

Lighting Retrofit Scope of Work – Administration

Contractor will perform a turn-key, lighting retrofit of 2,374 fixtures as detailed on the subsequent Houston Community College LoanSTAR #1 Lighting Renovation Detail Sheet - Administration Set.

An electronic table of the fixture detail spreadsheet has been provided that will allow the Contractor to sort the project by fixture type as an aid to identify counts of fixtures and fixture types.

Central Administration Building 3100 Main Street, Houston, Texas 77002



The scope of work includes all material, equipment, and labor necessary for the renovation of the light fixtures identified on the following fixture detail sheets. The scope also includes all removal, disposal and recycling of removed lamps, ballasts and lighting materials removed as a result of the project. Contractor will provide Owner copies of appropriate documentation demonstrating proper disposal of removed materials where appropriate.

Procedure:

Install lamps, ballasts and/or fixtures of the types indicated where shown, in accordance with NEMA standards and requirements of the National Electric Code pertaining to installation of interior lighting fixtures. If not currently present, Contractor to supply and install ballast/driver push-in disconnect, Ideal Model 102 or Engineer approved equal, to satisfy NEC requirements.

Contractor is to retrofit the lighting system according to the attached Project Spreadsheet. Areas not appearing on the spreadsheet were intentionally omitted from the project. In the event that the Owner requests for fixtures to be added to the project that are not in the original scope of work, this addition must be in writing from the Owner and copied to the Engineer before work is performed. Additional work performed without written authorization may not be considered for payment. Reimbursement for additional fixtures shall be governed by Owner accepted and signed proposal, Requests for Change Order (RCO), or by according to the detailed unit cost spreadsheetsheet included with the Contractor's bid for the project.

If an area that appears on the spreadsheet has a type or quantity of lamps, ballasts, or fixtures that is different from the type or quantity of lamps, ballasts or fixtures in the area to be retrofit, the Contractor should retrofit the appropriate type or number of lamps, ballasts, or fixtures and document the difference. Only appropriately documented differences will be considered for payment. This documentation will include the room or area where the discrepancy occurred, the original quantities noted on the spreadsheet, and the actual quantities retrofit. These "count differences" will be accomplished without delay of the project and will be reimbursed according to the detailed unit cost spreadsheetsheet included with the Contractor's bid for the project.

2016 Lighting Retrofit Introduction and Scope of Work
Houston Community College LoanSTAR #1

In the event that the existing fixtures are found to be in too poor of a condition to be retrofitted, the Contractor is to inform the Owner's Representative, the Project Manager, or the Engineer of the condition of the fixture and advise that the fixtures should be completely replaced. Work to replace the fixtures should only begin after receiving written authorization from the Owner. The Contractor will be reimbursed the full cost of the installed fixture, less the cost of the intended retrofit that was already included in the base bid price, as per the detailed unit cost pricing spreadsheet included with the proposal. The Contractor should proceed with the retrofit of other fixtures in other areas that are not in question while the written authorization is obtained.

Contractor to verify switching requirements prior to ordering drivers. All fixtures with inboard/outboard switching will require 2 each drivers per fixture.

Prior to final inspection, the Contractor shall check all lighting fixtures for damage occurring during construction and replace the damaged fixture, lenses, or other item where necessary at no additional cost to the Owner. All lighting fixtures shall be cleaned and completely lamped at the time of final acceptance. The Contractor shall provide new lamp holders or tombstones for fixtures where broken, or as required to maintain adequate electrical contact with lamps. Upon completion of the project, the Contractor shall clean all fixtures, inside and out, including plastics and glassware, replace broken and damaged parts, install lamps and test all fixtures for electrical as well as mechanical operation.

The Contractor will be responsible for removal of lamps and ballasts from the site in accordance with all Local, State and Federal regulations.

Attachment 1
Performance Specification

EXHIBIT I HAZARDOUS MATERIALS & MATERIAL SAFETY DATA SHEETS (MSDS)

Contractor's Responsibility for the OSHA Hazard Communication Standard

As required by a new OSHA Standard (effective May 23, 1988), HCC requires Contractor supply HCC Project Manager with materials that Contractor has onsite or plans to bring on-site to complete the work according to the Subcontract Agreement. HCC will, in turn, supply Contractor's jobsite supervisor with MSDS on materials used by HCC employees to which Contractor's employees may be exposed. Contact HCC Project Manager to obtain appropriate MSDS from HCC and other Contractors.

OSHA holds Contractor responsible for the safety and health of Contractor's employees. It is Contractor's responsibility for having a Hazard Communication Program that meets the requirements outlined by OSHA.

In addition, Contractor is responsible for reviewing excess chemicals and/or Hazardous Materials which Contractor has brought or might bring to jobsite. Surplus Hazardous Materials and their containers (even if empty) will not be placed in HCC's or HCC's trash dumpsters or trash trucks for disposal by HCC or HCC at a public trash dump.

If the chemical(s) Contractor plans to use is made up of Toluene, Xylene, Benzene, Ethyl Benzene, Trichloroethane, Ethyl Ketone (Butanone or MEK), limit the quantity on the jobsite; when possible substitute with an alcohol or orange peel based solvent and store and handle the materials in such a manner as to prevent spills, overfills, and splashes giving rise to ground contamination.

EXHIBIT II SAFETY, DRUGS, ALCOHOL, AND WEAPONS POLICY

POLICY

To further the Contractor's goal of providing a safe work environment for Contractor and Contractor employees working on HCC jobsites, the possession, use, or distribution of Prohibited Substances is not permitted. Prohibited Substances include, but are not limited to, alcoholic beverages, inhalants, narcotics, illegal drugs, simulated "look alike" drugs, drug paraphernalia, and prescription drugs which may adversely affect working ability. Employees are not permitted to work when alcohol or other Prohibited Substances are present in their system. No firearms, unauthorized explosives or weapons of any kind are allowed on company premises. Entry into company premises is conditioned on the company's right to search a person, personal effects, and vehicles of any entrant for Prohibited Substances, Firearms, Explosives, and Weapons. These searches may involve the use of electronic detection devices, scent-trained dogs, or any other search method deemed appropriate by HCC. Any employee who fails to abide by the above rules and/or refuses to submit to search or drug test will not be allowed to work on any HCC project.

SPECIFIC CONTRACTOR RESPONSIBILITIES

Prior to starting work this contractor / employer will:

1. Communicate the contents of this Policy to all employees before they are assigned to an HCC project, ensuring employees that Contractor fully supports this Policy.
2. Upon request from HCC, the Contractor will provide evidence of criminal background checks and drug testing for each employee assigned to the project site.
3. Contractor shall agree, if required by HCC, to drug test individual employees and/or groups of employees based on suspicion of use and/or as part of an ongoing random drug testing program.
4. If portions of the work are subcontracted to other companies, Contractor shall be required to ensure that those Contractors conform to the requirements of this Policy.
5. Designate a company representative to coordinate and administer all safety and health issues and communicate with the HCC Project Manager.
6. Submit to HCC a written safety and training program that meets all applicable local, state, and federal safety requirements, as well as with any safety rules and OSHA regulations set forth and pertaining to its contracted work.
7. Provide employee injury records such as Experience Modification Rate (EMR or MOD) for workers' compensation for the past three years and the contractor's past safety record in performing jobs of a similar nature.
8. Provide any OSHA log, which includes the injury and illness rates (number of lost-time accident cases, number of recordable cases, number of restricted workday cases, number of fatalities) for the past three years.
9. Provide incidence rates for recordable lost-time accidents for the past three years.

