

# ENERGY AUDIT – FINAL REPORT CEG PROJECT NO. 9C08134

# SOUTH BRUNSWICK BOARD OF EDUCATION PO BOX 181 MONMOUTH JUNCTION, NJ 08852 ATTN: Mr. ANTHONY TONZINI BUSINESS ADMINSTRATOR

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#### I. EXECUTIVE SUMMARY

This report presents the findings of an energy audit conducted for:

South Brunswick High School 750 Ridge Road South Brunswick, NJ 08852

Facility Contact Person: Anthony Sudnick (on-site)

Anthony Tonzini (Board Administrator)

This audit was performed in connection with the New Jersey Clean Energy Local Government Energy Audit Program. These energy audits are conducted to promote the office of Clean Energy's mission, which is to use innovation and technology to solve energy and environmental problems in a way that improves the State's economy. This can be achieved through the wiser and more efficient use of energy.

The annual energy costs at this facility are as follows:

Electricity	\$ 1,370,227	
Natural Gas	\$_ 319,898	
Total	\$ 1 690 125	4

The potential annual energy cost savings are shown below in Table 1. The costs are inclusive of incentive dollars. The cost of each measure for this level of auditing is  $\pm$  20% until detailed engineering, specifications, and hard proposals are obtained. Refer to Section VII for a more detailed evaluation of the ECM's.

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Table 1
Energy Conservation Measures (ECM's)

ECM#	Description	Total Project Cost, \$	Annual Savings	Simple Payback (Years)
ECM #1	BOILER REPLACEMENT	\$504,000	\$24,509	19.9
ECM #2	DOMESTIC WATER HEATER REPLACEMENT	\$207,250	\$19,929	10.1
ECM #3	ENERGY RECOVERY	\$3,944,531	\$14,941	264.0
ECM #4	LIGHTING RETROFIT	\$625,569	\$100,763	6.2
ECM #5	1500 KW PV SOLAR	\$12,444,000	\$1,436,036	8.7

The estimated demand and consumption savings are shown below in Table 2. The information in this table corresponds to the ECM's in Table 1.

Table 2
Estimated Energy Savings

		Annual Utility Reduction				
ECM#	Description	Demand Reduction (KW)	Consumption Reduction (KWH)	Consumption Reduction (Therms)		
ECM #1	BOILER REPLACEMENT	(62.00)	13,669	9,071		
ECM #2	DOMESTIC WATER HEATER REPLACEMENT	8	40,162	8,273		
ECM #3	ENERGY RECOVERY	209	(97,105)	31,309		
ECM #4	LIGHTING RETROFIT	143	671,755	0		
ECM #5	1500 KW PV SOLAR	1,500	2,437,851	0		

Concord Engineering recommends the implementation of all ECM's that provide a simple payback of seven to ten (7 to 10) years or less.

The following Energy Conservation Measures are recommended for South Brunswick High School:

> ECM # 4 Lighting Retrofit

> ECM # 5 1500 KW PV Solar Panels

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#### II. INTRODUCTION

The South Brunswick High School is included in this energy audit. Based on our survey and the documentation available, it was determined that the building area is approximately 427,000 SF.

The first task was to collect and review two years worth of utility energy data for electricity and natural gas. This information was used to analyze operational characteristics, calculate energy benchmarks for comparison to industry averages, estimate savings potential, and establish a baseline to monitor the effectiveness of implemented measures. A computer spreadsheet was used to enter, sum, and calculate benchmarks and to graph utility information.

The Energy Use Index (EUI) is expressed in British Thermal Units/square foot/year (BTU/ft²/yr) and can be used to compare energy consumption to similar building types or to track consumption from year to year in the same building. The EUI is calculated by converting annual consumption of all fuels to BTU's then dividing by the area (gross square footage) of the building. EUI is a good indicator of the relative potential for energy savings. A comparatively low EUI indicates less potential for large energy savings. Blueprints obtained from the District were used to calculate the gross area of the three buildings.

Obtaining Architectural and Mechanical drawings, a building profile was created that included age, occupancy, description, and existing conditions of Architectural and Mechanical Systems. The profile noted the major energy – consuming equipment or systems and components that are inherently inefficient. Also, by reviewing the mechanical drawings and equipment schedules, questions regarding the lighting systems/controls, HVAC zone controls, or setback operations were noted.

The site visit was spent inspecting the actual systems and answering specific questions from the preliminary review. The building manager provided occupancy schedules, O & M practices, the building energy management program, and other information that has an impact on energy consumption.

The post-site work included evaluation of the information gathered during the site visit, researching possible conservation opportunities, organizing the audit into a comprehensive report, and making recommendations on mechanical and building envelope improvements.

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#### III. METHOD OF ANALYSIS

The first step in the energy analysis is the site survey. The auditor walks the entire site to determine building size and to inventory the building envelope (roof, windows, etc.), the heating, ventilation, and air conditioning equipment (HVAC), the lighting equipment, other facility-specific equipment, and to gain an understanding of how each facility is used.

The collected data is then processed using engineering calculations, Microsoft Excel spread sheets and Trane Trace 700<sup>TM</sup> building simulation software that calculate the anticipated energy usage. The actual energy usage is entered directly from the utility bills. The anticipated energy usage is compared to the actual usage. If necessary, corrections are made to the site-collected data until the anticipated energy usage matches the actual usage. This process develops an enduse baseline for all of the fuels used at the facility. This baseline is used to calculate the energy savings for the measures that are recommended in this report.

The savings in this report are not duplicative. The savings for each recommendation may actually be higher if the individual recommendations were installed instead of the entire project. For example, the lighting module calculates the change in wattage and multiplies it by the new operating hours instead of the existing operating hours (if there was a change in the hours at all). The lighting controls module calculates the change in hours and multiplies it by the new system wattage instead of the existing wattage. Therefore, if you chose to install the recommended lighting system but not the lighting controls, the savings achieved with the new lighting system would actually be higher because there would have been no reduction in the hours of use.

The same principal follows for heating, cooling, and temperature recommendations – even with fuel switching. If there are recommendations to change the temperature settings to reduce fuel use, then the savings for the heating/cooling equipment recommendations are reduced, as well.

Our thermal module calculates the savings for temperature reductions utilizing Trane Trace 700<sup>TM</sup> building simulation software. The savings are calculated in "output" values – meaning energy, not <u>fuel</u> savings. To show fuel savings we multiply the energy values times the fuel conversion factor (these factors are different for electricity, natural gas, fuel oil, etc.) and also take into account the heating/cooling equipment efficiency. The temperature recommendation savings are lower when the heating/cooling equipment is more efficient or is using a cheaper fuel.

Thermal recommendations (insulation, windows, etc.) are evaluated by taking the difference in the thermal load due to reduced heat transfer. Again, the "thermal load" is the thermal load <u>after</u> the other recommendations have been accounted for.

Lastly, installation costs are then applied to each recommendation and simple paybacks are calculated. Costs are derived from Means Cost Data, other industry publications, and local contractors and suppliers. The New Jersey SmartStart<sub>tm</sub> Building program incentives (refer to Appendix C) are calculated for the appropriate ECM's and subtracted from the installed cost prior to calculation of the simple payback. In addition, where applicable, maintenance cost savings are estimated and applied to the net savings.

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#### IV. HISTORIC ENERGY CONSUMPTION/COST

#### A. Energy Usage / Tariffs

Table 3 and Figure 1 represent the electrical usage for the surveyed facility from June 2007 to May 2008. The existing Facility is currently served electric under the Public Service Electric and Gas Company (PSEG) Large Power and Lighting (LPL) Tariff. This electric rate has a component for consumption that is measured in kilowatt-hours (kWh). It is calculated by multiplying the wattage of the equipment times the hours that it operates. For example, a 1,000 Watt lamp operating for 5 hours would measure 5,000 Watt-hours. Since one kilowatt is equal to 1,000 Watts, the measured consumption would be 5 kWh. The basic usage charges are shown as generation service and delivery charges along with several non-utility generation charges. Rates used in this report reflect the most current rate structure available.

Table 4 and Figure 2 show the natural gas energy usage for the surveyed facility from June 2007 to May 2008. Woodruff Energy supplies the natural gas and PSE&G delivers the fuel to the burner. Below is the average unit cost for the utilities at this facility.

<u>Description</u>

Electricity

16¢/kWh

Natural Gas

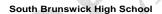
\$1.24/ Therm

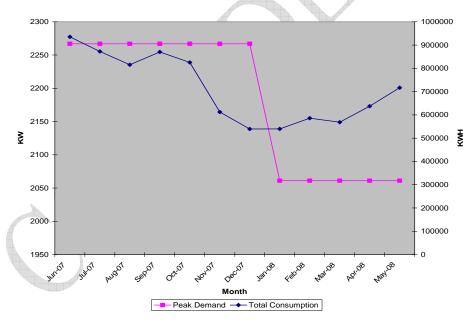
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Table 3
Electricity Billing Data

		Start	End		Utility	Billing	Peak		Off Peak		On Peak		Total		Total \$
Provider	Month	Date	Date	Account	Туре	Days	Demand	Units	Usage	Units	Usage	Units	Consumption	Units	
PSE&G Co (14101)	Jun-07	5/25/2007	6/26/2007	6270797357E	Electric	32	2267	kw	369553	kwh	566047	kwh	935600	kwh	\$ 135,242.67
PSE&G Co (14101)	Jul-07	6/26/2007	7/26/2007	6270797357E	Electric	30	2267	kw	335740	kwh	537092	kwh	872832	kwh	\$ 135,989.87
PSE&G Co (14101)	Aug-07	7/26/2007	8/24/2007	6270797357E	Electric	29	2267	kw	314234	kwh	501061	kwh	815295	kwh	\$ 168,257.89
PSE&G Co (14101)	Sep-07	8/24/2007	9/25/2007	6270797357E	Electric	32	2267	kw	336178	kwh	534144	kwh	870322	kwh	\$ 146,874.59
PSE&G Co (14101)	Oct-07	9/25/2007	10/24/2007	6270797357E	Electric	29	2267	kw	291255	kwh	534338	kwh	825593	kwh	\$ 131,241.07
PSE&G Co (14101)	Nov-07	10/24/2007	11/26/2007	6270797357E	Electric	33	2267	kw	245904	kwh	366626	kwh	612530	kwh	\$ 84,859.30
PSE&G Co (14101)	Dec-07	11/26/2007	12/26/2007	6270797357E	Electric	30	2267	kw	214880	kwh	324414	kwh	539294	kwh	\$ 86,982.14
PSE&G Co (14101)	Jan-08	12/26/2007	1/25/2008	6270797357E	Electric	30	2061	kw	212684	kwh	326935	kwh	539619	kwh	\$ 85,402.85
PSE&G Co (14101)	Feb-08	1/25/2008	2/26/2008	6270797357E	Electric	32	2061	kw	250771	kwh	335046	kwh	585817	kwh	\$ 87,958.19
PSE&G Co (14101)	Mar-08	2/26/2008	3/27/2008	6270797357E	Electric	30	2061	kw	233599	kwh	335090	kwh	568689	kwh	\$ 88,492.73
PSE&G Co (14101)	Apr-08	3/27/2008	4/25/2008	6270797357E	Electric	29	2061	kw	233391	kwh	404034	kwh	637425	kwh	\$ 105,008.25
PSE&G Co (14101)	May-08	4/25/2008	5/27/2008	6270797357E	Electric	32	2061	kw	284369	kwh	432668	kwh	717037	kwh	\$ 113,917.11
						Max Peak:	2267	kw			12 Mont	h Total:	8520053	kwh	\$ 1,370,226.66
								4	,		Avg. Cost p	er kwh:	\$ 0.16		

Figure 1 Electricity Usage Profile





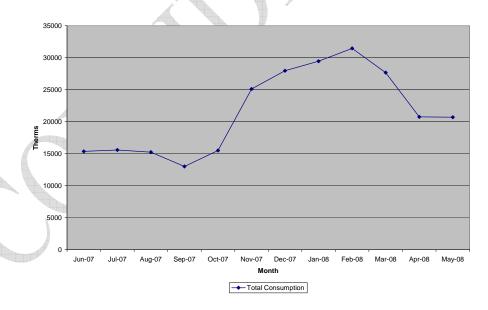
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Table 4 Natural Gas Billing Data

		Start	End		Utility	Billing			
Provider	Month	Date	Date	Account	Type	Days	Consumption	Units	Total \$
PSE&G Co (14101)	Jun-07	5/25/2007	6/26/2007	6270797357G	Gas	32	15362	therms	\$ 17,250
PSE&G Co (14101)	Jul-07	6/26/2007	7/26/2007	6270797357G	Gas	30	15584	therms	\$ 16,467
PSE&G Co (14101)	Aug-07	7/26/2007	8/24/2007	6270797357G	Gas	29	15241	therms	\$ 14,776
PSE&G Co (14101)	Sep-07	8/24/2007	9/25/2007	6270797357G	Gas	32	13003	therms	\$ 11,615
PSE&G Co (14101)	Oct-07	9/25/2007	10/24/2007	6270797357G	Gas	29	15504	therms	\$ 14,939
PSE&G Co (14101)	Nov-07	10/24/2007	11/26/2007	6270797357G	Gas	33	25120	therms	\$ 31,829
PSE&G Co (14101)	Dec-07	11/26/2007	12/26/2007	6270797357G	Gas	30	27967	therms	\$ 35,755
PSE&G Co (14101)	Jan-08	12/26/2007	1/25/2008	6270797357G	Gas	30	29453	therms	\$ 37,208
PSE&G Co (14101)	Feb-08	1/25/2008	2/26/2008	6270797357G	Gas	32	31466	therms	\$ 41,800
PSE&G Co (14101)	Mar-08	2/26/2008	3/27/2008	6270797357G	Gas	30	27683	therms	\$ 39,618
PSE&G Co (14101)	Apr-08	3/27/2008		6270797357G	Gas	29	20747	therms	\$ 27,662
PSE&G Co (14101)	May-08	4/25/2008	5/27/2008	6270797357G	Gas	32	20696	therms	\$ 30,978
					12 Mc	onth Total:	257826	therms	\$ 319,898.18
				A	verage Cost	per therm:	\$ 1.24		·

Figure 2 Natural Gas Usage Profile

South Brunswick High School



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#### B. Energy Use Index (EUI)

The Oak Ridge National Laboratory (ORNL) Buildings Technology Center under a contract with the U.S. Department of Energy maintains a Benchmarking Building Energy Performance Program. Their website allows the user to determine how well the client's building energy use intensity (EUI) compares with similar facilities in the U.S. and NJ.

Elementary School EUI = (Electric Usage in kBtu/h + Gas Usage in kBtu/h) / SF

Electric = ((8,520,053 kWh) \* (1000 W/kW) \* (3.414 Btu/h / 1 W))/ (1000 Btu/h / 1 kBtu/h) = 29,070,421 kBTU/h

Gas = ((257,826 therms) \* (100,000 Btu/h / 1 W)) / (1000 Btu/h / 1 kBtu/h) = 25,782,600 kBtu/h

EUI = (29,070,421 kBTU/h + 25,782,600 kBtu/h) / (427,000 SF) = 128.5 kBtu/SF

School EUI = 85 kBtu/SF

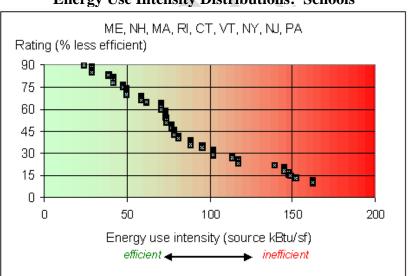


Figure 3
Energy Use Intensity Distributions: Schools

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#### C. EPA Energy Benchmarking System

The United States Environmental Protection Agency (EPA) in an effort to promote energy management has created a system for benchmarking energy use amongst various end users. The benchmarking tool utilized for this analysis is entitled Portfolio Manager. The Portfolio Manager tool allows you to track and assess energy consumption via the template forms located on the ENERGY STAR website (<a href="www.energystar.gov">www.energystar.gov</a>). The importance of benchmarking for local government municipalities is becoming more important as utility costs continue to increase and more emphasis is being placed throughout multiple arenas on carbon reduction, greenhouse gas emissions and other environmental impacts.

