PT-BZ)	1,080	350	1,000			1,000	6.480	2.100	6,480.00	2,100.00	4,380.00	0.00	4,380.00		E	
6	Chapman Sports Complex	Hockey	A	W1000SPORTPL	10		MH. (1) 1000W SPORTS LIGHTER	(LED) NEW DECO 350W 5000K SPORTS FLOOD POST TOP MOUNT BRONZE (PN# D230-LED-350-50-UNV-PT-BZ)	1,080	350	1,000			1,000	10.800	3.500	10,800.00	3,500.00	7,300.00	0.00	7,300.00		E	
					71						7,648			7,648	60.577	21.773	60,768.77	21,890.83	38,897.94	0.00	38,897.94			

Sports & Recreation Center
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 15-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Sports And Recreation Center	Restroom	SR2	K264P-8	1		CF, QUAD, (1) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 15.5W 4K RETROFIT DOWNLIGHT (PN# RC-8-10-8-40-WD-SD-CL-MR-1V-10)	33	18	2,340			2,340	0.033	0.018	77.22	36.27	40.95	0.00	40.95		A	HARD CAP
2	Sports And Recreation Center	Restroom	SR2	CT8	2		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.118	0.042	276.12	98.28	177.84	0.00	177.84		A	HARD CAP
3	Sports And Recreation Center	Restroom	SR2	CT8	1		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	2,340			2,340	0.059	0.021	138.06	49.14	88.92	0.00	88.92		A	HARD CAP
4	Sports And Recreation Center	Lobby	SR	KMR16-4	6		1L 50WMR16 4" RECESSED CAN	(LED)1L GREEN CREATIVE 6MR16G4D8M830FL36 LED (NAED 6MR16G4D8M830FL36 (40758))	80	6	4,212			4,212	0.360	0.036	1,516.32	151.63	1,364.69	0.00	1,364.69	Y	A	HARD CAP
5	Sports And Recreation Center	Lobby	SR	KCF32-8ER	8		CF, QUAD, (1) 32W 8" RECESSED CAN EMERGENCY	(LED) AND ACUITY 8" LED RECESSED CAN RETROFIT 4K WITH EMERGENCY BATTERY BACKUP (PN# LRTB-15LM-40K-120-G4-80CRI-SRT20C-WHITE)	35	17	4,212			4,212	0.280	0.138	1,179.36	579.57	599.79	0.00	599.79	Y	A	HARD CAP
6	Sports And Recreation Center	Lobby	SR	K32-8	11		CF, QUAD, (1) 32W 8" RECESSED CAN	(LED) AND GE 8INCH 15.5W 4K RETROFIT DOWNLIGHT (PN# RC-8-10-8-40-WD-SD-CL-MR-1V-10)	35	18	4,212			4,212	0.385	0.171	1,621.62	718.15	903.47	0.00	903.47	Y	A	HARD CAP
7	Sports And Recreation Center	Lobby	SR	N2FT40	2		CF, LONG TWIN, (2) 40W 2X2 PRISMATIC	(LED)2L GREEN CREATIVE PLL 17W 4000K 2100 LED PLUG & PLAY DIRECT DIM (NAED 17PLL/840/DIR(97747))	72	34	4,212			4,212	0.144	0.068	606.53	286.42	320.11	0.00	320.11	Y	A	HARD CAP
8	Sports And Recreation Center	Open Area	SR	N2FT40	16		CF, LONG TWIN, (2) 40W 2X2 PRISMATIC	(LED)2L GREEN CREATIVE PLL 17W 4000K 2100 LED PLUG & PLAY DIRECT DIM (NAED 17PLL/840/DIR(97747))	72	34	4,212			4,212	1.152	0.544	4,852.22	2,291.33	2,560.90	0.00	2,560.90	Y	A	HARD CAP
9	Sports And Recreation Center	Open Area	SR	KPAR20-4	12		INCAN, (1) 50W R20 4" RECESSED CAN	(LED)1L GREEN CREATIVE 6.5R20G4D8M827 (NAED 6.5R20G4D8M827 (40812))	50	7	4,212			4,212	0.600	0.078	2,527.20	328.54	2,198.66	0.00	2,198.66	Y	A	HARD CAP
10	Sports And Recreation Center	Open Area	SR	K32-8	1		CF, QUAD, (1) 32W 8" RECESSED CAN	(LED) AND GE 8INCH 15.5W 4K RETROFIT DOWNLIGHT (PN# RC-8-10-8-40-WD-SD-CL-MR-1V-10)	35	18	4,212			4,212	0.035	0.018	147.42	65.29	82.13	0.00	82.13	Y	A	HARD CAP
11	Sports And Recreation Center	Gym	SR	CF842HB	30		CF, QUAD, (8) 42W HIGH BAY	(LED) NEW 18T SOURCE LED BAY 99W 2FT 4K WIRE GUARD (PN# LED BAY LHB2-4-P0-S-40-0-U-HWC)	368	99	4,212			4,212	11.040	2.970	46,500.48	12,509.64	33,990.84	0.00	33,990.84	Y	C	HARD CAP
12	Sports And Recreation Center	Chair Storage	SR	DWT8	6		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,212			4,212	0.295	0.105	1,242.54	442.26	800.28	0.00	800.28		A	HARD CAP
13	Sports And Recreation Center	Mechanical Rm	SR	DWT8	3		2L F32T8/32W W/ EB 4' WRAP	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,212			4,212	0.177	0.063	745.52	265.36	480.17	0.00	480.17		A	HARD CAP
14	Sports And Recreation Center	Restrooms	SR	CT8	3		2L F32T8/32W W/ EB 2X4 TROFFER PRISMATIC	(LED)2L RVLT 10.5W 4FT BYPASS LED T8 (NAED SEPG4-48-10.5-N-40)	59	21	4,212			4,212	0.177	0.063	745.52	265.36	480.17	0.00	480.17		A	HARD CAP
					101						53,352			53,352	14.855	4.329	62,176.14	18,087.22	44,088.92	0.00	44,088.92			