During the construction period the contractor will:

1. Ensure that its employees comply with all applicable local, state, and federal safety requirements, as well as with any safety rules and OSHA regulations set forth and pertaining to its contracted work.
2. Enforce all safety rules set forth in order to provide a safe work environment and control the hazards of the contracted process during performance of the contractor's work.
3. Require that all of its subcontractors and subcontractor employees abide by the rules set forth to govern safety for its trade and or the same rules to which the contractor is bound to as defined in this section.
4. Hold a minimum of (1) mandatory weekly safety meeting with all employees and or subcontractors under its control which are performing work on the jobsite.
5. Provide to the HCC Project Manager documented written proof of employees and subcontract employees that attended the mandatory weekly safety meetings and copies of the safety policy and or safety procedure training presented that week.

INDEMNIFICATION

Nothing herein is intended to restrict Contractor's responsibility and liability for all such actions. Contractor will indemnify, defend and hold harmless HCC, its agents and employees, from and against all claims, liabilities and causes of action, including attorneys' fees and defense costs, arising out of or resulting from Contractor's compliance or noncompliance with this Safety, Drugs, Alcohol, and Weapons Policy.

EXHIBIT III PROJECT INSTALLATION RULES OF CONDUCT

The Rules of Conduct are established by HCC to ensure that a minimum standard for contractors and Individual professionalism is maintained on this project. They are intended to eliminate issues arising due to misunderstandings and or poor judgment.

Any contractor or Contractor personnel found deviating from these established standards will face disciplinary action as deemed appropriate by the HCC Project Manager.

It is the responsibility of each contractor to submit this document to each of its employees and Contractors assigned to this project to read, understand and sign prior to working at this project site.

The contractors will keep a copy and return the original copy of each signed document to the HCC Entegral Solutions Project Manager.

Standard Rules of Conduct

- The contractor supervisor is required to check in with the schools primary contact person each day prior to starting work to determine if any issues related to the contractors work exist.
- If any accidental damage occurs to any customer property it must immediately be reported to the customer and the HCC Project Manager.
- When working after normal business hours it is the responsibility of the contractor to insure that all exterior doors are secured as required when work is complete.
- All interior doors will be left as found unless obvious security issues exist. In these cases the contractor supervisor should contact a customer representative or HCC Project Manager for direction.
- There will be no smoking on the customer's property.
- There will be no firearms allowed on the property or project site. This includes the parking lots.
- There will be no alcohol or illegal drugs permitted on the property.
- There will be no radios or loud music permitted on the property or in work areas.
- There will be no improper language and or gestures used by contractor personnel on the property.
- **There will be no improper conduct, communication or fraternizing with the customer personnel or the students.**
- There will be no use of any customer equipment without prior approval of HCC and the client. (Ladders, tools, housekeeping equipment etc)
- All customer items moved or relocated to facilitate an installation will be put back in the exact condition and location in which it was found.
- There will be no standing on customer desks, chairs, cabinets or tables to facilitate work.
- Flooring, furniture and office equipment will be covered as to protect it from any construction activity.
- Observe all safety rules as detailed in your contract documents.
- Daily clean up of areas where work was performed is required.
- Leave all personal items on desks and in work areas alone. (Computers, food items, phones, pens, pencils etc)
- Dress attire will be professional. No sleeveless shirts, no shorts.
- Use of customer telephones is prohibited without permission. (Local calls only)
- HCC Contractor ID and uniforms bearing the company name will be worn at all times.

Contractor / Employee Signature / Date

2016 Lighting Retrofit Performance Specification
Houston Community College LoanSTAR #1

Contents

Article I. GENERAL.....	7
Article II. SCHEDULE.....	7
Article III. WEEKLY PROGRESS REPORTS.....	7
Article IV. GENERAL MATERIAL SPECIFICATIONS.....	8
Article V. MATERIAL HANDLING.....	10
Article VI. DISPOSAL.....	10
Article VII. LEVELS AND CONSUMPTION.....	10
Article VIII. ABANDONED DEVICES.....	11
Article IX. LUMINAIRE CLEANING.....	11
Article X. EMERGENCY LIGHTING.....	11
Article XI. VERIFICATION OF OPERATION.....	11
Article XII. CODES.....	11
Article XIII. PERMITS AND FEES.....	11
Article XIV. SUBSTANTIAL COMPLETION.....	11
Article XV. FINAL COMPLETION.....	11
Article XVI. WARRANTY.....	11
Article XVII. RELEVANT INSTALLATIONS.....	12

2016 Lighting Retrofit Performance Specification
Houston Community College LoanSTAR #1

Article I. GENERAL

GENERAL

Furnish all labor, materials, supervision and tools for a complete lighting retrofit at Houston Community College (The "HCC") per this scope of work and the terms and conditions of this contract.

WORKING HOURS

All work will be performed with no interference of daily activities within the project sites. All work will be coordinated, with property representatives and HCC's project management team to ensure an efficient and professional installation. A master key may be issued to the lead supervisor for the lighting installation team and will be the sole responsibility of the Contractor. All areas will be properly secured prior to completing work in that area each day. Any areas not accessible with the master key will be coordinated with the HCC's security personnel. Certain areas within the project site may require access with a security keypad. These areas will be considered special access areas and access will be coordinated the day prior to performing the work. All work will be performed either during night time or weekend working hours.

JOBSITE CONDITIONS

Contractor is responsible for the installation of all retrofits covered by this scope of work and will have reviewed jobsite conditions prior to submitting proposal. Any apparatus, appliance, accessory, material, appurtenance or labor that may be necessary to complete the work in accordance with the intent or purpose of these documents shall be required and provided as part of the work and included in the cost of the work provided by the contractor. Omission of specific mentioned work does not relieve the contractor of providing a satisfactory lighting retrofit. It is the Contractor's responsibility to review all areas of the project and become familiar with all systems, intent, and equipment prior to starting work so that Contractor's work will include provisions for all requirements.

PERSONNEL

Upon request, a weekly report will be provided to the HCC Project Manager showing the names of all personnel working on the project. Prior to starting work the HCC Project Manager will be given a list of names and contacts for the execution of this project with contact numbers. Personnel will be required to dress in a professional manner wearing normal dress attire that clearly identifies all workers to be employees of the Contractor or their respective Subcontractor.

Article II. SCHEDULE

Upon request, the contractor will furnish to the HCC Project Manager a schedule, by area, of all work to be performed, with time duration for that work, within two weeks of contract start date. Upon request, the contractor will furnish a weekly job progress report to the HCC Project Manager to update this schedule.

Article III. WEEKLY PROGRESS REPORTS

Upon request, the contractor will furnish to the HCC Project Manager a summary of work in place by retrofit type by area, at the close of each week's work. Report will also estimate or calculate percent complete for project.

2016 Lighting Retrofit Performance Specification
Houston Community College LoanSTAR #1

Article IV. GENERAL MATERIAL SPECIFICATIONS

All lighting materials must be LED and meet the ARRA (American Recovery and Reinvestment Act) "Buy American" financing program requirements. Product specification sheets from each manufacturer must be submitted for verification of Buy American status.

- A. All Hi-Bay LED fixture housings to be manufactured by TechBrite, series B4-14, or Engineer approved equal.
- B. All exterior and canopy LED lighting to be manufactured by Neutex, RAB Lighting, Energy Focus or Techbrite.
- C. Screw-in LED replacement lamps to be manufactured by AAMSCO, Sylvania, Neutex or GlobalTechLED.
- D. LED exit sign retrofits must match lens color. Lens must be replaced if existing lens does not allow sufficient light transmission to ensure a clearly illuminated sign.
- E. Gymnasium fixtures will be protected from damage due to impact.
- F. All linear Tubular LED lamps must meet the following criteria:
 - 1. Type: Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kit.