Based on information gathered from the ENERGY STAR website, Government agencies spend more than \$10 billion a year on energy to provide public services and meet constituent needs. Furthermore, energy use in commercial buildings and industrial facilities is responsible for more than 50 percent of U.S. carbon dioxide emissions. Therefore, it is vital that local government municipalities assess their energy usage, benchmark this usage utilizing Portfolio Manager, set priorities and goals to lessen their energy usage and move forward with these priorites and goals. Saving energy will in-turn save the environment.

In accordance with the Local Government Energy Audit Program, CEG has created an Energy Star account for the school district in order to allow the school district access to monitoring their yearly energy usage as it compares to facilities of similar type. The following is the user name and password for this account:

User Name:	Antcaucci
Password:	password

Utilizing the utility bills and other information gathered during the energy audit process, CEG entered the respective data into Portfolio Manager and the following is a summary of the results:

Table 5
ENERGY STAR Performance Rating

FACILITY DESCRIPTION	ENERGY PERFORMANCE RATING	NATIONAL AVERAGE
South Brunswick High School	7	50

Refer to Appendix G for detailed energy benchmarking report entitled "STATEMENT OF ENERGY PERFORMANCE."

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#### V. FACILITY DESCRIPTION

The existing facility was built in two phases, the original building constructed in 1996 and the rear addition, or "Annex", constructed in 2001. The current square footage of the entire facility is approximately 427,000.

The building is divided into 6 main areas denoted by the following: A, B, C, D, E and the Annex. Areas A, B and the Annex have 3 levels, area C has 2 levels and the remaining areas are one level at grade. First floor area A mainly consists of the school's front entrance and lobby, Media Center, Administration Offices, and Student Services. First floor area B is the Art wing consisting of Art Design & Home Economics Rooms. First floor area C consists of the Auditorium with Stage and Vocal and Instrumental Music Rooms. Area D contains two Cafeterias, A & B, the Main Kitchen, Faculty Dining, Loading Dock and Mechanical Rooms. Area E consists of the Main and Aux. Gyms, Locker Rooms, Team Rooms and the Weight Room. Level one of the Annex has a Gym, Locker Rooms, Cafeteria, Kitchen and Classrooms. Second floor area A and the Annex contain Classrooms and Computer Rooms. Second Floor area B is Classrooms and Labs. Second floor area C is the upper seating areas of the Auditorium and the Projection Booth. The third floor of areas A, B and the Annex consist of Classrooms and Labs. Area C's third level is attic space above the Auditorium.

During the school year from September to June the school is occupied by approximately 3000 students and 200 faculty. During the summer months the school is used for summer school and outsourced to community groups. The facility is open year round from 6am - 10pm, 5 days per week. The facility is closed on the weekends.

#### **Building Envelope**

The building envelope consists of a variety of components. There are two main types of exterior wall systems, brick and block and 6" stud with brick veneer. Both types have 1-1/2" rigid insulation behind the face brick. The brick and block U-factor is approximately 0.08 and the stud wall with brick veneer has an approx. U-factor of 0.04. Typical exterior wall heights are around 14 feet. There are two types of windows used in the facility, glass block and double pane coated. The latter was constructed as part of a "storefront" system. The glass block has an approximate U-factor of 0.6. The double glazed coated glass' approximate U-factor is 0.5. The majority of the windows in the school are fixed closed. There are two types of roofing installed on the facility consisting of either standing seam metal or flat rubber roofing. Both types are backed with 3" rigid insulation and 3" metal decking. The approximate U-factors for the roofs are 0.06 for the flat and 0.08 for the pitched metal roofs.

Overall the facility's construction is very tight and no major problems with the envelope were reported. The roofing material has been well maintained and has its original integrity with minimal patching. All of the penetrations were properly sealed. The windows and doors also seemed to be well maintained allowing minimal infiltration of outdoor air.

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#### **Mechanical System Description**

The entire facility is served by packaged rooftop air handling (RTU) equipment with the majority being variable air volume (VAV) units. The VAV central station air handlers on the roof provide a constant supply air temperature of 55° F throughout the primary air ductwork at all times of the year. This satisfies any possible cooling requirements within interior spaces during the winter months. Their fans vary their speed to maintain a minimum static pressure in the primary air ductwork of 1.0" w.c. at all times. Primary air ductwork is distributed throughout the facility between the air handlers and terminal VAV boxes. VAV boxes are controlled by local thermostats and deliver conditioned air to the space through secondary ductwork and out of ceiling diffusers to the rooms. Terminal VAV boxes are very basic and control airflow to the space by throttling an air valve. Once distributed the air is collected above the ceilings in the plenum and returned to the RTU's and either recirculated or exhausted. Each VAV box has an associated minimum and maximum flow based on the heating and cooling requirements of the room. All of the VAV boxes are outfitted with hot water heating coils to "reheat" the air as required to maintain the desired room temperature.

All exterior rooms in the building are outfitted with ceiling mounted radiant panels. The panels are controlled in series with the room's VAV box reheat coil. The radiant panels and the VAV boxes work in tandem to satisfy the room's heating requirements.

The rooftop air handlers, VAV box reheat coils and radiant panels are all fed with hot water from the central boiler plant. The boiler water is distributed throughout the facility at a temperature of approximately 180°F. All terminal devices have 2-way control valves which controls flow of water through their coils. The hot water pumping system is outfitted with variable frequency drives to allow the pumps to slow down during low load conditions.

The facility has two separate building management systems (BMS) which control the operations of the HVAC equipment. The original building has an Invensys system and the Annex has a Metasys system. Both systems' computer interfaces are located in the main facilities office in area 'D'. It was reported that both systems operate properly and have internal scheduling to mimic the building's occupied and unoccupied times.

#### Area 'A'

Level 1 of Area 'A' is serviced by RTU-13 and partially by RTU-12. There are approximately 43 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 40,000 cfm (cubic feet per minute). Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells and vestibules have hot water cabinet unit heaters for use during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation.

Level 2 of Area 'A' is partially serviced by RTU-1 and 2. There are approximately 25 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 28,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells and have hot water cabinet unit heaters for use

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during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation.

Level 3 of Area 'A' is partially serviced by RTU-1 and 2. There are approximately 22 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 21,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells have hot water cabinet unit heaters for use during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation.

#### Area 'B'

Level 1 of Area 'B' is serviced by RTU-4 and partially by RTU-12. There are approximately 41 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 43,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells have hot water cabinet unit heaters for use during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation. In addition to regular classrooms this area has Home Economics and Art classrooms which have independent exhaust systems. The hoods and exhaust fans in these rooms total approximately 13,500 cfm. The hoods are operated manually and operate when necessary which is about half of the school day.

Level 2 of Area 'B' is partially serviced by RTU-1, 2 and 3. There are approximately 43 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 49,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells have hot water cabinet unit heaters for use during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation. In addition to regular classrooms this area has Chemistry and Biology Labs which have independent exhaust systems. The hoods and exhaust fans in these rooms total approximately 7,650 cfm. The hoods are operated manually and operate when necessary which is about half of the school day. The labs also have general exhaust fans which operate continuously and total about 3400 cfm. Purge fans were also installed for instances when extreme odors or smoke are present and total about 19,200 cfm. The purge fans are manually operated and are rarely used.

Level 3 of Area 'B' is partially serviced by RTU-1, 2 and 3. There are approximately 47 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 50,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells have hot water cabinet unit heaters for use during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation. In addition to regular classrooms this area has Chemistry and Biology Labs which have independent

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exhaust systems. The hoods and exhaust fans in these rooms total approximately 10,200 cfm. The hoods are operated manually and operate when necessary which is about half of the school day. The labs also have general exhaust fans which operate continuously and total about 3400 cfm. Purge fans were also installed for instances when extreme odors or smoke are present and total about 25,600 cfm. The purge fans are manually operated and are rarely used.

#### Area 'C'

Level 1 of Area 'C' is serviced by RTU-14, 15, 16, 17 and 18. There are approximately 25 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 51,950 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells and vestibules have hot water cabinet unit heaters for use during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation.

Level 2 of Area 'C' is serviced by RTU-5. There are 5 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 7,250 cfm. This area is limited to the upper seating of the auditorium and projector booth. The VAV boxes and RTU-5 are original and no problems were reported with their operation.

#### Area 'D'

Area 'D' is serviced by RTU-9, 10 and 11. There are approximately 42 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 81,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells and vestibules have hot water cabinet unit heaters for use during the winter months. All of the exterior rooms have radiant panels. The VAV boxes, radiant panels and rooftop equipment are original and no problems were reported with their operation. In addition to the cafeterias this area has the main kitchen which has 2 cooking hoods along with 2 dishwasher hoods. The cooking hoods are 20' x 5' each and have roof mounted exhaust fans totaling 11,400 cfm. The dishwashers have roof mounted exhaust fans totaling 4000 cfm. The make-up air for the hood systems is provided via transfer air from the cafeterias. The hoods operate 5 days per week from 6am to 2pm.

#### Area 'E'

Area 'E' is serviced by HRU-1 & 2, RTU-6 and partially by RTU-9. There are approximately 10 Tempmaster VAV boxes in this area totaling a maximum cooling airflow of 11,000 cfm. The vestibules have hot water cabinet unit heaters for use during the winter months. The main and auxiliary gyms are served by RTU-6 which is a constant volume unit totaling approximately 47,600 cfm. Heat recovery units (HRU) were installed for the locker room areas which require large amounts of outdoor air. The HRU's are roof mounted with fixed plate heat exchangers, constant volume fans, integral electric cooling and hot water heating. HRU-1 serves the west side team rooms with 12,000 cfm of which 100% is outdoor air. HRU-2 serves the east side locker rooms and weight room with 13,000 cfm of which 100% is outdoor air. All of the spaces served by the HRU's have duct mounted heating hot water coils for local space reheat control. It

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was reported that the heating coils on HRU-1 and 2 have failed and are no longer operable. The space reheat coils are being used for the entire heating load. RTU-6 and 9 are original and no problems were reported with their operation.

#### <u>Annex</u>

Level 1 of the Annex is serviced by RTU-1A, 3A, 5A, 8A and partially by RTU-7A. RTU-8A is a constant volume packaged rooftop unit serving the gym and locker rooms totaling 20,000 cfm. EF-5A exhausts 8000 cfm of transfer air from the gym through the locker rooms. The locker rooms also have independent split system cooling units. The remainder of the first floor is has approx. 31 Enviro-Tec VAV boxes totaling a maximum cooling airflow of 37,000 cfm. The kitchen has an exhaust hood totaling 3800 cfm exhaust with 2900 cfm of make-up air. A Greenheck natural gas fired make-up air unit (no cooling) and exhaust fan are interlocked with the hood. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells and vestibules have hot water cabinet unit heaters for use during the winter months. The VAV boxes and rooftop equipment are original and no problems were reported with their operation.

Level 2 of the Annex is serviced by RTU-2A, 4A, 6A and 7A. There are approx. 27 Enviro-Tec VAV boxes totaling a maximum cooling airflow of 31,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells have hot water cabinet unit heaters for use during the winter months. The VAV boxes and rooftop equipment are original and no problems were reported with their operation.

Level 3 of the Annex is serviced by RTU-2A, 4A, 6A and 7A. There are approx. 28 Enviro-Tec VAV boxes totaling a maximum cooling airflow of 38,000 cfm. Bathrooms, janitor's closets, storage rooms, etc. have general exhaust which is serviced by rooftop centrifugal exhaust fans. The stairwells have hot water cabinet unit heaters for use during the winter months. The VAV boxes and rooftop equipment are original and no problems were reported with their operation.

#### Central Plant

The original building boiler plant consists of twenty Fulton Pulse boilers with 1000 MBH input, 900 MBH output (90% efficiency). The boilers are controlled by the central building management system and sequenced to evenly distribute usage. It was reported that at least 7 boilers were out of service. It was also reported that the heating load never requires more than 10 boilers operating simultaneously. The hot water is distributed with (2) 60 Hp Taco base mounted, end suction pumps. The pumps alternate to share the load and each one is outfitted with a variable frequency drive (VFD).

The Annex boiler plant consists of four Aerco Benchmark 2.0 boilers with 2000 MBH input, 1846 MBH output (92% efficiency). The boilers are controlled by the central building management system and sequenced to evenly distribute usage. There were no reported problems with the boilers and they were operating properly. The hot water is distributed with (2) 30 Hp Bell & Gossett base mounted, end suction pumps. The pumps alternate to share the load and each one is outfitted with a variable frequency drive (VFD).

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#### Domestic Hot Water System

The main building domestic hot water system consists of four (4) natural gas fired PVI domestic water heaters HWH-1 through HWH-4. HWH-1 has a 600 gallon storage tank and is rated at 800 MBH input and 664 MBH output (83% efficiency). HWH-2 has a 600 gallon storage tank and is rated at 1000 MBH input and 830 MBH output (83% efficiency). HWH-3 and 4 each have a 1500 gallon storage tank and is rated at 2000 MBH input and 1660 MBH output (83% efficiency). The system is outfitted with a <sup>3</sup>/<sub>4</sub> Hp recirculation pump and uses city water pressure for it's delivery to the building. HWH-3 was disassembled and undergoing a coil change. The other water heaters were operating properly and no problems were reported.

The Annex building domestic hot water system consists of one centrally located natural gas fired PVI domestic water heaters HWH-1A. HWH-1A has a 400 gallon storage tank and is rated at 600 MBH input and 498 MBH output (83% efficiency). The system is outfitted with a ¾ Hp recirculation pump and uses city water pressure for it's delivery to the building. No problems were reported with HWH-1A.

#### Lighting

The majority of the lighting is first generation T8 fluorescent technology. The facility also has metal halide in its gymnasiums and auditorium area. Exit signs are incandescent in some of the areas, however as the bulbs are failing maintenance staff are replacing them with compact fluorescent bulbs. There are also dimmable incandescent fixtures located in the auditorium. In all CEG personnel counted approximately 8,718 fixtures of varying types. The building lighting power density is rated at 1.57 watts per square foot. A room by room count of lighting fixtures is provided in the Appendix. (Refer to the Appendix – Lighting Audit).

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#### VI. MAJOR EQUIPMENT LIST

Following the completion of the field survey a detailed equipment list was created. The equipment within this list is considered major energy consuming equipment whose replacement could yield substantial savings. In addition, the list shows the major equipment in the facility and all pertinent information utilized in energy savings calculations. An approximate age was assigned to the equipment if a manufacturers date was not shown on the equipment's nameplate. The ASHRAE service life for the equipment along with the remaining useful life is also shown in the Appendix.

Equipment denoted by an asterisk indicates an estimate of the equipment ratings due to equipment inaccessibility, worn nameplates, lack of nameplates, etc.

Refer to Appendix D for the Major Equipment List for this facility.