Sports & Recreation Center Ext.
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LUMINAIRE LAMP / BALLAST /	PROPOSED BALLAST / LUMINAIRE LAMP /	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Sports And Recreation Center Exterior	Exterior Building	SR1	CF264PWP	16		CF, QUAD, (1) 26W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	33	15	4,271			4,271	0.594	0.270	2,536.68	1,153.04	1,383.64	0.00	1,383.64		A	
2	Sports And Recreation Center Exterior	Exterior Building	SR1	CF2264PWP	10		CF, QUAD, (2) 26W WALL PACK	(LED) NEW SYLVANIA 15 WATT LED DLC PORCH LIGHT	66	15	4,271			4,271	0.660	0.150	2,818.53	640.58	2,177.96	0.00	2,177.96		A	
3	Sports And Recreation Center Exterior	Exterior Building	SR1	K264P-8	2		CF, QUAD, (1) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 15.5W 4K RETROFIT DOWNLIGHT (PN# RC-8-10-8-40-WD-SD-CL-MR-1V-10)	33	16	4,271			4,271	0.066	0.031	281.85	132.39	149.47	0.00	149.47		A	
4	Sports And Recreation Center Exterior	Exterior Building	SR1	K264P-8ER	2		CF, QUAD, (1) 26W 8" RECESSED CAN EMERGENCY	(LED) AND ACUITY 8" LED RECESSED CAN RETROFIT 4K WITH EMERGENCY BATTERY BACKUP (PN# LRT8-15LM-40K-120-G4-90CRI-BRT20C-WHITE)	33	17	4,271			4,271	0.066	0.034	281.85	146.91	134.95	0.00	134.95		A	
5	Sports And Recreation Center Exterior	Exterior Building	SR1	K264P-8	2		CF, QUAD, (1) 26W 8" RECESSED CAN	(LED) AND GE 8INCH 15.5W 4K RETROFIT DOWNLIGHT (PN# RC-8-10-8-40-WD-SD-CL-MR-1V-10)	33	16	4,271			4,271	0.066	0.031	281.85	132.39	149.47	0.00	149.47		A	
6	Sports And Recreation Center Exterior	POLE	SR1	LED40POST	2		LED (1)40W FIXTURE POST TOP	EXCLUDED/NO CHANGE	40	40	4,271			4,271	0.080	0.080	341.64	341.64	0.00	0.00	0.00		A	
					36						25,623			25,623	1.532	0.595	6,542.41	2,546.93	3,995.48	0.00	3,995.48			

Civic Center Parking
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Civic Center Parking	Parking Poles	EXT	W175GLBPT	47		MH, (1) 175W GLOBE POST TOP	1L SUPERIOR LIFE 45W LED COB 5K MOGUL BASE	215	45	4,380			4,380	10.105	2.115	44,259.90	9,263.70	34,996.20	0.00	34,996.20		A	
					47						4,380			4,380	10.105	2.115	44,259.90	9,263.70	34,996.20	0.00	34,996.20			