Direct Wire: Lamps that are connected directly line voltage, receive power on a single end, shall be tested according to the UL 1598C standard.
 - 2. Regulatory standards: must meet all three standards:

Safety compliance: UL 1598C and UL 1993,

Emissions compliance: FCC Title 47 part 15 class B to not interfere with radio communications or other electronic hardware, and

Performance: Design Lights Consortium (DLC)
 - 3. Driver Type: The LED driver /power supply must be integral to the lamp construction; Remote/external LED Drivers /Power supplies are not acceptable.
 - 4. Tube Style: 2' and 4' nominal lengths, G13 medium bi-pin connectors per ANSI C78.81 Standards.
 - 5. Initial Luminous Flux (Lumen output):
2' length: 1050 +/- 10% variance (clear); 950 +/- 10% variance (frosted).
4' length: 1690 +/- 10% variance (clear); 1600 +/- 10% variance (frosted).
 - 6. Minimum Efficacy: Internal driver with 130 Lumens per watt. 13 and 18 watt options. Efficacy must be shown on DLC listing.
 - 7. Minimum Power Factor: 0.90 at 277VAC input as per the DLC requirements.
 - 8. Maximum Total Harmonic Distortion: 20% +/- 2% as per the DLC requirements.

2016 Lighting Retrofit Performance Specification
Houston Community College LoanSTAR #1

9. Correlated Color Temperature (CCT):
 - 3500K: Nominal value of 3500K \pm 300K
 - 4000K: Nominal value of 4000K \pm 300K
 - 5000K: Nominal value of 5000K \pm 300K
 - Meets ANSI Standard.
10. Lens Type: Frosted or Clear with striated design
11. Operating Voltage: 100 - 277VAC, 50/60 Hz (auto-ranging)
12. Color Rendition Index (CRI): 80 minimum
13. Minimum Beam Angle: 120 +/-10 degrees (maximizes efficiency of fixture)
14. Minimum Lumen Maintenance L70: >50,000 hours, as indicated by TM-21 calculations based on a LM-80 data provide by the LED manufacturer.
15. Minimum Warranty: 10 Years. Manufacturer must provide a minimum warranty document covering the lamps.
16. Mean Time Between Failure (MTBF): Manufacturer must provide Mean Time Between Failure (MTBF) report, for each model lamp purchased, prior to shipment. MTBF document must indicate 100K hours MTBF of lamp at 40°C ambient and Ground Benign (GB) condition.
17. Housing construction: The lamp shall have a full-length rigid aluminum structure to provide durability (anti-warp) and thermal management.
18. Critical Component Standard: To ensure product performance over its anticipated life. Only electrolytic energy storage capacitor with a minimum rated operation of greater than 190,000 hours at 60 degrees (C) are acceptable.
19. Light Flicker: Maximum allowable flicker of less than 1% for Direct Wire lamps.
20. Operational Temperature: -20C to 50C (-4F to 120F).
21. SAFETY. Lamp shall exhibit intrinsic safety to operator/installer, lamp, and accessories/equipment. This includes:
 - Regulatory: UL/cUL listed lamp, FCC
 - Prevention of electric shock: The lamp must pass the shock hazard test performed by a third party laboratory.
 - Zero current measured in electric shock test specified by UL 1598C (Direct Wire operation)
 - Less than 5 milliamps (mA) allowed in electric shock test specified by UL 1993 (Direct Fit operation)
 - Non-destruction and safe insertion of lamp (even when lamp is in non-operational state) when installed in non-compatible wiring or power source.
22. DELIVERY
 - IES photometry reading of lamp in fixture, for both prismatic and lensed troffers and including multi-lamp configurations, shall be available upon request.

2016 Lighting Retrofit Performance Specification
Houston Community College LoanSTAR #1

First lot shall be accompanied (upon request) with the following certification material:

- LM-79 "Lighting Facts" data
- In-situ thermal data (thermocouple based)
- Photometric indoor test results (plot of IES data, lamp in fixture)
- DLC report or Electrical test report, including
 - Integrating sphere test report (Lumens, CCT, CRI)
 - Power, power factor, and THD at nominal operating voltages
 - The above data when power from target ballast

Article V. MATERIAL HANDLING

MATERIAL HANDLING

Contractor will be responsible for all equipment handling.

STORAGE OF EQUIPMENT

Contractor will be responsible for the proper storage of all equipment being furnished for this project and will keep secure all equipment until time of such equipment installation. All equipment stored at project site will be closely coordinated with HCC's representative so as not to interfere with the daily activities of the project sites. Contractor is responsible for furnishing mini-mobile storage containers as required.

Article VI. DISPOSAL

DISPOSAL OF EQUIPMENT

All equipment, except hazardous waste, removed in performing specified retrofits will be disposed of by the contractor. Contractor will furnish required containers for all removed equipment to include furnishing required dumpsters. Dumpsters will be located on project as directed by HCC representatives.

CLEAN-UP

Contractor will be responsible for all clean-up of work areas. No equipment will be allowed to remain unsecured prior to commencement of tenant activities. All ladders, tools etc. will be kept in an orderly fashion throughout the work day. Special care shall be taken when moving any equipment so as not to damage floors, walls, and or ceilings. Contractor will be held responsible should such damages occur. Contractor shall notify HCC, prior to entering a work area that shows such damage, so that responsible party can be clearly determined prior to starting work. Broken lenses, broken ceiling tiles should be pointed out to HCC prior to starting work. Contractor will furnish all required dumpsters for the proper handling and disposal of waste materials.

LAMPS AND PCB BALLASTS DISPOSAL

The Contractor will properly and legally dispose of all removed lamps and ballast per State and Federal laws governing disposal of such materials. Upon completion of the project scope of work the Contractor shall provide pro of (all manifests, bills of lading and related documentation) of proper disposal.

Article VII. LEVELS AND CONSUMPTION

LIGHT LEVELS

All before and after retrofit foot candle readings of each room or area will be measured and recorded and furnished to the HCC Project Manager prior to final completion.

POWER CONSUMPTION

All before and after power consumption (watts) readings of 1% of each fixture type serving every room or area will be measured and recorded and furnished to the HCC Project Manager prior to final completion.

2016 Lighting Retrofit Performance Specification
Houston Community College LoanSTAR #1

Article VIII. ABANDONED DEVICES

Where de-lamping is specified, excess sockets and wiring will be removed from fixture.

Article IX. LUMINAIRE CLEANING

Contractor will dry clean all reflective surfaces of each fixture being retrofitted. All lenses will be cleaned on interior and exterior. After cleaning, all reflective and light transmitting surfaces will be free of dirt, dust and grime so that the light utilization of the fixture is in as "like new" condition as possible. DO NOT USE tenant desk, tables etc. for cleaning work surfaces. DO NOT USE tenant furniture for any reason in performing any retrofit.

Article X. EMERGENCY LIGHTING

Contractor is responsible to maintain function of existing emergency lighting (whether battery or generator supplied). Contractor must wire existing battery pack (whether functional or not) to new electronic ballasts. Contractor must report malfunctioning battery packs in writing to the HCC Project Manager. In situations where a generator supplies back-up power to some or all lamps within a fixture, Contractor must maintain this function within said fixture. It is the Contractor's responsibility to inspect and identify emergency lighting to ensure that these conditions are met.