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#### VII. ENERGY CONSERVATION MEASURES

Life cycle costing (LCC) is an integral part to energy auditing. The applicable costs reviewed in completing a life cycle costing analysis are as follows: utility costs, installation costs, maintenance costs, and equipment replacement costs. The NIST-BLCC 5.3™ program determines operation costs based on the energy use of the building systems (HVAC, lighting, etc.) in conjunction with the utility, installation and maintenance costs. The NIST-BLCC software is endorsed by the Federal Energy Management Program and is the approved software for all federal life cycle costing analysis. When calculating the LCC of a respective ECM, recurring costs for existing HVAC equipment replacement play a major role. The delineation of the respective costs is as follows:

#### **Utility Rates**

The utility rates for electric and natural gas are as noted in Section IV of this report.

#### Installed Costs – Construction Cost Estimate

The installed costs for the energy conservations measures have been completed utilizing RS Means estimating software, engineering estimates and contractor pricing.

Some initial cost can be avoided by utilizing the New Jersey  $SmartStart_{tm}$  Financial Incentive program (www.njsmartbuildings.com). The program offers financial incentives on various types of building equipment. Incentives were utilized in CEG's Life Cycle Costing calculations detailed in the financial analysis.

#### Maintenance Costs

Maintenance costs are based on a variety of variables and are difficult to calculate, therefore it is an industry practice to develop these costs based on the methods established in ASHRAE Applications Handbook 2007, Chapter 36 or to estimate the numbers based on ASHRAE Research Data issued in peer-reviewed journals.

#### Recurring Costs – Equipment Replacement Costs

HVAC Equipment Replacement Costs are calculated utilizing the installation costs estimated by the cost consultant with an estimated inflation rate (approx. 2.0%) for the time of the study life that the replacement occurs. The recommended service life per ASHRAE Applications Handbook 2007, Chapter 36 has been used as the basis for the analysis software to determine equipment replacement frequency for the 20 year Life Cycle Cost Analysis. Refer to Appendix B for a listing of the recurring / replacement costs per ECM.

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#### **Economic Parameters**

The LCC analysis was performed using a 20-year Study Life with a Cost of Capital equal to 5%. The project was not modeled as being financed because the project is privately funded. The utility costs, maintenance and replacement costs incorporate a 2.0% average long-term inflation rate calculated annually for the DOE/FEMP projects according to 10 CFR 436. Depending on any unforeseen changes in rate structure by the utility providers, this inflation rate is likely to increase.

#### **Base Building Model**

Base Case reflects existing equipment, operating conditions and energy consumption.

Figure 4
Base Building
Energy Consumption Summary

	Elect Cons. (kWh)	ENERGY CONSUMPTION SUMMARY			
		Gas Cons. (k@u)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
ALT 1 - BASE CASE				11.	
Primary heating Primary heating Other Htg Accessories	687,309	16,477,628	46.6 % 6.6 %	16,477,628 2,345,786	17,344,872 7,038,063
Heating Subtotal	687,309	16,477,628	53.2 %	18,823,414	24,382,934
Primary cooling Cooling Compressor Tower/Cond Fans Condenser Pump Other Cig Accessories Cooling Subtotal	808,873 115,317 2,225 926,414		7.8 % 1.1 % 0.0 % 0.0 % 8.9 %	2,760,684 393,576 0 7,593 3,161,852	8,282,879 1,180,846 ( 22,780 9,486,509
Auxillary Supply Fans Pumps Stand-alone Base Utilities Aux Subtotal	485,338 35,259 146,621 667,219	361,752 361,752	4.7 % 0.3 % 2.4 % 7.5 %	1,656,460 120,339 862,170 2,638,969	4,969,877 361,053 1,882,197 7,213,120
Lighting Lighting	2,850,570		27.5 %	9,728,996	29,189,906
Receptacle Receptacles	299,139		2.9 %	1,020,960	3,063,187
Cogeneration Cogeneration			0.0 %	0	(
Totals					
Totals**	5,430,651	16,839,380	100.0 %	35,374,192	73,335,656
				50,014,152	70,00
Project Name:	a maximum of 7 utilit	he Total Source Energy value. ies. If additional utilities are used, they will be included in the total. CEIS_BRUNS_HSTRC	TRACE® 700 v6.2 Alternative - 1 Energy	calculated at 02:06 P	M on 03/18/20

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#### **ECM # 1:** Replace Boilers

The existing boilers heating the main building of the school are approximately 90% efficient (nameplate efficiency – we assume they've degraded since installation) and have a remaining useful life of about 11 more years. During our site visit (7°F outdoor temperature) approximately 8 boilers were running to heat the building. We're assuming that the 20,000 MBH input capacity of the existing 20 boilers is slightly oversized. It was reported that 7 boilers were offline. We are suggesting replacing the existing Fulton boilers with new 92% efficient (97% part load eff.) boilers with fully modulating capabilities. The existing boilers are not fully modulating. We recommend installing 8 new Lochinvar Intellifin IBN 2000 boilers with 2000 MBH input. The total boiler input would be about 16,000 MBH.

The boilers in the Annex are relatively new and very efficient so they weren't addressed in this alternative.

Based on the potential savings and construction costs the simple payback for this alternative is 19.9 years. The table below shows a summary of the energy consumption for this alternative.

ECM No. 1 Energy Consumption Summary

	Elect Cons. (kWh)	ENERG	BY CONSUMPTION SUMMARY			
		Gas Cons. (kBtu)		% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
ALT 2 - BOILER REPLACES	MENT				11 151	30.00
Primary heating						
Primary heating		15,570,579		45.2 %	15,570,579	16,390,083
Other Htg Accessories	673,640			6.7 %	2,299,134	6,898,092
Heating Subtotal	673,640	15,570,579		51.9 %	17,869,713	23,288,174
Primary cooling						
Cooling Compressor	808,873			8.0 %	2,760,684	8,282,879
Tower/Cond Fans	115,317			1.1 %	393,576	1,180,846
Condenser Pump				0.0 %	0	(
Other Clg Accessories	2,225			0.0 %	7,593	22,780
Cooling Subtotal	926,414			9.2 %	3,161,852	9,486,505
Auxiliary						
Supply Fans	485,338			4.8 %	1,656,460	4,969,877
Pumps	35,259			0.4 %	120,339	361,053
Stand-alone Base Utilities	146,621	361,752		2.5 %	862,170	1,882,197
Aux Subtotal	667,219	361,752		7.7 %	2,638,969	7,213,126
Lighting						
Lighting	2,850,570			28.3 %	9,728,996	29,189,906
Receptacle						
Receptacles	299,139			3.0 %	1,020,960	3,063,187
	280,130			3.0 %	1,020,000	3,003,101
Cogeneration						
Cogeneration				0.0 %	0	(
Totals						
rotais		15,932,331		100.0 %	34,420,491	72,240,896

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#### **ECM # 2:** Replace Domestic Water Heaters

The existing PVI domestic water heaters in the main building are approximately 83% efficient (nameplate efficiency – we assume they've degraded since installation) and have a remaining useful life of about 11 more years. The four existing units total 5800 MBH input capacity with 4200 gallons of storage capacity. We're assuming this capacity is about 200% of the required load. We agree with adequate redundancy in this type of system. We're suggesting replacing the existing units with new 92% efficient (97% part load eff.) boilers with fully modulating capabilities. The existing boilers are not fully modulating. We recommend installing (3) new Lochinvar Intellifin IBN 2000 boilers with 2000 MBH input along with 4000 gallons of storage. The total boiler input would be about 6,000 MBH.

The domestic heater in the Annex is fairly new and wasn't addressed in this alternative.

Based on the potential savings and construction costs the simple payback for this alternative is 10.1 years. The table below shows a summary of the energy consumption for this alternative.

ECM No. 2 Energy Consumption Summary

		ENERGY CONSUMPTION SUMMARY			
	Elect Cons. (kWh)	Gas Cons. (kBtu)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
ALT 3 - DOMESTIC HEATE	REPLACEMENT			11. 35.2	341 34142
Primary heating					
Primary heating		15,650,379	45.5 %	15,650,379	16,474,083
Other Htg Accessories	669,432		6.6 %	2,284,771	6,854,998
<b>Heating Subtotal</b>	669,432	15,650,379	52.1 %	17,935,150	23,329,082
Primary cooling					
Cooling Compressor	808,873		8.0 %	2,760,684	8,282,879
Tower/Cond Fans	115.317		1.1 %	393.576	1,180,846
Condenser Pump	111111111111111		0.0 %	0	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Other Clg Accessories	2,225		0.0 %	7,593	22,780
Cooling Subtotal	926,414		9.2 %	3,161,852	9,486,505
Auxiliary					
Supply Fans	485,338		4.8 %	1,656,460	4,969,877
Pumps	12,974		0.1 %	44,281	132,856
Stand-alone Base Utilities	146,621	381,752	2.5 %	862,170	1,882,197
Aux Subtotal	644,934	361,752	7.5 %	2,562,911	6,984,930
Lighting					
Lighting	2,850,570		28.3 %	9,728,996	29,189,906
Receptacle					
Receptacles	299.139		3.0 %	1.020.960	3.063.187
	200,100		5.0 %	1,020,000	5,005,101
Cogeneration					10
Cogeneration			0.0 %	0	(
Totals					
	5,390,489	16,012,131	100.0 %	34,409,868	72,053,600

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#### ECM # 3: Energy Recovery

The existing main building has (16) McQuay rooftop air conditioners. The Annex has (8) existing AAON rooftop air conditioners. All of the units were installed during the original construction of each building. The main building units are near the end of their useful life and will require major repair or replacement in the next 2-5 years. The Annex units are newer and won't require replacement for another 7-10 years. As an energy conservation measure we are suggesting replacing all of the existing rooftop units with energy recovery rooftop air conditioners. Energy recovery units use a "total energy wheel" to precondition outside air entering the unit, therefore lowering required capacity.

Based on the potential savings and construction costs the simple payback for this alternative is 264 years. This alternative does not "pay back" due to the high construction costs. We do suggest exploring the option of energy recovery equipment when the time comes for rooftop equipment replacement. It should be noted that when the school district undertakes Rooftop Unit (RTU) replacement, they should incorporate energy recovery units, as this will provide an attractive payback on the incremental cost. The table below shows a summary of the energy consumption for this alternative.

ECM No. 3
Energy Consumption Summary

	Elect Cons. (kWh)		ENERGY CONSUMPTION SUMMARY			
		Gas Cons. (kBtu)		% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
ALT 4 - ENERGY RECOVER	Y UNITS				11 151	30.00
Primary heating				Merricon	A10.4F0407-07-17-1	
Primary heating		13,346,714		41.0 %	13,346,714	14,049,173
Other Htg Accessories	667,245	0200202300		7.0 %	2,277,307	6,832,604
Heating Subtotal	667,245	13,346,714		48.0 %	15,624,021	20,881,776
Primary cooling						
Cooling Compressor	757,168			7.9 %	2,584,214	7,753,418
Tower/Cond Fans	113,147			1.2 %	386,172	1,158,632
Condenser Pump				0.0 %	0	(
Other Clg Accessories	2,271			0.0 %	7,750	23,252
Cooling Subtotal	872,586			9.1 %	2,978,136	8,935,302
Auxillary						
Supply Fans	587,016			6.2 %	2,003,486	6,011,060
Pumps	35,259			0.4 %	120,339	361,053
Stand-alone Base Utilities	146,621	361,752		2.7 %	862,170	1,882,197
Aux Subtotal	768,896	361,752		9.2 %	2,985,996	8,254,309
Lighting						
Lighting	2.850,570			29.9 %	9.728.996	29,189,906
Receptacle	368,459			3.9 %	1.257.552	2 772 000
Receptacles	308,459			3.9 %	1,207,552	3,773,033
Cogeneration						
Cogeneration				0.0 %	0	
Totals						

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#### ECM # 4: Lighting Upgrade

#### *Upgrade the Fluorescent Lighting*

New higher efficiency fluorescent lamps and ballasts are available as direct replacements for the existing lamps and ballasts. A simple change from the old to the new can provide substantial savings. A typical drop-ceiling lay in fixture with four, 4-foot lamps (32 Watts per lamps) has a total input wattage of about 114 watts. By using the new lamps and ballasts the total input wattage would be reduce to approximately 84 Watts.

The proposed lamps are newer generation "T8" fluorescent lamps and ballasts, which have reduced wattage, extended performance life, increase light output, and higher efficiency ballasts. The new fixtures consist of lamps that are equivalent in color temperature and are rated at 28 watts per lamp. Older generation electronic ballasts are inefficient and have high ballast factors which cause them to require higher input wattages. New generation ballasts provide increased efficiency and reduced frequency distortion. In many cases new generation electronic ballasts require less input watts then the required lamps.

#### High Bay Metal Halide Fixtures to Fluorescent Lighting Fixtures

The existing metal halide are designed to provide spaces with high ceilings with a sufficient light level, but require high wattage ballasts and are not instant on type fixtures. These fixtures can be replaced with new "T5" fluorescent technology. The new fixtures can provide the equivalent light output at a reduced wattage that generally has a range of a 20% to 40% reduction. The new fixtures also have increased fixture life and provide increase control capability with the instant on capability.

#### Install Lighting Controls to Reduce the Lighting Use

Occupancy based lighting controls are used to reduce the lighting burn hours during times when lights are on in areas where occupants currently are not present. These sensors can lead to a 10% reduction or greater in kilowatt-hour consumption. They also extend the life the lamps due to reduced on time. Newer generation occupancy sensors use infrared and sounds sensing technology to control the lighting environment. Based on the type of space, sensors can be mounted at the light fixtures wall switch, mounted to the fixture directly, or from a single ceiling mounted sensor. While occupants are using the room the sensor reads the occupant's motion or noise to insure lights on in an occupied mode. Once the residing occupants leave the space, the lighting controls generally leave the space lights on for an additional ten minutes before shutting down and going into an unoccupied mode.

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#### VIII. RENEWABLE/DISTRIBUTED ENERGY MEASURES (ECM # 5)

In recent years renewable energy has leaped into mainstream society affecting global and domestic energy policy. The State of New Jersey has taken a proactive approach, and has recently adopted in its Energy Master Plan a goal of 30% renewable energy by 2020. To help reach this goal New Jersey created the Office of Clean Energy underneath the Board of Public Utilities and instituted a Renewable Energy Incentive Program to provide additional funding to private and public entities for installing qualified technologies. A renewable energy source can greatly reduce a building's operating expenses while producing clean environmentally friendly energy. CEG has assessed the feasibility of installing renewable energy technologies and concluded that there is a potential for solar energy generation.

Solar energy production is a great way to produce clean energy and reduce a buildings carbon footprint. In order to do this Photovoltaic panels will be mounted on all south and southwestern facets of the building. Flat roof, as well as slopped areas can be utilized; flat areas will have the panels turned to an optimum solar absorbing angle. (A structural survey of the roof would be necessary before the installation of PV panels is considered). The state of NJ has instituted a program in which one Solar Renewable Energy Certificate (SREC) is given to the owner for every 1000 kWh of generation. SREC's can be sold anytime on the market at their current market value. The value of the credit varies upon the current need of the power companies. The average value per credit is around \$350, this value was used in our financial calculations. This equates to \$0.35 per kWh generated.

CEG has reviewed the existing roof area of the building being audited for the purposes of determining a potential for a roof mounted photovoltaic system. A roof area of 100,000 S.F. can be utilized for a PV system on the High School. A depiction of the area utilized is shown in Appendix C following the financial calculations. Using this square footage it was determined that a system size of 1555 kilowatts could be installed. A system of this size has an estimated kilowatt hour production of 2,437,851 KWh annually, reducing the overall utility bill by almost 44 percent. A detailed financial analysis can be found in Appendix F. This analysis illustrates the payback of the system over a 25 year period. The eventual degradation of the solar panels and the price of accumulated SREC's are factored into the payback.