Library Parking
Room by Room Audit

LINE	FLOOR / BUILDING / AREA	ROOM	AREA TYPE	ECM CODE	QUANTITY	ESTIMATE?	EXISTING LAMP / BALLAST / LUMINAIRE	PROPOSED LAMP / BALLAST / LUMINAIRE	EXISTING WATTAGE	PROPOSED WATTAGE	EXISTING OPERATING HOURS	QUANTITY	OCCUPANCY SENSOR TYPE	PROPOSED OPERATING HOURS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	KWH SAVINGS (LIGHTING ONLY)	KWH SAVINGS (CONTROLS ONLY)	TOTAL KWH SAVINGS (COMBINED LIGHTING AND CONTROLS)	AC	HEIGHT A: 1-15 B: 16-24 C: 25-34 D: 35-44 E: 45-59 F: 60+	CEILING TYPE
1	Library Parking	Parking Poles	LP	W175GLBPT	24		MH. (1) 175W GLOBE POST TOP	1L SUPERIOR LIFE 45W LED COB 5K MOGUL BASE	215	45	3,504			3,504	5.160	1.080	18,080.64	3,784.32	14,296.32	0.00	14,296.32		A	
					24						3,504			3,504	5.160	1.080	18,080.64	3,784.32	14,296.32	0.00	14,296.32			

City of Garden Grove
Appendix 2
Plug Load Audit

Plug Load

City of Garden Grove- Plug Load										Total	# Ext cord	# Pwr strip
# of Berts	4	13	9	4	1	6	3	1	2	43	0	23
Total Annual Net kWh Savings	208	1,689	2,251	163	252	2,051	1,438	66	101	8,198		
Device Type:	Projector	M Print	L Print/Copy	TV/Mon	Snack Vend	Lg Coffee	H/C Water Disp.	Wtr Fntn	AC - 110 (15A)			
Watts:	8	20	40	8	40	56	75	10	8			
Baseline Hours ON:	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760			
City Hall												
# of Berts	1	5	4	0	0	2	1	0	0	13	0	6
Scheduled ON Hours (Bert)	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210			
Annual Net Hours Savings	6,550	6,550	6,550	6,550	6,550	6,550	6,550	6,550	6,550			
Total Annual Net kWh Savings	52	655	1,048	00	00	734	491	00	00	2,980		
Existing kW	0.01	0.10	0.16	0.00	0.00	0.11	0.08	0.00	0.00	0.4550		
Existing kWh	70.08	876.00	1401.60	0.00	0.00	981.12	657.00	0.00	0.00	3985.8		
Proposed kW	0.01	0.10	0.16	0.00	0.00	0.11	0.08	0.00	0.00	0.4550		
Proposed kWh	17.68	221.00	353.60	0.00	0.00	247.52	165.75	0.00	0.00	1005.6		
Savings kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0		
Savings kWh	52.40	655.00	1048.00	0.00	0.00	733.60	491.25	0.00	0.00	2980.3		
Community Meeting Center, H. Louis Lake Senior Center												
# of Berts	0	0	1	3	0	1	0	0	0	5	0	2
Scheduled ON Hours (Bert)	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165			
Annual Net Hours Savings	4,595	4,595	4,595	4,595	4,595	4,595	4,595	4,595	4,595			
Total Annual Net kWh Savings	00	00	184	110	00	257	00	00	00	551		
Existing kW	0.00	0.00	0.04	0.02	0.00	0.06	0.00	0.00	0.00	0.1200		
Existing kWh	0.00	0.00	350.40	210.24	0.00	490.56	0.00	0.00	0.00	1051.2		
Proposed kW	0.00	0.00	0.04	0.02	0.00	0.06	0.00	0.00	0.00	0.1200		
Proposed kWh	0.00	0.00	166.60	99.96	0.00	233.24	0.00	0.00	0.00	499.8		
Savings kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0		
Savings kWh	0.00	0.00	183.80	110.28	0.00	257.32	0.00	0.00	0.00	551.4		
Municipal Service Center (Public works or The Yard)												
# of Berts	1	7	3	0	1	3	2	0	2	19	0	13
Scheduled ON Hours (Bert)	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450			
Annual Net Hours Savings	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310			
Total Annual Net kWh Savings	50	883	757	00	252	1,060	947	00	101	4,051		
Existing kW	0.01	0.14	0.12	0.00	0.04	0.17	0.15	0.00	0.02	0.6420		
Existing kWh	70.08	1226.40	1051.20	0.00	350.40	1471.68	1314.00	0.00	140.16	5623.9		
Proposed kW	0.01	0.14	0.12	0.00	0.04	0.17	0.15	0.00	0.02	0.6420		
Proposed kWh	19.60	343.00	294.00	0.00	98.00	411.60	367.50	0.00	39.20	1572.9		
Savings kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0		
Savings kWh	50.48	883.40	757.20	0.00	252.40	1060.08	946.50	0.00	100.96	4051.0		
Buena Clinton Youth & Family Center												
# of Berts	2	1	1	1	0	0	0	1	0	6	0	2
Scheduled ON Hours (Bert)	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210			
Annual Net Hours Savings	6,550	6,550	6,550	6,550	6,550	6,550	6,550	6,550	6,550			
Total Annual Net kWh Savings	105	131	262	52	00	00	00	66	00	616		
Existing kW	0.02	0.02	0.04	0.01	0.00	0.00	0.00	0.01	0.00	0.0940		
Existing kWh	140.16	175.20	350.40	70.08	0.00	0.00	0.00	87.60	0.00	823.4		
Proposed kW	0.02	0.02	0.04	0.01	0.00	0.00	0.00	0.01	0.00	0.0940		
Proposed kWh	35.36	44.20	88.40	17.68	0.00	0.00	0.00	22.10	0.00	207.7		
Savings kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0		
Savings kWh	104.80	131.00	262.00	52.40	0.00	0.00	0.00	65.50	0.00	615.7		