Article XI. VERIFICATION OF OPERATION

Contractor will verify all fixtures retrofitted are still properly working at completion of work each day. All work will meet final approval of the HCC Project Manager prior to final acceptance.

Article XII. CODES

All work will meet local, area, state, and national codes for the proper installation of all retrofits.

Article XIII. PERMITS AND FEES

Contractor will be responsible for all required permits, fees and licenses for the complete installation of this lighting retrofit. It will be this Contractor's responsibility to verify compliance prior to commencing work.

Article XIV. SUBSTANTIAL COMPLETION

Contractor will furnish at substantial completion all documentation for project close-out, including the below list of documents. (Three sets)

- A. Before and after foot candle readings by area
- B. Before and after power consumption measurements (1% of each type of lighting fixture)
- C. Submittal data to include all manufacturer's data sheets and spec sheets for equipment furnished on this project.
- D. Manufacturer's warranties (see Warranty above)
- E. List of all sources used in the purchasing of equipment to include address and phone numbers.
- F. As-built retrofit list of work in place by facility.
- G. Contractor will correct all punch list items as required after walkthrough with Contractor representative and HCC representative.

Article XV. FINAL COMPLETION

After completion of all items listed in substantial completion, final invoices will be issued to include retainage and project will be accepted as complete.

Article XVI. WARRANTY

Contractor will warranty all work performed for a period of one year from date of final completion. All materials furnished on this project will be covered by manufacturer's standard warranty. Contractor will furnish 1% spare

2016 Lighting Retrofit Performance Specification
Houston Community College LoanSTAR #1

parts (lamps) at the completion of the project. Contractor will furnish expressed written warranties in the O&M manuals at the completion of the project.

Article XVII. RELEVANT INSTALLATIONS

In order to be considered an acceptable bid, the Contractor must provide a list of a minimum of ten (10) similar LED installations completed within the last two (2) years prior to the date of this specification. These projects must demonstrate LED installations for both interior and exterior applications.

2016 Lighting Retrofit Fixture Detail Spreadsheet
Houston Community College LoanSTAR #1

Attachment 2
Fixture Detail Spreadsheet

Room / Office / Area				Existing Lighting System										Proposed Lighting System				
Building	Room	Fixture Type	Quantity	Sensor	Qty	Fixture Code	Fixture Type	# of Lamps	Lamp Type	Ballast Type	Existing WPF	Existing kW	Existing kWh	Un Qty	Proposed Fixture Type	Quantity	Proposed kW	Proposed kWh
System Bldg	Lobby Cafe	Dining / Cafeteria and Student Lounge	3990		20	4ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.96	3,830.40	20	4' LED Tube - 2	30	0.6	2,394.00
System Bldg	Lobby Cafe	Dining / Cafeteria and Student Lounge	3990		9	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.45	1,795.50	9	MR16LED7	7	0.06	251.37
System Bldg	Cafe Side Room	Dining / Cafeteria and Student Lounge	3990		44	MR-16	Incandescent	10	Halogen, 50w	N/A	50	2.2	8,778.00	44	MR16LED7	7	0.31	1,228.92
System Bldg	Serving Area	Kitchen Area	3990		3	13TP2L T8	Troffer Prismatic	2	3' 25w T8, Fluorescent	Electronic	46	0.14	550.62	3	3' LED Tube - 2	24	0.07	287.28
System Bldg	Kitchen	Kitchen Area	3990		42	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	1.76	7,038.36	42	4' LED Tube - 2 HO	36	1.51	6,032.88
System Bldg	Vent Hood	Kitchen Area	3990		8	14TP2L T8 (28w)	Troffer Prismatic	2	4' 28w T8, Fluorescent	Electronic	48	0.38	1,532.16	8	4' LED Tube - 2	30	0.24	957.60
System Bldg	Vent Hood	Kitchen Area	3990		3	13TP2L T8	Troffer Prismatic	2	3' 25w T8, Fluorescent	Electronic	46	0.14	550.62	3	3' LED Tube - 2	24	0.07	287.28
System Bldg	Serving Table	Kitchen Area	3990		8	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.4	1,596.00	8	MR16LED7	7	0.06	223.44
System Bldg	Pantry	Kitchen Area	3990		4	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.17	670.32	4	4' LED Tube - 2 HO	36	0.14	574.56
System Bldg	Office	AD - Private Office	4245		4	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.17	713.16	4	4' LED Tube - 2 HO	36	0.14	611.28
System Bldg	RR Entry	AD - Common Area and Restrooms	5070		2	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.08	425.88	2	4' LED Tube - 2	30	0.06	304.20
System Bldg	MRR/WRR	AD - Common Area and Restrooms	5070		2	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.08	425.88	2	4' LED Tube - 2	30	0.06	304.20
System Bldg	Cooler	Kitchen Area	3990		3	IA1-60	Screw In	1	Incandescent, 60w	N/A	60	0.18	718.20	3	ALED12	12	0.04	143.64
System Bldg	Kitchen Lab	Kitchen Area	3990		25	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	1.05	4,189.50	25	4' LED Tube - 2 HO	36	0.9	3,591.00
System Bldg	Dishwasher	Kitchen Area	3990		10	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.42	1,675.80	10	4' LED Tube - 2 HO	36	0.36	1,436.40
System Bldg	Pantry	Kitchen Area	3990		2	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.08	335.16	2	4' LED Tube - 2 HO	36	0.07	287.28
System Bldg	Office	AD - Private Office	4245		1	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.04	178.29	1	4' LED Tube - 2 HO	36	0.04	152.82
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	Fire Command	AD - General Work Area	5070		2	4W2L T8	Wrap	2	4' 28w T8, Fluorescent	Electronic	58	0.12	588.12	2	4' LED Tube - 2	30	0.06	304.20
System Bldg	Comm Room	AD - General Work Area	5070		2	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	0.1	486.72	2	4' LED Tube - 2	30	0.06	304.20
System Bldg	Comp Lab	Classroom	2997		9	IA1-60	Screw In	1	Incandescent, 60w	N/A	60	0.54	1,618.11	9	ALED12	12	0.11	323.62
System Bldg	Comp Lab	Classroom	2997		9	IA1-60	Screw In	1	Incandescent, 60w	N/A	60	0.54	1,618.11	9	ALED12	12	0.11	323.62
System Bldg	TV Studio	AD - General Work Area	5070		30	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	1.44	7,300.80	30	4' LED Tube - 2	30	0.9	4,563.00
System Bldg	Track Lights	AD - General Work Area	5070		15	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.75	3,802.50	15	MR16LED7	7	0.11	532.35
System Bldg	Track Lights	AD - General Work Area	5070		16	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.8	4,056.00	16	MR16LED7	7	0.11	567.84
System Bldg	Make up Mirror	AD - Locker and Dressing Rooms	5070		6	GLOBE40	Screw In	1	Incandescent, 40w	N/A	40	0.24	1,216.80	6	GLOBELED6	6	0.04	182.52
System Bldg	Make up Mirror	AD - Locker and Dressing Rooms	5070		6	GLOBE40	Screw In	1	Incandescent, 40w	N/A	40	0.24	1,216.80	6	GLOBELED6	6	0.04	182.52
System Bldg	Track Lights	AD - Private Office	4245		4	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.2	849.00	4	MR16LED7	7	0.03	118.86
System Bldg	Track Lights	AD - Private Office	4245		4	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.2	849.00	4	MR16LED7	7	0.03	118.86
System Bldg	Track Lights	AD - Private Office	4245		5	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.25	1,061.25	5	MR16LED7	7	0.04	148.58
System Bldg	Track Lights	AD - Private Office	4245		6	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.3	1,273.50	6	MR16LED7	7	0.04	178.29
System Bldg	Track Lights	AD - Private Office	4245		4	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.2	849.00	4	MR16LED7	7	0.03	118.86
System Bldg	Track Lights	AD - Private Office	4245		5	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.25	1,061.25	5	MR16LED7	7	0.04	148.58
System Bldg	Pvt Office	AD - Private Office	4245		1	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.05	212.25	1	MR16LED7	7	0.01	29.72
System Bldg	Track Lights	AD - Private Office	4245		4	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.2	849.00	4	MR16LED7	7	0.03	118.86
System Bldg	Pvt Office	AD - Private Office	4245		1	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.05	212.25	1	MR16LED7	7	0.01	29.72
System Bldg	Track Lights	AD - Private Office	4245		4	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.2	849.00	4	MR16LED7	7	0.03	118.86
System Bldg	Master Control	AD - General Work Area	5070		4	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.2	1,014.00	4	MR16LED7	7	0.03	141.96
System Bldg	Track Lights	AD - General Work Area	5070		5	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.25	1,267.50	5	MR16LED7	7	0.04	177.45
System Bldg	Back room	AD - General Work Area	5070		4	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.2	1,014.00	4	MR16LED7	7	0.03	141.96
System Bldg	Track Lights	AD - General Work Area	5070		8	MR-16	Incandescent	10	Halogen, 50w	N/A	50	0.4	2,028.00	8	MR16LED7	7	0.06	283.92
System Bldg	Studio	AD - General Work Area	5070		12	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	0.58	2,920.32	12	4' LED Tube - 2	30	0.36	1,825.20
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	Lobby	AD - Common Area and Restrooms	5070		13	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.62	3,163.68	13	4' LED Tube - 2	30	0.39	1,977.30
System Bldg	Conference Services	AD - Meeting and Boardrooms	4095		13	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.62	2,555.28	13	4' LED Tube - 2	30	0.39	1,597.05
System Bldg	Meeting Room	AD - Meeting and Boardrooms	4095		12	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.58	2,358.72	12	4' LED Tube - 2	30	0.36	1,474.20
System Bldg	Meeting Room	AD - Meeting and Boardrooms	4095		20	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.96	3,931.20	20	4' LED Tube - 2	30	0.6	2,457.00
System Bldg	Meeting Room	AD - Meeting and Boardrooms	4095		9	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.43	1,769.04	9	4' LED Tube - 2	30	0.27	1,105.65
System Bldg	Pvt Office	AD - Private Office	4245		1	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.05	203.76	1	4' LED Tube - 2	30	0.03	127.35
System Bldg	Pvt Office	AD - Private Office	4245		2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.1	407.52	2	4' LED Tube - 2	30	0.06	254.70
System Bldg	Pvt Office	AD - Private Office	4245		2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.1	407.52	2	4' LED Tube - 2	30	0.06	254.70
System Bldg	Break Area	AD - Break and Lounge Areas	5070		2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.1	486.72	2	4' LED Tube - 2	30	0.06	304.20
System Bldg	St Luke's Audit	AD - General Work Area	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.02	3,361.41	12	4' LED Tube - 3	45	0.54	1,779.57
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,392.30	4	4' LED Tube - 3	45	0.18	737.10
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33