CEG has reviewed financing options for the owner. Two options were studied and they are as follows: Self-financed and direct purchase without finance. Self-finance was calculated with 90% of the total project cost financed at a 5% interest rate over 20 years. Direct purchase involves the local government paying 100% of the total cost upfront. Both of these calculations include utility inflation rate as well as the degradation of the solar panels over time. Based on our calculations the following are the payback periods for the respective method of payment:

Payment Type	Life Cycle Payback	IRR		
Self-Finance	15 Years	26 %		
Direct Purchase	10.2 Years	8.8 %		

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Wind energy production is another option available through the Renewable Energy Incentive Program. Small wind turbines can be utilized to produce clean energy on a per building basis. Cash incentives are available per kWh of electric usage. CEG has reviewed the applicability of wind energy for South Brunswick and has determined it is not a viable option. Low average wind speeds for the area are not adequate for wind turbine generation. Typical wind turbines start producing energy at 8 mph wind speeds. South Brunswick averages 4 mph wind speeds making this application impractical.



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#### IX. ENERGY PURCHASING AND PROCUREMENT STRATEGY

#### **Load Profile:**

Load Profile analysis was performed to determine the seasonal energy usage of the facility. Irregularities in the load profile will indicate potential problems within the facility. Consequently based on the profile a recommendation will be made to remedy the irregularity in energy usage. For this report, the facility's energy consumption data was gathered in table format and plotted in graph form to create the load profile. Refer to Section IV, Figures 1 and 2 included within this report to reference the respective electricity and natural gas usage load profile for June 2007 through May 2008.

#### **Electricity**:

Section IV, Figure 1 demonstrates a typical cooling profile, (April –October), complimenting the heating load. It is evident that there is a significant reduction in the On Peak Load from October 2007 to November 2007 and a substantial increase from March 2007 to April 2007. The Off Peak load is typical, with some expected increased consumption in the June-September period. The base-load shaping is important because flat consumption profiles will yield more competitive pricing.

#### Natural Gas:

Section IV, Figure 2 demonstrates a typical heating load (November –March), and complimentary cooling load (April –October). Consequently there is a clear separation between summer and winter loads consistent with Wholesale Energy Pricing. Heating loads carry a much higher average cost because of the higher demand for natural gas during the winter.

#### **Tariff Analysis:**

#### Electricity:

South Brunswick High School receives electrical service through Public Service Electric and Gas Company (PSE&G) on a LPL (Large Power and Lighting Service) rate. This utility tariff is for delivery service for general purposes at secondary distribution voltages where the customer's measured peak demand exceeds 150 kilowatts in any month and also at primary distribution charges. The rate schedule has a Delivery Charge, Societal Benefits Charge, Non-utility Generation Charge, Securitization Charge, System Control Charge, Customer Account Services Charge, Standby Fee, Base Rate Distribution Adjustment Charge, Solar Pilot Recovery Charge and RGGI Charge. The customer can elect to have the Commodity Charge serviced through the utility or by a Third Party Supplier (TPS).

While South Brunswick High School may be on a typical rate structure with the local utility (LPL), some variations in price do cause some concern, and are worth investigating further. While the summer is the time for increased load due to cooling, August 2007 does not

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demonstrate that it is the month of highest demand. However, August 2007 has the highest expenditure for electricity costs.

#### Natural Gas:

South Brunswick High School receives natural gas service through Public Service Electric and Gas Company (PSE&G) on a LVG (Large Volume Service) rate class, when not receiving commodity by a Third Party Supplier. This utility tariff is for firm delivery service for general purposes. This rate schedule has a Delivery Charge, Balancing Charge, Societal Benefits Charge, Realignment Adjustment Charge, Margin Adjustment Charge, RGGI Charge and Customer Account Service Charge. The customer can elect to have the Commodity Charge serviced through the utility or by a Third Party Supplier (TPS). It is pertinent to note, should the TPS not deliver, the customer may receive service from PSE&G under Emergency Sales Service. Emergency Sales Service carries an extremely high penalty cost of service.

CEG received an example bill for South Brunswick HS for the period of December 22, 2008 – January 19, 2009 to review current usage and TPS charges. It is pertinent to note, that the date range of this bill is different than the analyzed historical data period for the base analysis. In reviewing this bill, an imbalance charge has been applied to the natural gas account. The imbalance is for a volume of 28,724 therms. CEG questions this imbalance because the amount is more than half the monthly historical volume. These imbalances occur when Third Party Suppliers are used to supply natural gas, full-delivery is not made, and when a new supplier is contracted or the customer returns to the utility. It is important when utilizing a Third Party Supplier, that an experienced regional supplier is used. Otherwise, imbalances can occur, jeopardizing economics and scheduling.

From review of the information provided by the School District, South Brunswick is utilizing the services of a Third Party Supplier, Woodruff Energy for natural gas service. The contract is administered through the Middlesex Regional Educational Services Commission (MRESC) for the term, August 1, 2008 through July 31, 2010. The agreement is between the MRESC and South Brunswick BOE and it does not define the full and final price. Based on the limited data available, it appears that South Brunswick is paying 25%-50% above market price.

Additionally, the MRESC charges \$.0325 per deka-therm for administering this RFP. The South Brunswick BOE could realize additional savings by evaluating a new natural gas contract. It should be noted that there was not a Woodruff Energy Contract available for review, nor a complete delivered natural gas price.

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#### **Recommendations:**

CEG recommends a global approach that will be consistent with all facilities within the South Brunswick School District. CEG's primary observation is seen in the electricity costs. South Brunswick's "weighted average price" per kWh (kilowatt hour) for all buildings is \$.1614/kWh (kWh is the common unit of electric measure). The average price per deka-therm for natural gas is \$12.50/dth (Dth is the common unit of measure). Energy commodities are among the most volatile of all commodities, however at this point and time, energy is extremely competitive. South Brunswick could see significant savings if it were to take advantage of these current market prices quickly, before energy increases. Based on last year's historical consumption (June 2007 through May 2008) and current electric rates, South Brunswick would see savings of over \$500,000 per year (Note: Savings were calculated using South Brunswick High School's Average Annual Consumption of 8,520,053 kWh and a variance of \$.06/kWh utilizing a fixed one-year commodity contract). South Brunswick should aggregate its entire electric load to gain the most optimal energy costs. CEG recommends advisement for alternative sourcing and supply of energy on a "managed approach".

CEG's secondary recommendation coincides with South Brunswick's natural gas costs and the contract with MRESC and Woodruff Energy. CEG recognized a segment of the natural gas cost is not competitive with current market prices. Based on the current market, South Brunswick is paying approximately \$1.717 per unit above market in the PSEG territory and about \$.58 per unit above market in the Elizabethtown Gas and New Jersey Natural Gas territories. CEG recommends further advisement on these prices. South Brunswick should also consider procuring energy (natural gas) on its own. By procuring energy through the MRESC it is paying a premium of \$.0325 per unit. CEG recommends alternative sourcing strategies.

CEG recommends that South Brunswick schedule a meeting with their current utility providers to review their utility charges and current tariff structures for electricity and natural gas. This meeting would provide insight regarding alternative procurement options that might be available to South Brunswick. Through its meeting with the Local Distribution Company (LDC), South Brunswick will learn more about the competitive supply process. South Brunswick can acquire a list of approved Third Party Suppliers from the New Jersey Board of Public Utilities website at <a href="https://www.nj.gov/bpu">www.nj.gov/bpu</a>. South Brunswick should also consider using a billing-auditing service to further analyze the utility invoices, manage the data and use the data to manage ongoing demand-side management projects. Furthermore, CEG recommends South Brunswick pay attention to credit mechanisms, imbalances, balancing charges and commodity charges when meeting with their utility representative. In addition, South Brunswick should also ask the utility representative about alternative billing options. Some utilities allow for consolidated billing options when utilizing the service of a Third Party Supplier.

Finally, if South Brunswick frequently changes its supplier for energy (natural gas), it needs to closely monitor balancing, particularly when the contract is close to termination.

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#### X. INSTALLATION FUNDING OPTIONS

CEG has reviewed various funding options for the Owner to utilize in subsidizing the costs for installing the energy conservation measures noted within this report. Below are a few alternative funding methods:

- i. Energy Savings Improvement Program (ESIP) Public Law 2009, Chapter 4 authorizes government entities to make energy related improvements to their facilities and par for the costs using the value of energy savings that result from the improvements. The "Energy Savings Improvement Program (ESIP)" law provides a flexible approach that can allow all government agencies in New Jersey to improve and reduce energy usage with minimal expenditure of new financial resources.
- ii. *Municipal Bonds* Municipal bonds are a bond issued by a city or other local government, or their agencies. Potential issuers of municipal bonds include cities, counties, redevelopment agencies, school districts, publicly owned airports and seaports, and any other governmental entity (or group of governments) below the state level. Municipal bonds may be general obligations of the issuer or secured by specified revenues. Interest income received by holders of municipal bonds is often exempt from the federal income tax and from the income tax of the state in which they are issued, although municipal bonds issued for certain purposes may not be tax exempt.
- iii. Power Purchase Agreement Public Law 2008, Chapter 3 authorizes contractor of up to fifteen (15) years for contracts commonly known as "power purchase agreements." These are programs where the contracting unit (Owner) procures a contract for, in most cases, a third party to install, maintain, and own a renewable energy system. These renewable energy systems are typically solar panels, windmills or other systems that create renewable energy. In exchange for the third party's work of installing, maintaining and owning the renewable energy system, the contracting unit (Owner) agrees to purchase the power generated by the renewable energy system from the third party at agreed upon energy rates.

CEG recommends the Owner review the use of the above-listed funding options in addition to utilizing their standard method of financing for facilities upgrades in order to fund the proposed energy conservation measures.

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#### XI. ADDITIONAL RECOMMENDATIONS

The following recommendations include low cost measures, Operation & Maintenance (O&M) items, and water conservation measures with attractive paybacks. These measures are not eligible for the Smart Start Buildings incentives from the office of Clean Energy but save energy none the less.

- A. Chemically clean the condenser and evaporator coils periodically to optimize efficiency. Poorly maintained heat transfer surfaces can reduce efficiency 5-10%.
- B. Maintain all weather stripping on windows and doors.
- C. Use cog-belts instead of v-belts on all belt-driven fans, etc. These can reduce electrical consumption of the motor by 2-5%.
- D. Repair/replace piping and ductwork insulation in the attic spaces.
- E. Reduce lighting in specified areas where the foot-candle levels are above 70 in private offices and above 30 in corridor, lobbies, etc. During the site survey, many areas were measured at over 100 foot-candles.
- F. Provide more frequent air filter changes to decrease overall fan horsepower requirements and maintain better IAQ.
- G. Install a Vending Miser system to turn off vending machines when not in use.
- H. Efficient parking lot lighting fixtures can reduce the energy use on the site without compromising safety or illumination. "Hockey puck" fixtures which use 175-Watt metal halide lamps use 70% less electricity than "cobra head" fixtures using 250-watt high pressure sodium lamps.
- I. Clean all fixtures to maximize light output.
- J. Feel for air drafts around electrical outlets. Inexpensive pads are available, as are plugs for unused sockets.
- K. Confirm that outside air economizers on the air handling units are functioning properly to take advantage of free cooling.

In addition to the recommendations above CEG would also like to suggest Retro-Commissioning. Retro-Commissioning is a means to verify your current equipment is operating at their designed capacity, airflow, etc. Commissioning agents would use an independent balancing company to perform air and water balancing on the existing systems.

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# **APPENDIX**



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#### Electric Cost Summary South Brunswick H S PSE & G Acct.No:6270797357E

Appendix A Page 1 of 2

Month
Last Meter Read Date
Current Meter Read Date
Billing Days
KWH
KW
Monthly Load Factor
Electric Delivery, \$
Delivery \$/kwh
Electric Supply, \$
Supply \$/kwh
Total Cost, \$
\$/KWH

	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Total
I	5/25/2007	6/26/2007	7/26/2007	8/24/2007	9/25/2007	10/24/2007	11/26/2007	12/26/2007	1/25/2008	2/26/2008	3/27/2008	4/25/2008	5/25/2007
е	6/26/2007	7/26/2007	8/24/2007	9/25/2007	10/24/2007	11/26/2007	12/26/2007	1/25/2008	2/26/2008	3/27/2008	4/25/2008	5/27/2008	5/27/2008
	32	30	29	32	29	33	30	30	32	30	29	32	368
	935,600	872,832	815,295	870,322	825,593	612,530	539,294	539,619	585,817	568,689	637,425	717,037	8,520,053
	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,061	2,061	2,061	2,061	2,061	2,267
	54%	53%	52%	50%	52%	34%	33%	36%	37%	38%	44%	45%	44%
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0
	\$135,243	\$135,990	\$168,258	\$146,875	\$131,241	\$84,859	\$86,982	\$85,403	\$87,958	\$88,493	\$105,008	\$113,917	\$1,370,227
	\$0.1446	\$0.1558	\$0.2064	\$0.1688	\$0.1590	\$0.1385	\$0.1613	\$0.1583	\$0.1501	\$0.1556	\$0.1647	\$0.1589	\$0.1608

#### Natural Gas Cost Summary South Brunswick H S PSE & G

Appendix A Page 2 of 2

Acct.	No.	.6270	)797	1357	G
-------	-----	-------	------	------	---

Month
Billing Days
Last Meter Read Date
Current Meter Read Date
Gas Used per 100 cu ft
BTU Factor
Therms (Burner Tip)
Total Distribution Cost
Cost per Therm
Total Commodity Cost
Cost per Therm
Total Cost
Cost per Therm

	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Total
ſ	32	30	29	32	29	33	30	30	32	30	29	32	368
ı	5/25/2007	6/26/2007	7/26/2007	8/24/2007	9/25/2007	10/24/2007	11/26/2007	12/26/2007	1/25/2008	2/26/2008	3/27/2008	4/25/2008	5/25/2007
	6/26/2007	7/26/2007	8/24/2007	9/25/2007	10/24/2007	11/26/2007	12/26/2007	1/25/2008	2/26/2008	3/27/2008	4/25/2008	5/27/2008	5/27/2008
ı	0	0	0	0	0	0	0	0	0	0	0	0	
ı	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ı	15,362	15,584	15,241	13,003	15,504	25,120	27,967	29,453	31,466	27,683	20,747	20,696	257,826
ı	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ı	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	
ı	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ı	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
ı	\$17,250	\$16,467	\$14,776	\$11,615	\$14,939	\$31,829	\$35,755	\$37,208	\$41,800	\$39,618	\$27,662	\$30,978	\$319,898
ı	\$1.12	\$1.06	\$0.97	\$0.89	\$0.96	\$1.27	\$1.28	\$1.26	\$1.33	\$1.43	\$1.33	\$1.50	\$1.24