Location	Operation
City Hall	Mon-Thur 7:30am-5:30pm; Every Alternating Friday 8am-5pm, Sat-Sun Closed
Occupied Hours	2210
Unoccupied Hours	6550
Comm Center/ Senior Center	Mon-Fri 7:30am-5:30pm (CMC/SC); Sat: 6am-Noon; Sunday 12:30- midnight
Occupied Hours	4165
Unoccupied Hours	4595
Public Works / Municipal Service	M-F 7:30am-5:30pm
Occupied Hours	2450
Unoccupied Hours	6310
Buena Client	M-Th 9am-7pm; Friday only special events (customer notes)
Occupied Hours	2210
Unoccupied Hours	6550

City of Garden Grove
Appendix 3
BERT Pre-Installation Software Network Setup

Pre-Installation
Software and Network Setup Guide

Introduction

The Bert Plug Load Management System consists of a software application, Bertbrain 1000, and Bert® Smart Plugs and/or Bert® Inline units Bert® that measure and turn OFF & ON plug load devices such as printers, projectors, water coolers, vending machines, charging carts, AC units, etc. during nights, weekends, and holidays when your buildings are unoccupied.
The Bert® devices are wireless nodes that use the existing IP network to send\receive UDP messages (using ports 8255 & 8256) to the Bertbrain 1000 application, residing on a Windows Server 2008, or higher, attached to the IP network. Bert® devices use either WPA\WPA2 Personal PSK or WPA2 Enterprise security-username and password over a standard Wi Fi 802.11 b\g\n in the 2.4GHZ wireless spectrum.

Items needed for Bert Load Management System:

****Software download: www.bertbrain.com/support >register> fill in all required information**
-Install Bertbrain1000 software (instructions below)
***Allow Bertbrain1000 software thru the Windows FW**
***Add WLAN Service as a feature**

-Create SSID for the Berts
-Create PSK (WPA Personal) or Username\Password (WPA Enterprise)
-Provide Static IP Address of the Server

The minimum server requirements are:

- Windows Server 2008\2012\2016 installed as VM or Stand-alone Server
- 50-100 GB Hard Drive
- 4-8 GB RAM (depending on number of Berts)
- Dual-Core Processor
- .Net of 3.5 and higher

Bertbrain 1000 Software Registration and Download

To download the Bertbrain 1000 software on the server, you will need to register with your email address at the following URL: http://bertbrain.com/wp-login.php?action=register

One the registration is completed and approved, log into our website's Support portal to download the software onto the server at the following URL: http://www.bertbrain.com/wp-login.php

Technical Questionnaire (Please enter in the following):

1. **Primary IT Contact Name:** Click or tap here to enter text.
2. **Primary IT Contact Email Address:** Click or tap here to enter text.
3. **Primary IT Contact Phone Number:** Click or tap here to enter text.
4. **MAC Authentication being used?** Click or tap here to enter text.

5. **For WPA/WPA2 Personal Network Encryption:**
   Wireless Network SSID: Click or tap here to enter text.
   Wireless Network PSK: Click or tap here to enter text.
   Server IP Address for Bertbrain 1000 software: Click or tap here to enter text.

6. **For WPA/WPA2 Enterprise Network Encryption:**
   Wireless Network SSID: Click or tap here to enter text.
   Windows Active Directory Username\Password: Click or tap here to enter text.
   Server IP Address for Bertbrain 1000 software: Click or tap here to enter text.

Remote Access

The Bert Support team requires temporary remote access to the server running Bertbrain 1000 during the installation. As each Bert® is installed, the Bert support team will verify two-way communication between the Berts and the Bertbrain 1000 software. Remote access will also allow us to name and schedule the Berts. Once we have completed network verification and set up, remote access can be revoked.

7. **Remote Access (needed during Bert Installation):**
   Remote Access Method: Click or tap here to enter text.
   Remote Log in User ID: Click or tap here to enter text.
   Remote Log in Password: Click or tap here to enter text.
   Server Log in User ID: Click or tap here to enter text.
   Server Log in Password: Click or tap here to enter text.

Please contact the Bert® Support team at either 484-690-3822 or support@bertbrain.com if you need any assistance.