Room / Office / Area				Existing Lighting System										Proposed Lighting System				
Building	Space	Usage Type	Usage Room	Sensor	Qty	Fixture Code	Fixture Type	# of Lamps	Lamp Type	Ballast Type	Existing WPF	Existing kW	Existing kWh	Use Qty	Fixture Code	Proposed WPF	Proposed kW	Proposed kWh
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	6	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,164.95	6	4' LED Tube - 3	45	0.27	1,146.15
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Hall	AD - Common Area and Restrooms	5070	15	2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.72	3,650.40	15	4' LED Tube - 2	30	0.45	2,281.50
System Bldg	Elev Lobby	AD - Common Area and Restrooms	5070	1	1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	File Room	AD - General Work Area	5070	8	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	8	4' LED Tube - 3	45	0.36	1,825.20
System Bldg	MRR	AD - Common Area and Restrooms	5070	8	1	4S1L T8 (28w)	Strip	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	MRR	AD - Common Area and Restrooms	5070	3	2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.14	730.08	3	4' LED Tube - 2	30	0.09	456.30
System Bldg	WRR	AD - Common Area and Restrooms	5070	8	1	4S1L T8 (28w)	Strip	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	WRR	AD - Common Area and Restrooms	5070	3	2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.14	730.08	3	4' LED Tube - 2	30	0.09	456.30
System Bldg	Lobby Meeting Room	AD - Meeting and Boardrooms	4095	6	2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.29	1,179.36	6	4' LED Tube - 2	30	0.18	737.10
System Bldg	Auditorium Lobby	AD - Common Area and Restrooms	5070	26	2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	1.25	6,327.36	26	4' LED Tube - 2	30	0.78	3,954.60
System Bldg	Auditorium	Auditorium / Lecture Hall	2997	36	2	24ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	1.73	5,177.95	36	4' LED Tube - 2	30	1.08	3,236.22
System Bldg	Sound Booth	AD - General Work Area	5070	1	1	IA1-60	Screw In	1	Incandescent, 60w	N/A	60	0.06	304.20	1	ALED12	12	0.01	60.84
System Bldg	MRR	AD - Common Area and Restrooms	5070	2	1	4S1L T8 (28w)	Strip	1	4' 28w T8, Fluorescent	Electronic	25	0.05	253.50	2	4' LED Tube - 1	15	0.03	152.10
System Bldg	WRR	AD - Common Area and Restrooms	5070	5	1	4S1L T8 (28w)	Strip	1	4' 28w T8, Fluorescent	Electronic	25	0.13	633.75	5	4' LED Tube - 1	15	0.08	380.25
System Bldg	WRR	AD - Common Area and Restrooms	5070	2	1	4S1L T8 (28w)	Strip	1	4' 28w T8, Fluorescent	Electronic	25	0.05	253.50	2	4' LED Tube - 1	15	0.03	152.10
System Bldg	Back Service Hall	AD - Common Area and Restrooms	5070	6	2	4ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.29	1,460.16	6	4' LED Tube - 2	30	0.18	912.60
System Bldg	RR	AD - Common Area and Restrooms	5070	2	2	IA2-60	Screw In	2	Incandescent, 60w	N/A	120	0.24	1,216.80	2	2ALED12	24	0.05	243.36
System Bldg	Stair F	Stairs and Elevators	8760	3	1	3W1L T12	Wrap	1	3' 30w T12, Fluorescent	Magnetic	46	0.14	1,208.88	3	3' LED Tube - 1	12	0.04	315.36
System Bldg	Stair E	Stairs and Elevators	8760	3	1	3W1L T12	Wrap	1	3' 30w T12, Fluorescent	Magnetic	46	0.14	1,208.88	3	3' LED Tube - 1	12	0.04	315.36
System Bldg	Cove	AD - Common Area and Restrooms	5070	24	2	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	1.15	5,840.64	24	4' LED Tube - 2	30	0.72	3,650.40
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095	4	3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,392.30	4	4' LED Tube - 3	45	0.18	737.10
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095	3	3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,044.23	3	4' LED Tube - 3	45	0.14	552.83
System Bldg	Training Room	AD - General Work Area	5070	12	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.02	5,171.40	12	4' LED Tube - 3	45	0.54	2,737.80
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	MRR	AD - Common Area and Restrooms	5070	8	1	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	WRR	AD - Common Area and Restrooms	5070	8	1	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095	8	2	24TP2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	42	0.34	1,375.92	8	4' LED Tube - 2 HO	36	0.29	1,179.36
System Bldg	WRR	AD - Common Area and Restrooms	5070	8	1	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	Ups Room	AD - General Work Area	5070	3	2	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	0.14	730.08	3	4' LED Tube - 2	30	0.09	456.30
System Bldg	Lobby	AD - Common Area and Restrooms	5070	1	3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Lobby	AD - Common Area and Restrooms	5070	7	1	3S1L T8	Strip	1	3' 25w T8, Fluorescent	Electronic	23	0.16	816.27	7	3' LED Tube - 1	12	0.08	425.88
System Bldg	Sign Cove	AD - Common Area and Restrooms	5070	16	2	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	0.77	3,893.76	16	4' LED Tube - 2	30	0.48	2,433.60
System Bldg	Study Room	AD - Common Area and Restrooms	5070	2	3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30
System Bldg	Break Area	AD - Break and Lounge Areas	5070	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Under Counter	AD - Break and Lounge Areas	5070	1	2	4W2L T8	Wrap	2	4' 32w T8, Fluorescent	Electronic	58	0.06	294.06	1	4' LED Tube - 2	30	0.03	152.10
System Bldg	File Room	AD - General Work Area	5070	10	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.85	4,309.50	10	4' LED Tube - 3	45	0.45	2,281.50
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095	4	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,392.30	4	4' LED Tube - 3	45	0.18	737.10
System Bldg	Office Bullpen	AD - General Work Area	5070	46	3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	3.91	19,823.70	46	4' LED Tube - 3	45	2.07	10,494.90
System Bldg	File Room	AD - General Work Area	5070	10	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.85	4,309.50	10	4' LED Tube - 3	45	0.45	2,281.50
System Bldg	Kitchen	AD - Break and Lounge Areas	5070	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30
System Bldg	Under Counter	AD - Break and Lounge Areas	5070	4	1	4W1L T8	Wrap	1	4' 32w T8, Fluorescent	Electronic	31	0.12	628.68	4	4' LED Tube - 1	15	0.06	304.20
System Bldg	Cove Lights	AD - Break and Lounge Areas	5070	4	2	3S2L T8	Strip	2	3' 25w T8, Fluorescent	Electronic	46	0.18	932.88	4	3' LED Tube - 2	24	0.1	486.72
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	2	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05