APPENDIX B Page 1 of 3

	CONSTI	RUCTION CO	OST AND RE	BATES	
BASE CASE - EXISTING					
EQUIPMENT					
	<u>Qty</u>	<u>Unit Cost \$</u>	Material \$	<u>Labor \$</u>	<u>Total \$</u>
Total Cost			\$0	\$0	\$0
ECM    1 DON ED DEDI ACEMENTE	04	II.'. C f	M 1 ¢	Ι.1	T 4.1 ¢
ECM # 1- BOILER REPLACEMENT	<u>Qty</u>	<u>Unit Cost \$</u>	Material \$	<u>Labor \$</u>	<u>Total \$</u>
New Boilers	8	\$27,500	\$220,000	\$242,000	\$462,000
Demo Old Boilers			\$0	\$50,000	\$50,000
Controls	8	\$500	\$4,000	\$4,000	\$8,000
Boiler Rebate					<u>\$16,000</u>
Total After Rebate					\$504,000
	0:	ΙΥ. Τ. Ο . · Φ.	) f 1 f	Y 1 0	T . 10
ECM # 2 - DOMESTIC WATER HEATER REPLACEMENT	<u>Qty</u>	<u>Unit Cost \$</u>	Material \$	<u>Labor \$</u>	<u>Total \$</u>
New Boilers	3	\$27,500	\$82,500	\$90,750	\$173,250
Demo Old Boilers			\$0	\$25,000	\$25,000
Storage Tank	1	\$15,000	\$15,000		\$15,000
Boiler Rebate					\$6,000
Total After Rebate					\$207,250
ECM # 3 - ENERGY RECOVERY	<u>Qty</u>	<u>Unit Cost \$</u>	Material \$	<u>Labor \$</u>	Total \$
Main Bldg. ERU's	1	\$1,438,125	\$1,438,125	\$1,797,656	\$3,235,781
Annex ERU's	1	\$315,000	\$315,000	\$393,750	<u>\$708,750</u>
Total					\$3,944,531
ECM # 4 - LIGHTING RETROFIT	<u>Qty</u>	<u>Unit Cost \$</u>	Material \$	<u>Labor \$</u>	Total \$
Lighting Retrofit	1	\$180,549	\$180,549	\$447,420	\$627,969
Lighting Rebate					\$2,400
Total After Rebates					\$625,569
		1 ** . ~			T ==
ECM # 5 - PV SOLAR	<u>Qty</u>	<u>Unit Cost \$</u>	Material \$	<u>Labor \$</u>	<u>Total \$</u>
PV Solar	5,100	\$1,525	\$7,777,500	\$4,666,500	\$12,444,000
Total					\$12,444,000

APPENDIX B Page 2 of 3

BASE CASE - EXISTING EQUIPMENT		ı	
	\$	Life	Yr Incurred
Existing McQuay Rooftop Units - Main Bldg	\$958,750	15	2
Existing AAON Rooftop Units - Annex	\$140,000	15	7
Existing Fulton Boilers Existing PVI Domestic Water Heaters	\$300,000 \$86,000	24	11
New Energy Recovery Units - Main Bldg	\$0	15	15
New Energy Recovery Units - Annex	\$0	15	15
New Lochinvar Boilers	\$0	24	24
New Lochinvar Domestic Water Heaters	\$0	24	24
ECM # 1 - BOILER REPLACEMENT			
BOWN T BOTEEN REA ENCENTER (T	\$	Life	Yr Incurred
Existing McQuay Rooftop Units - Main Bldg	\$0	15	2
Existing AAON Rooftop Units - Annex	\$0	15	7
Existing Fulton Boilers	\$0	24	11
Existing PVI Domestic Water Heaters	\$0	24	11
New Energy Recovery Units - Main Bldg	\$0	15	15
New Energy Recovery Units - Annex	\$0	15	15
New Lochinvar Boilers New Lochinvar Domestic Water Heaters	\$224,000 \$0	24 24	24 24
ECM # 2 - DOMESTIC WATER HEATER			•
REPLACEMENT	Φ.	*	T v r
E. C. M.O. D. C. H.; M.; DII	\$	Life	Yr Incurred
Existing McQuay Rooftop Units - Main Bldg	\$0	15	2
Existing AAON Rooftop Units - Annex	\$0	15 24	7
Existing Fulton Boilers Existing PVI Domestic Water Heaters	\$0 \$0	24	11
	\$0 \$0	15	15
New Energy Recovery Units - Main Bldg New Energy Recovery Units - Annex	\$0 \$0	15	15
New Lochinvar Boilers	\$0	24	24
New Lochinvar Domestic Water Heaters	\$97,500	24	24
ECM # 3 - ENERGY RECOVERY	Φ.	T : C	T x z x
Evisting McOnory Doofton Units Main Plda	\$ \$0	Life 15	Yr Incurred
Existing McQuay Rooftop Units - Main Bldg Existing AAON Rooftop Units - Annex	\$0 \$0	15	7
Existing Fulton Boilers	\$0	24	11
Existing PVI Domestic Water Heaters	\$0	24	11
New Energy Recovery Units - Main Bldg	\$1,438,125	15	15
New Energy Recovery Units - Annex	\$315,000	15	15
New Lochinvar Boilers	\$0	24	24
New Lochinvar Domestic Water Heaters	\$0	24	24
ECM # 4 - LIGHTING RETROFIT			
	\$	Life	Yr Incurred
Existing McQuay Rooftop Units - Main Bldg	\$958,750	15	2
Existing AAON Rooftop Units - Annex	\$140,000	15	7
Existing Fulton Boilers	\$300,000	24	11
Existing PVI Domestic Water Heaters	\$86,000	24	11
New Energy Recovery Units - Main Bldg	\$0	15	15
New Energy Recovery Units - Annex	\$0	15	15
New Lochinvar Boilers	\$0	24	24
	\$0	24	24
New Lochinvar Domestic Water Heaters			
New Lochinvar Domestic Water Heaters  ECM # 5 - PV SOLAR	\$	Life	Yr Incurred
ECM # 5 - PV SOLAR  Existing McQuay Rooftop Units - Main Bldg	\$ \$958,750	Life 15	2
ECM # 5 - PV SOLAR  Existing McQuay Rooftop Units - Main Bldg  Existing AAON Rooftop Units - Annex			_
ECM # 5 - PV SOLAR  Existing McQuay Rooftop Units - Main Bldg Existing AAON Rooftop Units - Annex Existing Fulton Boilers	\$958,750	15	2
EXISTING McQuay Rooftop Units - Main Bldg Existing AAON Rooftop Units - Annex Existing Fulton Boilers Existing PVI Domestic Water Heaters	\$958,750 \$140,000 \$300,000 \$86,000	15 15 24 24	2 7 11 11
EXISTING PVI SOLAR  Existing McQuay Rooftop Units - Main Bldg Existing AAON Rooftop Units - Annex Existing Fulton Boilers Existing PVI Domestic Water Heaters New Energy Recovery Units - Main Bldg	\$958,750 \$140,000 \$300,000 \$86,000 \$0	15 15 24 24 15	2 7 11 11 15
EXISTING MCQUAY ROOFTOP Units - Main Bldg EXISTING AAON ROOFTOP Units - Annex EXISTING FUITON BOILETS EXISTING PVI DOMESTIC Water Heaters New Energy Recovery Units - Main Bldg New Energy Recovery Units - Annex	\$958,750 \$140,000 \$300,000 \$86,000 \$0 \$0	15 15 24 24 15 15	2 7 11 11 15 15
EXISTING PVI SOLAR  Existing McQuay Rooftop Units - Main Bldg Existing AAON Rooftop Units - Annex Existing Fulton Boilers Existing PVI Domestic Water Heaters New Energy Recovery Units - Main Bldg	\$958,750 \$140,000 \$300,000 \$86,000 \$0	15 15 24 24 15	2 7 11 11 15

ANNUAL MAINTENANCE COSTS				
	Base	Additional	Solar PV	Total
BASE CASE - EXISTING EQUIPMENT	\$106,750	\$0	\$0	\$106,750
ECM # 1 - BOILER REPLACEMENT	\$106,750	-\$10,675	\$0	\$96,075
ECM # 2 - DOMESTIC WATER HEATER				
REPLACEMENT	\$106,750	-\$3,203	\$0	\$103,548
ECM # 3 - ENERGY RECOVERY	\$106,750	\$10,000	\$0	\$116,750
ECM # 4 - LIGHTING RETROFIT	\$106,750	\$0	\$0	\$106,750
ECM # 5 - SOLAR PV SYSTEM				
	\$106,750	\$0	\$1,500	\$108,250

# Concord Engineering Group, Inc.



520 BURNT MILL ROAD VOORHEES, NEW JERSEY 08043

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## **SmartStart Building Incentives**

The NJ SmartStart Buildings Program offers financial incentives on a wide variety of building system equipment. The incentives were developed to help offset the initial cost of energy-efficient equipment. The following tables show the current available incentives as of January, 2009:

#### **Electric Chillers**

Water-Cooled Chillers	\$12 - \$170 per ton
Air-Cooled Chillers	\$8 - \$52 per ton

#### **Gas Cooling**

Gas Absorption Chillers	\$185 - \$400 per ton
Gas Engine-Driven	Calculated through custom
Chillers	measure path)

#### **Desiccant Systems**

-	<u> </u>
	\$1.00 per cfm – gas or electric

## **Electric Unitary HVAC**

Unitary AC and Split Systems	\$73 - \$93 per ton
Air-to-Air Heat Pumps	\$73 - \$92 per ton
Water-Source Heat Pumps	\$81 per ton
Packaged Terminal AC & HP	\$65 per ton
Central DX AC Systems	\$40- \$72 per ton
Dual Enthalpy Economizer Controls	\$250

## **Ground Source Heat Pumps**

Closed Loop & Open Loop	\$370 per ton
----------------------------	---------------

#### **Gas Heating**

Gas Fired Boilers < 300 MBH	\$300 per unit		
Gas Fired Boilers ≥ 300 - 1500 MBH	\$1.75 per MBH		
Gas Fired Boilers ≥1500 - ≤ 4000 MBH	\$1.00 per MBH		
Gas Fired Boilers > 4000 MBH	(Calculated through Custom Measure Path)		
Gas Furnaces	\$300 - \$400 per unit		

**Variable Frequency Drives** 

Variable Air Volume	\$65 - \$155 per hp
Chilled-Water Pumps	\$60 per hp
Compressors	\$5,250 to \$12,500
	per drive

**Natural Gas Water Heating** 

	0
Gas Water Heaters ≤ 50 gallons	\$50 per unit
Gas-Fired Water Heaters >50 gallons	\$1.00 - \$2.00 per MBH
Gas-Fired Booster Water Heaters	\$17 - \$35 per MBH

### **Premium Motors**

Three-Phase Motors	\$45 - \$700 per motor

**Prescriptive Lighting** 

T-5 and T-8 Lamps w/Electronic Ballast in Existing Facilities	\$10 - \$30 per fixture, (depending on quantity)
Hard-Wired Compact Fluorescent	\$25 - \$30 per fixture
Metal Halide w/Pulse Start	\$25 per fixture
LED Exit Signs	\$10 - \$20 per fixture
T-5 and T-8 High Bay Fixtures	\$16 - \$284 per fixture

**Lighting Controls – Occupancy Sensors** 

Wall Mounted	\$20 per control
Remote Mounted	\$35 per control
Daylight Dimmers	\$25 per fixture
Occupancy Controlled hilow Fluorescent Controls	\$25 per fixture controlled

## **Lighting Controls – HID or Fluorescent Hi-Bay Controls**

Occupancy hi-low	\$75 per fixture controlled
Daylight Dimming	\$75 per fixture controlled

**Other Equipment Incentives** 

- · · · T · T	
Performance Lighting	\$1.00 per watt per SF below program incentive threshold, currently 5% more energy efficient than ASHRAE 90.1-2004 for New Construction and Complete Renovation
Custom Electric and Gas Equipment Incentives	not prescriptive

TAG	MAKE	MODEL	TYPE	CAP.	EFF.	SERVES	LOCATION	REMAINING USEFUL LIFE	NOTES
RTU-1	McQUAY	RPS-135CLW	ROOFTOP UNIT	140 TONS	8.9 EER	AREAS 'A' & 'B'	SOUTHEAST ROOF "B"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-2	McQUAY	RPS-135CLW	ROOFTOP UNIT	140 TONS	8.9 EER	AREAS 'A' & 'B'	SOUTHEAST ROOF "B"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-3	McQUAY	RPS-135CLW	ROOFTOP UNIT	140 TONS	8.9 EER	AREAS 'A' & 'B'	NORTHWEST ROOF "B"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-4	McQUAY	RPS-080CLW	ROOFTOP UNIT	80 TONS	9.8 EER	AREA 'B'	NORTHWEST ROOF "B"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-5	McQUAY	RPS-025CLW	ROOFTOP UNIT	27 TONS	9.4 EER	AREA 'C'	EAST SIDE ROOF "B"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-6	McQUAY	RPS-135CLW	ROOFTOP UNIT	140 TONS	8.9 EER	AREA 'E'	NORTHWEST ROOF "E"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. CONSTANT VOLUME SUPPLY FAN.
RTU-9	McQUAY	RPS-050CLW	ROOFTOP UNIT	55 TONS	9.9 EER	AREAS 'D' & 'E'	NORTHWEST ROOF "E"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-10	McQUAY	RPS-090CLW	ROOFTOP UNIT	90 TONS	9.2 EER	AREA 'D'	SOUTHEAST ROOF "E"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-11	McQUAY	RPS-090CLW	ROOFTOP UNIT	90 TONS	9.1 EER	AREA 'E'	SOUTHEAST ROOF "E"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-12	McQUAY	RPS-060CLW	ROOFTOP UNIT	60 TONS	9.4 EER	AREA 'A'	SOUTHWEST ROOF "A"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-13	McQUAY	RPS-070CLW	ROOFTOP UNIT	75 TONS	9.7 EER	AREA 'A'	SOUTHWEST ROOF "A"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-14	McQUAY	RPS-0500OS	ROOFTOP UNIT	52 TONS	9.8 EER	AREA 'C'	NORTHEAST ROOF "C"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-15	McQUAY	RPS-0500OS	ROOFTOP UNIT	52 TONS	9.8 EER	AREA 'C'	SOUTHEAST ROOF "C"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-16	McQUAY	RPS-020CSW	ROOFTOP UNIT	23 TONS	9.3 EER	AREA 'C'	NORTHEAST ROOF "C"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-17	McQUAY	RPS-025CLW	ROOFTOP UNIT	30 TONS	9.4 EER	AREA 'C'	SOUTHEAST ROOF "C"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-18	McQUAY	RPS-025CLW	ROOFTOP UNIT	30 TONS	9.4 EER	AREA 'C'	SOUTHEAST ROOF "C"	2 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
HRU-1	SEASONS 4	3CFK-37	ROOFTOP ENERGY RECOVERY UNIT	60 TONS	N/A	LOCKER ROOMS	NORTHWEST ROOF "E"	2 YEARS	FIXED PLATE HEAT EXCHANGER WITH CONSTANT VOLUME SUPPLY AND EXHAUST FANS. HOT WATER COILS CURRENTLY OFFLINE.
HRU-2	SEASONS 4	3CFK-37	ROOFTOP ENERGY RECOVERY UNIT	60 TONS	N/A	LOCKER ROOMS	NORTHEAST ROOF "E"	2 YEARS	FIXED PLATE HEAT EXCHANGER WITH CONSTANT VOLUME SUPPLY AND EXHAUST FANS. HOT WATER COILS CURRENTLY OFFLINE.

TAG	MAKE	MODEL	TYPE	CAP.	EFF.	SERVES	LOCATION	REMAINING USEFUL LIFE	NOTES
B-1	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-2	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-3	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-4	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	UNDER REPAIR
B-5	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	UNDER REPAIR
B-6	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	UNDER REPAIR
B-7	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	UNDER REPAIR
B-8	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-9	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-10	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-11	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-12	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-13	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-14	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-15	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-16	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-17	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-18	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-19	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
B-20	FULTON	PHW-1000	BOILER	1000 MBH INPUT	90%	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	11 YEARS	B-1 Thru B-20 BOILERS ARE SEQUENCED ON DEMAND
P-1	TACO	-	END SUCTION PUMP	60 HP	N/A	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	7 YEARS	VFD
P-2	TACO	-	END SUCTION PUMP	60 HP	N/A	MAIN BLDG. HEATING LOOP	BOILER PLANT AREA "D-100"	7 YEARS	VFD - STANDBY
HWH-1	PVI	1000N-600A-TP	DOMESTIC WATER HEATER & STORAGE TANK	800 MBH INPUT	83%	MAIN BLDG.	BOILER PLANT AREA "D-100"	11 YEARS	600 GAL. STORAGE. 3/4 HP BURNER MOTOR
HWH-2	PVI	1250N-600A-TP	DOMESTIC WATER HEATER & STORAGE TANK	1000 MBH INPUT	83%	MAIN BLDG.	BOILER PLANT AREA "D-100"	11 YEARS	600 GAL. STORAGE. 3/4 HP BURNER MOTOR
HWH-3	PVI	2500N-1500-TP	DOMESTIC WATER HEATER & STORAGE TANK	2000 MBH INPUT	83%	MAIN BLDG.	BOILER PLANT AREA "D-100"	11 YEARS	1500 GAL. STORAGE. 1-1/2 HP BURNER MOTOR. CURRENTLY OFFLINE.
HWH-4	PVI	2500N-1500-TP	DOMESTIC WATER HEATER & STORAGE TANK	2000 MBH INPUT	83%	MAIN BLDG.	BOILER PLANT AREA "D-100"	11 YEARS	1500 GAL. STORAGE. 1-1/2 HP BURNER MOTOR

TAG	MAKE	MODEL	TYPE	CAP.	EFF.	SERVES	LOCATION	REMAINING USEFUL LIFE	NOTES
B-1A	AERCO	BMK 2.0	BOILER	2000 MBH INPUT	92%	ANNEX	ANNEX MECHANICAL ROOM	17 YEARS	SEQUENCED FOR EQUAL OPERATING TIME.
B-2A	AERCO	BMK 2.0	BOILER	2000 MBH INPUT	92%	ANNEX	ANNEX MECHANICAL ROOM	17 YEARS	SEQUENCED FOR EQUAL OPERATING TIME.
B-3A	AERCO	BMK 2.0	BOILER	2000 MBH INPUT	92%	ANNEX	ANNEX MECHANICAL ROOM	17 YEARS	SEQUENCED FOR EQUAL OPERATING TIME.
B-4A	AERCO	BMK 2.0	BOILER	2000 MBH INPUT	92%	ANNEX	ANNEX MECHANICAL ROOM	17 YEARS	SEQUENCED FOR EQUAL OPERATING TIME.
P-1A	BELL & GOSSETT	-	END SUCTION PUMP	30 HP	N/A	ANNEX HEATING LOOP	ANNEX MECHANICAL ROOM	12 YEARS	CONSTANT VOLUME.
P-2A	BELL & GOSSETT	-	END SUCTION PUMP	30 HP	N/A	ANNEX HEATING LOOP	ANNEX MECHANICAL ROOM	12 YEARS	CONSTANT VOLUME - STANDBY
HWH-1A	PVI	750P-400A-TP	DOMESTIC WATER HEATER & STORAGE TANK	600 MBH INPUT	83%	ANNEX	ANNEX MECHANICAL ROOM	16 YEARS	400 GAL. STORAGE. 1/3 HP BURNER MOTOR
RTU-1A	AAON	RK-25-3-D0-750	ROOFTOP UNIT	25 TONS	9.7 EER	ANNEX LEVEL 1 MUSIC ROOM	NORTHEAST ANNEX ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-2A	AAON	RF-090-E0-000	ROOFTOP UNIT	90 TONS	94 EER	ANNEX LEVELS 2 & 3 COMPUTER CLASS	NORTHEAST ANNEX ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & NO HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-3A	AAON	RK-26-3-F0-000	ROOFTOP UNIT	26 TONS	9.5 EER	ANNEX LEVEL 1 OFFICE AREA	SOUTHEAST ANNEX ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & NO HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-4A	AAON	RK-40-3-D0-000	ROOFTOP UNIT	40 TONS	8.8 EER	ANNEX LEVELS 2 & 3 MEDIA CENTER	SOUTHEAST ANNEX ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & NO HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-5A	AAON	RK-40-3-F0-750	ROOFTOP UNIT	40 TONS	8.8 EER	ANNEX LEVEL 1 CAFETERIA	SOUTHEAST ANNEX ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-6A	AAON	RK-26-3-F0-750	ROOFTOP UNIT	26 TONS	9.5 EER	ANNEX LEVELS 2 & 3 SCIENCE	SOUTHWEST ANNEX ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-7A	AAON	RF-070-3-E0-000	ROOFTOP UNIT	26 TONS	10.5 EER	ANNEX LEVELS 2 & 3 HEALTH CLASS WING	SOUTHWEST ANNEX ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & NO HEATING COIL. SUPPLY AND RETURN FANS WITH VAV CONTROL.
RTU-8A	AAON	RK-060-3-E0-750	ROOFTOP UNIT	26 TONS	7.3 EER	ANNEX GYM	GYM ROOF	7 YEARS	PACKAGED ROOFTOP UNIT WITH ELECTRIC COOLING & HOT WATER HEATING COIL. CONSTA VOLUME SUPPLY AND RETURN FANS.

Part			Existing Fixtures						Proposed	Fixtures							Fixt	ares Retrofitte	d	1		Unit 1	Installation Co	set		7	
Part		Room Name			Watts			Description	Topose	Lamps per	Watts					Ave \$/kwh	Energy	Energy		Material Each			Total		Total All		
Part		First Floor																									
Property of the property of		Area "A"	AT TO 11 11 P		50	40	500	D.1 D.1 II	0.1		- 12	10	120	150	450.4	00.15	000	0110.05	40	022.20	0.00.00	002.20	0222.00	0.000.00	0000 00	00.00	
Section   Sect	A-/I	Student Activities	2L-18-1'x4' P	2	59	10	590	Kelamp, Kebaliast		2	42	10	420	170	4704	\$0.15	800	\$119.95	10	\$22.28	\$60.00	\$82.28	\$222.80	\$600.00	\$822.80	\$0.00	6.9
March   Marc																											
PRINT CALLED   PRIN	Δ-100	Stair	3L_T8_2'v2'	3	87	5	435	Relamn Rehallast		3	68	5	340	95	4704	\$0.15	447	\$67.03	5	\$23.93	\$60.00	\$83.93	\$119.65	\$300.00	\$419.65	\$0.00	6.3
Second   S								,	FBO30/835/XP/ECO3							4		40.100				******					
Section   Sect									Sylvania Ballast																		
A-11 Tray-bank   Rush	A-100	Stair	8' Fixture w/ x2 4' 2L T8	4	114	1	114	Existing to Remair		4	114	1	114	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	_
Second   S	A-101	Pump Room	1L-T8-1'x4'	1	30	1	30	Relamp, Reballast	Sylvania Lamps	1	22	1	22	8	4704	\$0.15	38	\$5.64	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	14.6
No. 1. No																											
Part																											
Second Heat	A-102	Writing Lab	3L-18-1'x4' P	3	87	34	2958	Relamp, Reballast		3	63	34	2142	816	4704	\$0.15	3,838	\$575.77	34	\$23.93	\$60.00	\$83.93	\$813.62	\$2,040.00	\$2,853.62	\$0.00	5.0
Although Reference Referen									Sylvania Ballast																		
Control Cont	A 104	Madia Cantar	31 TQ 1'v/l' D	3	97	176	15312	Palamp Pahallast		3	63	176	11088	4224	4704	\$0.15	10.870	\$2.080.45	176	\$23.03	\$60.00	683.03	\$4.211.68	\$10.560.00	\$14.771.68	\$0.00	5.0
Make Caree   Mak	A-104	wedia center	3L-10-1 x4 1	,	67	170	13312	Kcianip, Kcoanast		,	0.5	170	11000	4224	4704	30.13	12,070	32,700.43	170	923.73	300.00	303.73	34,211.00	\$10,500.00	\$14,771.00	30.00	5.0
Action State Control of																											
Properties   Pro	A-104	Media Center	2L-PL-33"-P	2	78	5	390	Existing to Remair		2	78	5	390	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
State   Stat	A-107	Community Equipment	3L-T8-2'x2'	3	87	6	522	Relamp, Reballast		3	68	6	408	114	4704	\$0.15	536	\$80.44	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	6.3
Action   A																											
A.10									QHE3X32T8/UNV/ISL-SC																		
Section of the control of the cont	A-108	Software and CD	3L-T8-2'x4'	3	87	6	522	Relamp, Reballast	Sylvania Lamps	3	63	6	378	144	4704	\$0.15	677	\$101.61	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	5.0
Solitone and Column									Sylvania Ballast																		
A-100 West Room	A 100	C-61CD	AL TO AL-AL	2	50	4	226	Dalama Dalailar		2	45	4	100		470.4	60.15	262	620.51	,	622.20	640.00	602.20	600.12	6240.00	6220.12	60.00	0.2
A-100   Work Room	A-108	Software and CD	2L-18-2 X2	2	39	4	230	Keiamp, Kebaliast	FBO30/835XP/6/ECO3	2	43	4	180	30	4704	\$0.15	203	\$39.51	4	322.28	\$60.00	382.28	\$89.12	\$240.00	\$329.12	\$0.00	8.3
A-10    Work Room   Li 19-254"   3   8"   2   194   Relange, Relating   Figure School   195   2   194   Relange, Relating   Figure School   195   2   195   48   409   4015   200   4315   200   3310   2   3300   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320   3320									Sylvania Ballast																		
A-100   Week Room   1.77-274   3   87   2   134   Room, Related   Processing Section   Proc	A-109	Work Room	3L-T8-2'x4'	3	87	2	174	Relamp, Rehallast		3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0
Action   Committee   Committ						_		,	FO28/835/XP/ECO3			_				4			_			******					
A-110   Office   L-75-Ye   2   99   3   17   Redump, Redulin   Synomic Large   2   45   3   135   42   4794   51.5   199   57.64   3   57.25   50.00   52.25   50.04   510.00   53.05   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00   51.00									Sylvania Ballast																		
A-110 Office R-18-25V 3 07 2 074 Relam, Rebullar PROMISSION STATEMENT AND ASSESSMENT OF STATEMENT AND ASSESSMENT O	A-109	Work Room	2L-T8-2'x2'	2	59	3	177	Relamp, Reballast	Sylvania Lamps	2	45	3	135	42	4704	\$0.15	198	\$29.64	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	8.3
Office   Number   N																											
FORMANDER OF STATES									QHE2X32T8/UNV/ISL-SC																		
A-111 Work Room	A-110	Office	3L-T8-2'x4'	3	87	2	174	Relamp, Reballast		3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0
A-111   Work Room   St.Ph2-Vef   3   1   87   Relump, Rebullar   Sylvant Lamps   Sylvant Lam																											
Provided		W. I. D	ar mo at at		om.		0.5	D. D. II.	QHE3X32T8/UNV/ISL-SC					2.	450.4	00.15	112	01400		622.02	6 40 00	000.00	622.02	0.00.00	002.02	60.00	
A-112 Periodicals 3L-T8-2x2 2 99 3 177 Relump, Rebullar Sylvania Ballars (DIEXXITSINNESS C. 2 45 3 135 42 4704 50.5 198 529.64 3 522.8 56.00 522.8 56.00 5246.8 59.00 5246.8 59.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 50.00 524.6 5	A-111	Work Room	3L-18-2'x4'	- 5	87	1	87	Kelamp, Kebaliast		3	6.5	1	6.5	24	4704	\$0.15	113	\$16.93	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	5.0
A-112   Periodicals   2.78-2/42   2   99   3   177   Relump, Reballast   Sylvania Lamps   2   45   3   135   42   4704   50.15   198   \$59.64   3   \$52.28   \$50.00   \$52.28   \$56.54   \$510.00   \$52.68   \$40.00   \$52.68   \$40.00   \$52.68   \$40.00   \$50.00   \$52.68   \$40.00   \$50.00   \$52.68   \$40.00   \$50.00   \$52.68   \$40.00   \$50.00   \$52.68   \$40.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.00   \$50.0									Sylvania Ballast																		
Project   Proj	Δ-112	Periodicals	2L-T8-2'v2'	2	59	3	177	Relamn Rehallast		2	45	3	135	42	4704	\$0.15	198	\$29.64	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	8.3
A-112 Periodicals  3L-T8-2x2' 3 87 3 261 Relamp, Rebullas  PERSONSINDEGOS Sylvania Ballast OHENXTENIONISLSC  A-113 Vesubule  3L-T8-1x4 P 3 5 87 4 348 Relamp, Rebullas  A-114 Stair A 3L-T8-2x2' 3 87 5 7 4 14 Estiming to Remait  A-115 Stair A 5 Fixture w/ 2L-T8-1x2	A-112	renoulears	2L-10-2 A2	-	37		1//	Kcianip, Kcoanast	FBO30/835XP/6/ECO3	_	40	,	155	42	4704	30.13	170	327.04	,	322.20	300.00	302.20	300.04	\$100.00	3240.04	30.00	0.5
A-112 Periodicals JL-T8-2'x2																											
FBG30835NPECO3   Sylvania Ballast   CHENXTPS UNIVISISC   Section   State   Section	A-112	Periodicals	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast		3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
A-113   Ventubule   A-114   Stair A   31-78-1×4°P   3   87   2   174   Relamp, Reballast   Sylvania Lamps   5   5   5   5   5   5   5   5   5																											
A-114 Stair A 3LT8-2x2 3 87 2 174 Relamp, Reballast Sylvania Lamps PGO28385/PECO3 Sylvania Ballast OHENX2TRUNVISLS C ST. A 114 1 114 Stair A Stair A 3LT8-2x2 3 87 3 261 Relamp, Reballast OHENX2TRUNVISLS C ST. A 114 1 114 Stair A Stair A ST. A 2 184 Stair A St. A 114 1 185 St. A 114 1 1																											
A-114   Stair A   Stair A   Strike w/s24*2LT8   4   114   1   114   Existing to Remair   Existing to Remair   A-115   Corridor   1L-PL-T-6"   1   26   2   52   52   18   1062   Relamp, Reballast   Sylvania Lamps   Falamp, Reballast   Sylvania Lamps   Sylvania	A-113	Vestubule	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
A-114 Stair A																											
FB030835XP/EC03   Sylvania Ballast OHEXX2T8/UNVISL-SC   A   114   1   114   Existing to Remain   Existing to Rem									QHE3X32T8/UNV/ISL-SC																		
A-114 Stair A S-Fixture wt x2.4* '2L.TS	A-114	Stair A	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps EBO30/835/VD/ECO3	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-114 Stair A SFixture w/x24/2LTS 4 114 1 114 Existing to Remair Existing to Remair Sylvania Ballast OHENXZTRUNVISL-SC  A-115 Corridor IL-PLT-6* 1 26 2 52 Existing to Remair Existing t																											
A-114A   Corridor   3L-T8-2x2'   3   87   3   261   Relamp, Reballast   Sylvania Lamps   FBG30835XPEC03   Sylvania Ballast   Corridor   Corrido	A 114	Contra A	01 F2	4	114		114	Polodo e a Bossia			114		114	0	470.4	60.15	0	¢0.00	0	£0.00	60.00	60.00	60.00	60.00	00.00	60.00	
FB030835XP/ECO3   Sylvamia Ballast OHE3X27F4(INV/ISL-SC   Sylvamia Ballast OHE3X27F4(INV/ISL-SC   Sylvamia Ballast OHE3X27F4(INV/ISL-SC   Sylvamia Ballast   Sylvamia Sylvamia Ballast								Relamp, Reballast		3		3			4704												6.3
A-115   Corridor   2L-T8-2'x2'   2   59   65   3835   Relamp, Reballast   Sylvania Lamps   2   45   65   2925   910   4704   \$0.15   4,281   \$642.10   65   \$22.28   \$60.00   \$82.28   \$1,448.20   \$3,900.00   \$5,348.20   \$0.00   \$8.3   \$98.00   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$1,418.20   \$																											
A-115 Corridor 2L-T8-2x2* 2 59 65 3835 Relamp, Reballast Sylvania Lamps FBG30835XPeECO3 Sylvania Ballast OHEXX2T8/UNIVISL-SC  A-116 Corridor 1L-PL-T-6* 1 26 2 52 Existing to Remair 1 26 2 52 52 0 4704 \$0.15 0 \$0.00 0 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00																											
A-116 Corridor IL-PL-T-6" 1 26 2 52 Existing to Remair Existing to Remair 1 26 2 52 52 Existing to Remair 1 26 2 52 52 0 4704 \$0.15 0 \$0.00 0 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0	A-115	Corridor	2L-T8-2'x2'	2	59	65	3835	Relamp, Reballast	Sylvania Lamps	2	45	65	2925	910	4704	\$0.15	4,281	\$642.10	65	\$22.28	\$60.00	\$82.28	\$1,448.20	\$3,900.00	\$5,348.20	\$0.00	8.3
A-116   Corridor   IL-PLT-6"   1   26   2   52   Existing to Remair   Existing to Remair   1   26   2   52   52   Existing to Remair   1   26   2   52   52   52   52   52   52								1																			
A-116 Corridor IL-PL-T-6' 1 26 2 52 Existing to Remair Existing to Remair 1 26 2 52 0 4704 \$0.15 0 \$0.00 0 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$									QHE2X32T8/UNV/ISL-SC																		
A-117 Vestubule IL-PL-T-6" 1 26 2 52 Existing to Remair Existing to Remair 1 26 2 52 0 4704 \$0.15 0 \$0.00 0 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	A-116		1L-PL-T-6"				52	Existing to Remair	Existing to Remain	1	26		52		4704	\$0.15		\$0.00	0	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	4
FO28/835/XP/ECO3 Sylvania Ballast						2				1		2															
Sylvania Ballast	A-118	Secretary	2L-T8-1'x4' P	2	59	18	1062	Relamp, Reballast	Sylvania Lamps	2	42	18	756	306	4704	\$0.15	1,439	\$215.91	18	\$22.28	\$60.00	\$82.28	\$401.04	\$1,080.00	\$1,481.04	\$0.00	6.9
								1																			