Room / Office / Area				Existing Lighting System										Proposed Lighting System					
Building	Space	Area Type	Usage Hours	Sensor	Qty	Fixture Code	Fixture Type	# of Lamps	Lamp Type	Ballast Type	Existing WPF	Existing kW	Existing kWh	Proposed Qty	Proposed WPF	Proposed kW	Proposed kWh		
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05	
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05	
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05	
System Bldg	File Room	AD - General Work Area	5070		12	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.02	5,171.40	12	4' LED Tube - 3	45	0.54	2,737.80	
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05	
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	696.15	2	4' LED Tube - 3	45	0.09	368.55	
System Bldg	Hall	AD - Common Area and Restrooms	5070		9	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.77	3,878.55	9	4' LED Tube - 3	45	0.41	2,053.35	
System Bldg	Pvt Office	AD - Private Office	4245		1	4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	938.15	4	4' LED Tube - 3	45	0.18	496.67
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	File Room	AD - General Work Area	5070		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,585.70	6	4' LED Tube - 3	45	0.27	1,368.90	
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Office Bullpen	AD - General Work Area	5070		20	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.7	8,619.00	20	4' LED Tube - 3	45	0.9	4,563.00	
System Bldg	Office	AD - General Work Area	5070		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,723.80	4	4' LED Tube - 3	45	0.18	912.60	
System Bldg	Office	AD - General Work Area	5070		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,723.80	4	4' LED Tube - 3	45	0.18	912.60	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	2,784.60	8	4' LED Tube - 3	45	0.36	1,474.20	
System Bldg	Bulpen Coves	AD - General Work Area	5070		4	3S2L T8	Strip	2	3' 25w T8, Fluorescent	Electronic	46	0.18	932.88	4	3' LED Tube - 2	24	0.1	486.72	
System Bldg	Bulpen	AD - General Work Area	5070		104	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	8.84	44,818.80	104	4' LED Tube - 3	45	4.68	23,727.60	
System Bldg	Work Room	AD - General Work Area	5070		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	8	4' LED Tube - 3	45	0.36	1,825.20	
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Kitchen	AD - Break and Lounge Areas	5070		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,292.85	3	4' LED Tube - 3	45	0.14	684.45	
System Bldg	Under Counter	AD - Break and Lounge Areas	5070		5	4W1L T8	Wrap	1	4' 32w T8, Fluorescent	Electronic	31	0.16	785.85	5	4' LED Tube - 1	15	0.08	380.25	
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	4W2L T12	Wrap	2	4' 34w T12, Fluorescent	Magnetic	82	0.66	3,325.92	8	4' LED Tube - 2	30	0.24	1,216.80	
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	4W2L T12	Wrap	2	4' 34w T12, Fluorescent	Magnetic	82	0.66	3,325.92	8	4' LED Tube - 2	30	0.24	1,216.80	
System Bldg	Mall Room	AD - General Work Area	5070		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,292.85	3	4' LED Tube - 3	45	0.14	684.45	
System Bldg	Hall	AD - Common Area and Restrooms	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	2,784.60	8	4' LED Tube - 3	45	0.36	1,474.20	
System Bldg	Wall Cove	AD - Common Area and Restrooms	5070		5	3S2L T8	Strip	2	3' 25w T8, Fluorescent	Electronic	46	0.23	1,166.10	5	3' LED Tube - 2	24	0.12	608.40	
System Bldg	Elev Lobby	AD - Common Area and Restrooms	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15	
System Bldg	Work Room	AD - General Work Area	5070		10	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.85	4,309.50	10	4' LED Tube - 3	45	0.45	2,281.50	
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Common Area	AD - Common Area and Restrooms	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	2	4' LED Tube - 3	45	0.36	1,825.20	
System Bldg	Electrical Lobby	AD - Common Area and Restrooms	5070		1	4W2L T8	Wrap	2	4' 32w T8, Fluorescent	Electronic	58	0.06	294.06	1	4' LED Tube - 2	30	0.03	152.10	
System Bldg	Sign Coves	AD - Common Area and Restrooms	5070		16	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	0.77	3,893.76	16	4' LED Tube - 2	30	0.48	2,433.60	
System Bldg	Lobby	AD - Common Area and Restrooms	5070		42	3S2L T8	Strip	2	3' 25w T8, Fluorescent	Electronic	46	1.93	9,795.24	7	3' LED Tube - 2	24	0.17	851.76	
System Bldg	Copy Area	AD - General Work Area	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15	
System Bldg	Under Counter	AD - General Work Area	5070		2	4W1L T8	Wrap	1	4' 32w T8, Fluorescent	Electronic	31	0.06	314.34	2	4' LED Tube - 1	15	0.03	152.10	
System Bldg	Office Bullpen	AD - General Work Area	5070		32	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	2.72	13,790.40	32	4' LED Tube - 3	45	1.44	7,300.80	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,044.23	3	4' LED Tube - 3	45	0.14	552.83	
System Bldg	File Room	AD - General Work Area	5070		10	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.85	4,309.50	10	4' LED Tube - 3	45	0.45	2,281.50	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	696.15	2	4' LED Tube - 3	45	0.09	368.55	
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33

Room / Office / Area				Existing Lighting System										Proposed Lighting System				
System Bldg	Space	Usage Type	Room Number	Sensor	Qty	Fixture Code	Fixture Type	# of Lamps	Lamp Type	Ballast Type	Existing WPF	Existing kW	Existing kWh	Un Op	Proposed Lamps	Proposed WPF	Proposed kW	Proposed kWh
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Wall Cove	AD - Common Area and Restrooms	5070		5	3S2L T8	Strip	2	3' 25w T8, Fluorescent	Electronic	46	0.23	1,166.10	5	3' LED Tube - 2	24	0.12	608.40
System Bldg	Kitchen	AD - Break and Lounge Areas	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Under Counter	AD - Break and Lounge Areas	5070		1	4W1L T8	Wrap	1	4' 32w T8, Fluorescent	Electronic	31	0.03	157.17	1	4' LED Tube - 1	15	0.02	76.05
System Bldg	Office Bullpen	AD - General Work Area	5070		120	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	10.2	51,714.00	120	4' LED Tube - 3	45	5.4	27,378.00
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,392.30	4	4' LED Tube - 3	45	0.18	737.10
System Bldg	Supply Room	AD - General Work Area	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30
System Bldg	Hall	AD - Common Area and Restrooms	5070		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,723.80	4	4' LED Tube - 3	45	0.18	912.60
System Bldg	File Room	AD - General Work Area	5070		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,292.85	3	4' LED Tube - 3	45	0.14	684.45
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	File Room	AD - General Work Area	5070		10	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.85	4,309.50	10	4' LED Tube - 3	45	0.45	2,281.50
System Bldg	Office	AD - General Work Area	5070		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,585.70	6	4' LED Tube - 3	45	0.27	1,368.90
System Bldg	Hall	AD - Common Area and Restrooms	5070		5	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.43	2,154.75	5	4' LED Tube - 3	45	0.23	1,140.75
System Bldg	Elev Lobby	AD - Common Area and Restrooms	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Work Room	AD - General Work Area	5070		10	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.85	4,309.50	10	4' LED Tube - 3	45	0.45	2,281.50
System Bldg	Work Room	AD - General Work Area	5070		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	8	4' LED Tube - 3	45	0.36	1,825.20
System Bldg	Wall Cove	AD - Common Area and Restrooms	5070		5	3S2L T8	Strip	2	3' 25w T8, Fluorescent	Electronic	46	0.23	1,166.10	5	3' LED Tube - 2	24	0.12	608.40
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Bullpen	AD - General Work Area	5070		46	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	3.91	19,823.70	46	4' LED Tube - 3	45	2.07	10,494.90
System Bldg	Kitchen	AD - Break and Lounge Areas	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Under Counter	AD - Break and Lounge Areas	5070		1	4W1L T8	Wrap	1	4' 32w T8, Fluorescent	Electronic	31	0.03	157.17	1	4' LED Tube - 1	15	0.02	76.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,392.30	4	4' LED Tube - 3	45	0.18	737.10
System Bldg	Kitchen	AD - Break and Lounge Areas	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Under Counter	AD - Break and Lounge Areas	5070		2	4W1L T8	Wrap	1	4' 32w T8, Fluorescent	Electronic	31	0.06	314.34	2	4' LED Tube - 1	15	0.03	152.10
System Bldg	Office	AD - General Work Area	5070		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	8	4' LED Tube - 3	45	0.36	1,825.20
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Common Area	AD - Common Area and Restrooms	5070		22	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.87	9,480.90	22	4' LED Tube - 3	45	0.99	5,019.30
System Bldg	Lobby	AD - Common Area and Restrooms	5070		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	8	4' LED Tube - 3	45	0.36	1,825.20
System Bldg	Conf Area	AD - Break and Lounge Areas	5070		7	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.6	3,016.65	7	4' LED Tube - 3	45	0.32	1,597.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Commons	AD - Common Area and Restrooms	5070		5	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.43	2,154.75	5	4' LED Tube - 3	45	0.23	1,140.75
System Bldg	File Room	AD - General Work Area	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15

Room / Office / Area				Existing Lighting System										Proposed Lighting System				
Building	Office	Usage Type	Usage Hours	Sensor	Qty	Fixture Code	Fixture Type	# of Lamps	Lamp Type	Ballast Type	Existing WPF	Existing kW	Existing kWh	Qty	Proposed Lamp Type	Proposed Qty	Proposed kW	Proposed kWh
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Hall	AD - Common Area and Restrooms	5070		12	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.02	5,171.40	12	4' LED Tube - 3	45	0.54	2,737.80
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	Empty Suite	AD - General Work Area	5070		52	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	4.42	22,409.40	52	4' LED Tube - 3	45	2.34	11,863.80
System Bldg	Pvt Office	AD - Private Office	4245		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,082.48	3	4' LED Tube - 3	45	0.14	573.08
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095	1	4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	905.00	4	4' LED Tube - 3	45	0.18	479.12
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,088.45	6	4' LED Tube - 3	45	0.27	1,105.65
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		6	IA1-60	Screw In	1	Incandescent, 60w	N/A	60	0.36	1,474.20	6	ALED12	12	0.07	294.84
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095	1	6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	1,357.49	6	4' LED Tube - 3	45	0.27	718.67
System Bldg	Office	AD - General Work Area	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095	1	6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	1,357.49	6	4' LED Tube - 3	45	0.27	718.67
System Bldg	Break Area	AD - Break and Lounge Areas	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30
System Bldg	Lobby	AD - Common Area and Restrooms	5070		42	3S2L T8	Strip	2	3' 25w T8, Fluorescent	Electronic	46	1.93	9,795.24	7	3' LED Tube - 2	24	0.17	851.76
System Bldg	Sign Coves	AD - Common Area and Restrooms	5070		16	4S2L T8 (28w)	Strip	2	4' 28w T8, Fluorescent	Electronic	48	0.77	3,893.76	16	4' LED Tube - 2	30	0.48	2,433.60
System Bldg	Hall	AD - Common Area and Restrooms	5070		17	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.45	7,326.15	17	4' LED Tube - 3	45	0.77	3,878.55
System Bldg	Open Office	AD - General Work Area	5070		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,585.70	6	4' LED Tube - 3	45	0.27	1,368.90
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	234.54	1	4' LED Tube - 3	45	0.05	124.17
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03
System Bldg	Open Office	AD - General Work Area	5070		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,723.80	4	4' LED Tube - 3	45	0.18	912.60
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,164.95	6	4' LED Tube - 3	45	0.27	1,146.15
System Bldg	Kitchen	AD - Break and Lounge Areas	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15
System Bldg	Under Counter	AD - Break and Lounge Areas	5070		1	4W1L T8	Wrap	1	4' 32w T8, Fluorescent	Electronic	31	0.03	157.17	1	4' LED Tube - 1	15	0.02	76.05
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,044.23	3	4' LED Tube - 3	45	0.14	552.83
System Bldg	Open Office	AD - General Work Area	5070		26	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	2.21	11,204.70	26	4' LED Tube - 3	45	1.17	5,931.90
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,392.30	4	4' LED Tube - 3	45	0.18	737.10
System Bldg	Bulpen	AD - General Work Area	5070		25	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	2.13	10,773.75	25	4' LED Tube - 3	45	1.13	5,703.75
System Bldg	Pvt Office	AD - Private Office	4245	1	1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	234.54	1	4' LED Tube - 3	45	0.05	124.17
System Bldg	Pvt Office	AD - Private Office	4245		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,082.48	3	4' LED Tube - 3	45	0.14	573.08
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33