	SOUTH BRUNSWICK H						T	p	E!		APPENDIX	E	1		1	El-t-	D 644				¥7te	Installation C		LIGHTII	NG AUDIT	
Room Number	Room Name	Existing Fixtures  Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Proposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
A-118A	Files	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
A-120	Admin. Office	3L-T8-1'x4' P	3	87	3	261	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
A-120	Admin. Office	1L-PL-T-6"	1	26	3	78	Existing to Remair	Existing to Remain	1	26	3	78	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
A-121	Conference Room	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
								FO28/835/XP/ECO3 Sylvania Ballast																		
								QHE3X32T8/UNV/ISL-SC																		
A-121	Conference Room	2L-T8-2'x2'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3	2	45	3	135	42	4704	\$0.15	198	\$29.64	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	8.3
								Sylvania Ballast																		
								QHE2X32T8/UNV/ISL-SC																		
A-122	Admin. Office	3L-T8-1'x4' P	3	87	2	174	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0
								Sylvania Ballast																		
					_			QHE3X32T8/UNV/ISL-SC																		
A-122	Admin. Office	2L-T8-2'x2'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3	2	45	2	90	28	4704	\$0.15	132	\$19.76	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	8.3
								Sylvania Ballast																		
A-123	File Server	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	68	1	68	19	4704	\$0.15	89	\$13.41		\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
A-123	File Server	3L-10-2 X2	3	07	1	07	Keiainp, Kebanasi	FBO30/835/XP/ECO3	3	00	1	uo	19	4704	30.13	0.9	\$13.41		323.93	\$60.00	303.93	\$23.93	300.00	\$63.73	30.00	0.3
								Sylvania Ballast																		
A-125	Clerks	3L-T8-1'x4' P	3	87	7	609	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps	3	63	7	441	168	4704	\$0.15	790	\$118.54	7	\$23.93	\$60.00	\$83.93	\$167.51	\$420.00	\$587.51	\$0.00	5.0
11 123	Cicias	32 10 1 X4 1		0,	,	007	reminp, recuman	FO28/835/XP/ECO3		0.5	· ·		100	4704	ψ0.15	,,,,	9110.54	,	023.73	\$00.00	903.73	9107.51	\$120.00	ψ507.51	90.00	2.0
								Sylvania Ballast																		
A-125	Clerks	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
							1,	FBO30/835/XP/ECO3																		
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
A-125A	Passage	1L-PL-T-6"	1	26	2	52	Existing to Remair	Existing to Remain	1	26	2	52	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
A-126	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
								FBO30/835/XP/ECO3 Sylvania Ballast																		
								QHE3X32T8/UNV/ISL-SC																		
A-127	Info Server	3L-T8-1'x4' P	3	87	2	174	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0
								Sylvania Ballast																		
A-128	Clerks & Recep.	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
11 120	Cicias de Recep.	20 10 1 34 1				47.2	reminp, recumus	FO28/835/XP/ECO3	_	1.2		330	150	4704	ψ0.15	0.10	475.70	Ů	022.20	\$60.00	502.20	0170.24	\$100.00	\$656.24	50.00	0.7
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
A-129	Work Room	3L-T8-2'x2'	3	87	5	435	Relamp, Reballast	Sylvania Lamps	3	68	5	340	95	4704	\$0.15	447	\$67.03	5	\$23.93	\$60.00	\$83.93	\$119.65	\$300.00	\$419.65	\$0.00	6.3
							-	FBO30/835/XP/ECO3																		
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
A-130	Mail Room	3L-T8-2'x2'	3	87	9	783	Relamp, Reballast	Sylvania Lamps	3	68	9	612	171	4704	\$0.15	804	\$120.66	9	\$23.93	\$60.00	\$83.93	\$215.37	\$540.00	\$755.37	\$0.00	6.3
								FBO30/835/XP/ECO3 Sylvania Ballast																		
								QHE3X32T8/UNV/ISL-SC																		
A-131	Teacher Sign-In	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
								Sylvania Ballast																		
								QHE3X32T8/UNV/ISL-SC																		
A-132 A-133	Vestubule Passage	1L-PL-T-6" 2L-T8-2'x2'	2	26 59	3	78 59	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	2	26 45	1	78 45	0 14	4704 4704	\$0.15 \$0.15	0 66	\$0.00 \$9.88	0	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$0.00	8.3
			_	-	-		, , , , , , , , , , , , , , , , , , , ,	FBO30/835XP/6/ECO3	-						4		*****	-						4		
								Sylvania Ballast OHE2X32T8/UNV/ISL-SC																		
A-134	Conference Room B	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
							-	FO28/835/XP/ECO3																		
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
A-134A	Files	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
								FBO30/835/XP/ECO3 Sylvania Ballast																		
								QHE3X32T8/UNV/ISL-SC																		
A-135	College Information	2L-T8-1'x4' P	2	59	16	944	Relamp, Reballast	Sylvania Lamps	2	42	16	672	272	4704	\$0.15	1,279	\$191.92	16	\$22.28	\$60.00	\$82.28	\$356.48	\$960.00	\$1,316.48	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast																		
								QHE2X32T8/UNV/ISL-SC		L	1							L								
A-135	College Information	2L-T8-2'x2'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3	2	45	3	135	42	4704	\$0.15	198	\$29.64	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	8.3
								Sylvania Ballast																		
A-136	Reception/Waiting	2L-T8-1'x4' P	2	59	0	0	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	0	0	0	4704	\$0.15	0	\$0.00	0	\$22.28	\$60.00	\$82.28	\$0.00	\$0.00	\$0.00	\$0.00	-
11.150	ccpuon rranng		_			Ü		FO28/835/XP/ECO3	1 -		"			4704	90.13		ψ0.00	"	922.20	900.00	902.20	φο.σσ	90.00	ψ0.00	90.00	
								Sylvania Ballast																		
	I		1	1	1		1	QHE2X32T8/UNV/ISL-SC	1	1	1		1	1	1	1		1	1	1	1	1	1	1	1	1

	SOUTH BRUNSWICK H	IGH SCHOOL Existing Fixtures						Proposed	Fixtures		APPENDIX I	E			ı	Fixt	ares Retrofitte	d	ı		Unit	Installation Co	net	LIGHTIN	AG AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Troposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total	Total Labor	Total All	Rebate Estimate	Simple Payback
A-137	Career Center	2L-T8-1'x4' P	2	59	16	944	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	16	672	272	4704	\$0.15	1,279	\$191.92	16	\$22.28	\$60.00	\$82.28	\$356.48	\$960.00	\$1,316.48	\$0.00	6.9
A-137	Career Center	2L-T8-2'x2'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	4	180	56	4704	\$0.15	263	\$39.51	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	8.3
A-138	Conference Room A	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-139	Conference Room A	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-140	Passage/Kitchenette	2L-T8-2'x2'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	3	135	42	4704	\$0.15	198	\$29.64	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	8.3
A-141	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
A-142	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
A-143	Counselor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-144	Counselor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-145	Counselor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-146	Supervisor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-147	Counselor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-148	Counselor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-149	Counselor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-150	SBYS	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-151	SBYS	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-152	SBYS	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-153	Child Study	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-154	Child Study	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-155	Child Study	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-156	SBYS	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-157	SBYS	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9

		Existing Fixtures						Proposed	Fixtures							Fixtu	ıres Retrofitte	ı			Unit	Installation Co	ost			
Room	Room Name	Lighting Fixture Descriptio	Lamps per	Watts	Qty of	Total	Description		Lamps per	Watts	Qty of	Total	Wattage	Average	Ave \$/kwh	Energy	Energy	Qty	Material	Labor	Total Each	Total	Total Labor	Total All	Rebate	Simple
Number A-158	SBYS	2L-T8-1'x4' P	Fixture 2	59	Fixtures 4	Watts 236	Relamp, Reballast	Sylvania Lamps	Fixture 2	42	Fixtures 4	Watts 168	Reduction 68	Burn Hours 4704	\$0.15	Savings, kWh	Savings, \$ \$47.98	4	Each \$22.28	Each \$60.00	\$82.28	Materials \$89.12	\$240.00	\$329.12	Estimate \$0.00	Payback 6.9
A-130	3513	212-10-1 24 1	2	3,		230	Relatip, Reballast	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	•	100	00	4704	\$0.15	320	347.76	•	322.20	300.00	302.20	307.12	3240.00	\$327.12	30.00	0.7
A-159	SBYS	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-160	Passage	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-161	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-162	Girls Toilet Room	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-163	Janitor	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
A-164	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-165	Boys Toilet Room	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Ballast OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-166	Art Resoures	3L-T8-1'x4' P	3	87	6	522	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	3	63	6	378	144	4704	\$0.15	677	\$101.61	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	5.0
A-166A	Acid Storage	2L-T8-WALL	2	59	2	118	Relamp, Reballast	FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
71 1001	Teld Stolage	ES TO WALL		37		110	remany, recommen	FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	_		-		34	4704	90.13	130	\$25.77		922.20	300.00	302.20	31130	\$120.00	\$104.50	30.00	
	Area "B"																									
B-100	Corridor	2L-T8-2'x2'	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	27	1215	378	4704	\$0.15	1,778	\$266.72	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	8.3
B-101	Conference Room	3L-T8-1'x4' P	3	87	3	261	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
B-102	Supervisor	3L-T8-1'x4' P	3	87	3	261	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
B-103	Supervisor	3L-T8-1'x4' P	3	87	3	261	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
B-104	Supervisor	3L-T8-1'x4' P	3	87	3	261	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
B-105	Supervisor	3L-T8-1'x4' P	3	87	3	261	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
B-106 - B-108	Passage / Faculty Work 4 & 5	2L-T8-1'x4' P	2	59	35	2065	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	35	1470	595	4704	\$0.15	2,799	\$419.83	35	\$22.28	\$60.00	\$82.28	\$779.80	\$2,100.00	\$2,879.80	\$0.00	6.9
B-109	Passage	2L-T8-2'x2'	2	59	7	413	Relamp, Reballast	Sylvania Ballast OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3	2	45	7	315	98	4704	\$0.15	461	\$69.15	7	\$22.28	\$60.00	\$82.28	\$155.96	\$420.00	\$575.96	\$0.00	8.3
B-110	Tutorial	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
B-111	Tutorial	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Ballast OHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
B-112	Reception	3L-T8-1'x4' P	3	87	6	522	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps	3	63	6	378	144	4704	\$0.15	677	\$101.61	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	5.0
	•						-	FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		

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Room Number	Room Name	Existing Fixtures  Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Proposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-113	Tutorial	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
B-114	Files	2L-T8-1'x4' P	2	59	6	354	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	6	252	102	4704	\$0.15	480	\$71.97	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	6.9
B-116	Women's Room	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
B-116	Women's Room	1L-PL-T-6"	1	26	2	52	Existing to Remair	QHE2X32T8/UNV/ISL-SC Existing to Remain	1	26	2	52	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
B-117	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-118	Men's Room	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
B-118 B-119	Men's Room Alcove	1L-PL-T-6" 2L-T8-2'x2'	1 2	26 59	2	52 59	Existing to Remair Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Existing to Remain Sylvania Lamps	1 2	26 45	2	52 45	0 14	4704 4704	\$0.15 \$0.15	0 66	\$0.00 \$9.88	0	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$0.00	8.3
B-120	Faculty Work Room	3L-T8-1'x4' P	3	87	6	522	Relamp, Reballast	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	3	63	6	378	144	4704	\$0.15	677	\$101.61	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	5.0
	·						-	FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
B-121, B-122	Passage / Faculty Work 4 a	& 2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-124	Supervisor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-125	Supervisor	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-126	Supervisor	2L-T8-1'x4' P	2	59	3	177	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
B-127	Tutorial	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
B-130	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-131	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-134	General Area	2L-T8-2'x2'	2	59	16	944	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3	2	45	16	720	224	4704	\$0.15	1,054	\$158.05	16	\$22.28	\$60.00	\$82.28	\$356.48	\$960.00	\$1,316.48	\$0.00	8.3
B-135	Exam	2L-T8-2'x2'	2	59	2	118	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	45	2	90	28	4704	\$0.15	132	\$19.76	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	8.3
B-135	Exam	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
								FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC																		
B-136	Nurse's Office	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-139	Waiting Area	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
B-140	Corridor	2L-T8-2'x2'	2	59	24	1416	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	24	1080	336	4704	\$0.15	1,581	\$237.08	24	\$22.28	\$60.00	\$82.28	\$534.72	\$1,440.00	\$1,974.72	\$0.00	8.3
B-141	Vestubule	2L-T8-2'x2'	2	59	27	1593	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	27	1215	378	4704	\$0.15	1,778	\$266.72	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	8.3
B-145	Vestubule	1L-PL-T-6"	1	26	10	260	Existing to Remair	OHE2X32T8/UNV/ISL-SC Existing to Remain	1	26	10	260	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	$\vdash$