Houston Community College LoanSTAR #1 Lighting Renovation Detail Sheet Administration Set

Room / Office / Area				Existing Lighting System										Proposed Lighting System					
Building	Space	Usage Type	Usage Hours	Sensor	Qty	Fixture Code	Fixture Type	# of Lamps	Lamp Type	Ballast Type	Existing WPF	Existing kW	Existing kWh	Usage	Proposed Usage Type	Proposed Qty	Proposed kW	Proposed kWh	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	703.61	3	4' LED Tube - 3	45	0.14	372.50	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Bulpen	AD - General Work Area	5070		16	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.36	6,895.20	16	4' LED Tube - 3	45	0.72	3,650.40	
System Bldg	Kitchen	AD - Break and Lounge Areas	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30	
System Bldg	Comp Lab	Classroom	2997	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	331.11	2	4' LED Tube - 3	45	0.09	175.30	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Open Office	AD - General Work Area	5070		32	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	2.72	13,790.40	32	4' LED Tube - 3	45	1.44	7,300.80	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Copy Area	AD - General Work Area	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	280.12	1	4' LED Tube - 3	45	0.05	148.30	
System Bldg	Kitchen	AD - Break and Lounge Areas	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	280.12	1	4' LED Tube - 3	45	0.05	148.30	
System Bldg	Under Counter	AD - Break and Lounge Areas	5070		1	2	451L T8 (28w)	Strip	1	4' 28w T8, Fluorescent	Electronic	25	0.05	164.78	2	4' LED Tube - 1	15	0.03	98.87
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Supply Room	AD - General Work Area	5070		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,292.85	3	4' LED Tube - 3	45	0.14	684.45	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		2	4ID2L T8 (28w)	Indirect	2	4' 28w T8, Fluorescent	Electronic	48	0.1	393.12	2	4' LED Tube - 2	30	0.06	245.70	
System Bldg	Office	AD - Private Office	4245		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,443.30	4	4' LED Tube - 3	45	0.18	764.10	
System Bldg	Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Supply Room	AD - General Work Area	5070		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,723.80	4	4' LED Tube - 3	45	0.18	912.60	
System Bldg	Office	AD - General Work Area	5070		5	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.43	2,154.75	5	4' LED Tube - 3	45	0.23	1,140.75	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	696.15	2	4' LED Tube - 3	45	0.09	368.55	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Common Area	AD - Common Area and Restrooms	5070		28	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	2.38	12,066.60	28	4' LED Tube - 3	45	1.26	6,388.20	
System Bldg	Training Room	AD - General Work Area	5070		15	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.28	6,464.25	15	4' LED Tube - 3	45	0.68	3,422.25	
System Bldg	Training Room	AD - General Work Area	5070		15	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.28	6,464.25	15	4' LED Tube - 3	45	0.68	3,422.25	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	2,784.60	8	4' LED Tube - 3	45	0.36	1,474.20	
System Bldg	Break Room	AD - Lounge / Break Area	5070		8	IA1-60	Screw In	1	Incandescent, 60W	N/A	60	0.48	2,433.60	8	ALED12	12	0.1	486.72	
System Bldg	Office	AD - General Work Area	5070		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,585.70	6	4' LED Tube - 3	45	0.27	1,368.90	
System Bldg	Office	AD - General Work Area	5070		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,585.70	6	4' LED Tube - 3	45	0.27	1,368.90	
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40	
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40	
System Bldg	Elev Lobby	AD - Common Area and Restrooms	5070		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	430.95	1	4' LED Tube - 3	45	0.05	228.15	
System Bldg	Office	AD - General Work Area	5070		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	8	4' LED Tube - 3	45	0.36	1,825.20	
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03	
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03	
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03	
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03	
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.09	360.83	1	4' LED Tube - 3	45	0.05	191.03	
System Bldg	Office Bulpen	AD - General Work Area	5070		36	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	3.06	15,514.20	36	4' LED Tube - 3	45	1.62	8,213.40	
System Bldg	Pvt Office	AD - Private Office	4245		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	938.15	4	4' LED Tube - 3	45	0.18	496.67	
System Bldg	Pvt Office	AD - Private Office	4245		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	1,407.22	6	4' LED Tube - 3	45	0.27	745.00	
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	452.50	2	4' LED Tube - 3	45	0.09	239.56	
System Bldg	Office Area	AD - General Work Area	5070		6	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.51	2,585.70	6	4' LED Tube - 3	45	0.27	1,368.90	
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245		1	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33	
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05	

Room / Office / Area				Existing Lighting System										Proposed Lighting System				
Building	Space	Usage Type	Usage Volume	Sensor	Qty	Fixture Code	Fixture Type	# of Lamps	Lamp Type	Ballast Type	Existing WPF	Existing kW	Existing kWh	Un Qty	Proposed Upgrade Type	Proposed WPF	Proposed kW	Proposed kWh
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245		4	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.34	1,443.30	4	4' LED Tube - 3	45	0.18	764.10
System Bldg	Pvt Office	AD - Private Office	4245		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	721.65	2	4' LED Tube - 3	45	0.09	382.05
System Bldg	Conf Room	AD - Meeting and Boardrooms	4095		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	696.15	2	4' LED Tube - 3	45	0.09	368.55
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	Pvt Office	AD - Private Office	4245	1	2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	469.07	2	4' LED Tube - 3	45	0.09	248.33
System Bldg	File Room	AD - General Work Area	5070		3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	1,292.85	3	4' LED Tube - 3	45	0.14	684.45
System Bldg	File Room	AD - General Work Area	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30
System Bldg	Bulpen Area	AD - General Work Area	5070		18	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	1.53	7,757.10	18	4' LED Tube - 3	45	0.81	4,106.70
System Bldg	Pvt Office	AD - Private Office	4245	1	3	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.26	703.61	3	4' LED Tube - 3	45	0.14	372.50
System Bldg	Open Office	AD - General Work Area	5070		8	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.68	3,447.60	8	4' LED Tube - 3	45	0.36	1,825.20
System Bldg	File Room	AD - General Work Area	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30
System Bldg	File Room	AD - General Work Area	5070		2	24PB3L T8	Troffer Parabolic	3	4' 32w T8, Fluorescent	Electronic	85	0.17	861.90	2	4' LED Tube - 3	45	0.09	456.30
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	14PB1L T8 (28w)	Troffer Parabolic	1	4' 28w T8, Fluorescent	Electronic	25	0.2	1,014.00	8	4' LED Tube - 1	15	0.12	608.40
System Bldg	Doorway	AD - Private Office	4245		1	IA1-60	Screw In	1	Incandescent, 60w	N/A	60	0.06	254.70	1	ALED12	12	0.01	50.94
System Bldg	MRR	AD - Common Area and Restrooms	5070		8	14PB2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	48	0.38	1,946.88	8	4' LED Tube - 2	30	0.24	1,216.80
System Bldg	WRR	AD - Common Area and Restrooms	5070		8	14PB2L T8 (28w)	Troffer Parabolic	2	4' 28w T8, Fluorescent	Electronic	48	0.38	1,946.88	8	4' LED Tube - 2	30	0.24	1,216.80
System Bldg	Stairs	Stairs and Elevators	8760		80	4W2L T8	Wrap	2	4' 32w T8, Fluorescent	Electronic	58	4.64	40,646.40	80	4' LED Tube - 2	30	2.4	21,024.00

2374