		Existing Fixtures						Proposed	Fixtures							Fixt	ures Retrofitte	d	I		Unit	Installation Co	st		1	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-146	Stair	2L-T8-2'x2'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	4	180	56	4704	\$0.15	263	\$39.51	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	8.3
B-147	Home EC Combo Lab	3L-T8-1'x4' P	3	87	56	4872	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	56	3528	1344	4704	\$0.15	6,322	\$948.33	56	\$23.93	\$60.00	\$83.93	\$1,340.08	\$3,360.00	\$4,700.08	\$0.00	5.0
B-149	Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
B-150 - B-152	Play Area/Read Area/Child Development	1 2L-T8-1'x4' P	2	59	56	3304	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	56	2352	952	4704	\$0.15	4,478	\$671.73	56	\$22.28	\$60.00	\$82.28	\$1,247.68	\$3,360.00	\$4,607.68	\$0.00	6.9
B-153	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-154	Kitchen	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-156	Home EC Office	2L-T8-2'x2'	2	59	8	472	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	8	360	112	4704	\$0.15	527	\$79.03	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	8.3
B-157	Home Economics Food Lal	2L-T8-1'x4' P	2	59	46	2714	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	46	1932	782	4704	\$0.15	3,679	\$551.78	46	\$22.28	\$60.00	\$82.28	\$1,024.88	\$2,760.00	\$3,784.88	\$0.00	6.9
B-158	Storage	2L-T8-2'x2'	2	59	4	236	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	4	180	56	4704	\$0.15	263	\$39.51	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	8.3
B-160	Women's Room	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-160	Women's Room	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
B-161	Men's Room	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-161	Men's Room	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
B-162	Lobby	2L-T8-2'x2'	2	59	26	1534	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	26	1170	364	4704	\$0.15	1,712	\$256.84	26	\$22.28	\$60.00	\$82.28	\$579.28	\$1,560.00	\$2,139.28	\$0.00	8.3
B-162	Lobby	1L-PL-T-6"	1	26	9	234	Existing to Remair	Existing to Remain	1	26	9	234	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
B-162A	Vestubule	1L-PL-T-6"	1	26	8	208	Existing to Remair	Existing to Remain	1	26	8	208	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
B-163	Vestubule	2L-T8-2'x2'	2	59	8	472	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	8	360	112	4704	\$0.15	527	\$79.03	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	8.3
B-164	Stair	2L-T8-2'x2'	2	59	5	295	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	5	225	70	4704	\$0.15	329	\$49.39	5	\$22.28	\$60.00	\$82.28	\$111.40	\$300.00	\$411.40	\$0.00	8.3
B-164 B-165	Stair Art Room C	8' Fixture w/ x2 4' 2L T8 3L-T8-1'x4' P	3	114 87	42	114 3654	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	1 42	114 2646	1008	4704 4704	\$0.15 \$0.15	0 4,742	\$0.00 \$711.24	42	\$0.00 \$23.93	\$0.00 \$60.00	\$0.00 \$83.93	\$0.00 \$1,005.06	\$0.00 \$2,520.00	\$0.00 \$3,525.06	\$0.00 \$0.00	5.0
B-165 B-166	Art Room C Storage	TRACK HEAD 3L-T8-2'x2'	3	75 87	24 3	1800 261	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	75 68	24	1800 204	0 57	4704 4704	\$0.15 \$0.15	0 268	\$0.00 \$40.22	3	\$0.00 \$23.93	\$0.00 \$60.00	\$0.00 \$83.93	\$0.00 \$71.79	\$0.00 \$180.00	\$0.00 \$251.79	\$0.00 \$0.00	6.3
B-167	Storge	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
B-168	Passage	3L-T8-2'x4'	3	87	2	174	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0
B-168	Passage	TRACK HEAD	1	75	6	450	Existing to Remair	QHE3X32T8/UNV/ISL-SC Existing to Remain	1	75	6	450	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	

	SOUTH BRUNSWICK H	HIGH SCHOOL Existing Fixtures					I	Proposed	E'		APPENDIX	E	1	1	1	Ti	res Retrofitte		1		¥114	Installation Co		LIGHTII	NG AUDIT	
Room			Lamps per		Qty of	Total		Proposed	Lamps per		Qty of	Total	Wattage	Average		Energy	Energy		Material	Labor		Total			Rebate	Simple
Number	Room Name	Lighting Fixture Description	Fixture	Watts	Fixtures	Watts	Description		Fixture	Watts	Fixtures	Watts	Reduction	Burn Hours	Ave \$/kwh	Savings, kWh	Savings, \$	Qty	Each	Each	Total Each	Materials	Total Labor	Total All	Estimate	Payback
B-169	Storage	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
B-170	Storge	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
B-171	Art Room B	3L-T8-1'x4' P	3	87	42	3654	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	42	2646	1008	4704	\$0.15	4,742	\$711.24	42	\$23.93	\$60.00	\$83.93	\$1,005.06	\$2,520.00	\$3,525.06	\$0.00	5.0
B-171	Art Room B	TRACK HEAD	1	75	24	1800	Existing to Remair	QHE3X32T8/UNV/ISL-SC Existing to Remain	1	75	24	1800	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
B-172	Acid Room	2L-T8-WALL	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
B-174	Dark Room Passage	3L-T8-2'x4'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	3	189	72	4704 4704	\$0.15 \$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
B-175	Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
B-176	Press Room	3L-T8-2'x4'	3	87	0	0	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	0	0	0	4704	\$0.15	0	\$0.00	0	\$23.93	\$60.00	\$83.93	\$0.00	\$0.00	\$0.00	\$0.00	
B-177	LUCY	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-178	LUCY	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-179	Art Room A	3L-T8-1'x4' P	3	87	42	3654	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	42	2646	1008	4704	\$0.15	4,742	\$711.24	42	\$23.93	\$60.00	\$83.93	\$1,005.06	\$2,520.00	\$3,525.06	\$0.00	5.0
B-179	Art Room A	TRACK HEAD	1	75	24	1800	Existing to Remain	Existing to Remain	1	75	24	1800	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
B-180	Corridior	2L-T8-2'x2'	2	59	34	2006	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	34	1530	476	4704	\$0.15	2,239	\$335.87	34	\$22.28	\$60.00	\$82.28	\$757.52	\$2,040.00	\$2,797.52	\$0.00	8.3
B-181	Mech. Skills Center	2L-T8-1'x4' P	2	59	42	2478	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	42	1764	714	4704	\$0.15	3,359	\$503.80	42	\$22.28	\$60.00	\$82.28	\$935.76	\$2,520.00	\$3,455.76	\$0.00	6.9
B-181	Mech. Skills Center	3L-T8-2'x4'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
B-183	Project Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
B-185	General Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
B-186	General Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
B-187	Design Studio - A	2L-T8-1'x4' P	2	59	42	2478	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	42	1764	714	4704	\$0.15	3,359	\$503.80	42	\$22.28	\$60.00	\$82.28	\$935.76	\$2,520.00	\$3,455.76	\$0.00	6.9
B-188	Project Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
B-189	Electrical Closet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-190	Closet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-191	Design Studio - B	3L-T8-1'x4' P	3	87	20	1740	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	20	1260	480	4704	\$0.15	2,258	\$338.69	20	\$23.93	\$60.00	\$83.93	\$478.60	\$1,200.00	\$1,678.60	\$0.00	5.0

	SOUTH BRUNSWICK HIG	GH SCHOOL Existing Fixtures						Proposed	Fivtures		APPENDIX.	E				Fixt	ures Retrofitte	d			Unit	Installation Co	net	LIGHTIN	G AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Troposea	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-192	Drafting/Graphics	3L-T8-1'x4' P	3	87	53	4611	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	53	3339	1272	4704	\$0.15	5,983	\$897.52	53	\$23.93	\$60.00	\$83.93	\$1,268.29	\$3,180.00	\$4,448.29	\$0.00	5.0
	Area "C"																									
C-100, C-138	Instrumental Music, Passage	3L-T8-1'x4' P	3	87	66	5742	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	66	4158	1584	4704	\$0.15	7,451	\$1,117.67	66	\$23.93	\$60.00	\$83.93	\$1,579.38	\$3,960.00	\$5,539.38	\$0.00	5.0
C-100	Instrumental Music	3L-T8-2'x2'	3	87	7	609	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	7	476	133	4704	\$0.15	626	\$93.84	7	\$23.93	\$60.00	\$83.93	\$167.51	\$420.00	\$587.51	\$0.00	6.3
C-100	Instrumental Music	2L-T8-6"x4'	2	59	14	826	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	14	588	238	4704	\$0.15	1,120	\$167.93	14	\$22.28	\$60.00	\$82.28	\$311.92	\$840.00	\$1,151.92	\$0.00	6.9
C-101 - C-104	Closet	1L-PL-T-6" 2L-T8-2'x2'	1 2	26 59	4 2	104 118	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	1 2	26 45	4 2	104 90	0 28	4704 4704	\$0.15 \$0.15	0 132	\$0.00 \$19.76	0	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$44.56	\$0.00 \$120.00	\$0.00 \$164.56	\$0.00 \$0.00	8.3
							1,	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC									******									
C-106	Office	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
C-107	Music Library	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
C-108	Office	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
C-109, 118	Passage/Practice	2L-T8-2'x2'	2	59	5	295	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	5	225	70	4704	\$0.15	329	\$49.39	5	\$22.28	\$60.00	\$82.28	\$111.40	\$300.00	\$411.40	\$0.00	8.3
C-110	Passage	2L-T8-2'x2'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	2	90	28	4704	\$0.15	132	\$19.76	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	8.3
C-111	Instrument Repair	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
C-112, 113	Practice	1L-T8-1'x4'	1	30	10	300	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE1X32T8/UNV/ISL-SC	1	22	10	220	80	4704	\$0.15	376	\$56.45	10	\$22.28	\$60.00	\$82.28	\$222.80	\$600.00	\$822.80	\$0.00	14.6
C-114, 115	Practice	1L-T8-1'x4'	1	30	14	420	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	1	22	14	308	112	4704	\$0.15	527	\$79.03	14	\$22.28	\$60.00	\$82.28	\$311.92	\$840.00	\$1,151.92	\$0.00	14.6
C-116	Passage	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	QHE1X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
C-117	Passage	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
C-119, C120	Practice	1L-T8-1'x4'	1	30	4	120	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	1	22	4	88	32	4704	\$0.15	151	\$22.58	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	14.6
C-121	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE1X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
C-122	Vocal Music	3L-T8-1'x4' P	3	87	52	4524	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	52	3276	1248	4704	\$0.15	5,871	\$880.59	52	\$23.93	\$60.00	\$83.93	\$1,244.36	\$3,120.00	\$4,364.36	\$0.00	5.0
C-122	Vocal Music	2L-T8-6"x4'	2	59	52	3068	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	52	2184	884	4704	\$0.15	4,158	\$623.75	52	\$22.28	\$60.00	\$82.28	\$1,158.56	\$3,120.00	\$4,278.56	\$0.00	6.9
C-123 - C-131	Closet	IL-PL-T-6"	1	26	8	208	Existing to Remair	Existing to Remain	1	26	8	208	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
C-132	Storage	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
C-132A	Storage	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3

	SOUTH BRUNSWICK I	Existing Fixtures						Proposed	Fixtures		APPENDIX	E				Fixt	ures Retrofitte	d			Unit I	nstallation Co	ost	LIGHTI	NG AUDIT	
Room Number	Room Name	Lighting Fixture Description	n Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	11,7	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	F	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
C-132B	Elec. Storage	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
C-133	Passage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
C-134	Storage	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
C-134	Storage	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
					·			FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2									1								
C-135	Passage	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
C-136	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
C-136	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
C-139	Corridor	2L-T8-2'x2'	2	59	28	1652	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3	2	45	28	1260	392	4704	\$0.15	1,844	\$276.60	28	\$22.28	\$60.00	\$82.28	\$623.84	\$1,680.00	\$2,303.84	\$0.00	8.3
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
C-139 C-140	Corridor Vestubule	1L-INCAND-6" 1L-PL-T-6"	1	100 26	6	600 52	Existing to Remair Existing to Remair	Existing to Remair Existing to Remair	1	100 26	6	600 52	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	
C-142	Passage	1L-INCAND-6"	1	100	4	400	Existing to Remair	Existing to Remain	1	100	4	400	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
C-142A	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
C-145 C-145	Auditorium Auditorium	1L-MH-12" 250W 1L-Incandescent-12" 30(	1	288 324	42 36	12096 11664	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	1	288 324	42 36	12096 11664	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	
C-146	Lobby	2L-T8-2'x2'	2	59	52	3068	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	52	2340	728	4704	\$0.15	3,425	\$513.68	52	\$22.28	\$60.00	\$82.28	\$1,158.56	\$3,120.00	\$4,278.56	\$0.00	8.3
C-146 C-146A	Lobby Alcove	1L-PL-T-6" 2L-T8-2'x2'	1 2	26 59	32 52	832 3068	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	1 2	26 45	32 52	832 2340	0 728	4704 4704	\$0.15 \$0.15	0 3,425	\$0.00 \$513.68	0 52	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$1,158.56	\$0.00 \$3,120.00	\$0.00 \$4,278.56	\$0.00 \$0.00	8.3
C-140A			2	39	52	3008	Reiamp, Rebaliast	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	52	2340	728	4/04	\$0.15	3,423	\$313.08	32	\$22.28	\$60.00	382.28	\$1,138.30	\$3,120.00	54,278.36	\$0.00	8.3
C-147	Vestubule	2L-T8-2'x2'	2	59	10	590	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	10	450	140	4704	\$0.15	659	\$98.78	10	\$22.28	\$60.00	\$82.28	\$222.80	\$600.00	\$822.80	\$0.00	8.3
C-148	Display	TRACK HEAD	1	75	5	375	Existing to Remair	Existing to Remain	1	75	5	375	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
C-149 C-150	Display	TRACK HEAD	1	75	5	375	Existing to Remain	Existing to Remain	1	75	5	375	0	4704 4704	\$0.15 \$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
C-151	Passage	1L-INCAND-6"	1	100	4	400	Existing to Remair	Existing to Remain	1	100	4	400	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
C-151A	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
C-152	Corridor	2L-T8-2'x2'	2	59	32	1888	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	32	1440	448	4704	\$0.15	2,107	\$316.11	32	\$22.28	\$60.00	\$82.28	\$712.96	\$1,920.00	\$2,632.96	\$0.00	8.3
C-153	Vestubule	2L-PL-T-9"	2	52	2	104	Existing to Remair	QHE2X32T8/UNV/ISL-SC Existing to Remain	2	52	2	104	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<del>                                     </del>
C-154	Passage	2L-T8-2'x2'	2	59	12	708	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	12	540	168	4704	\$0.15	790	\$118.54	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	8.3
C-155	Passage	2L-T8-2'x2'	2	59	6	354	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	6	270	84	4704	\$0.15	395	\$59.27	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	8.3
C-156	Classroom	2L-T8-1'x4' P	2	59	14	826	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	14	588	238	4704	\$0.15	1,120	\$167.93	14	\$22.28	\$60.00	\$82.28	\$311.92	\$840.00	\$1,151.92	\$0.00	6.9
C-157	Classroom	2L-T8-1'x4' P	2	59	15	885	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	15	630	255	4704	\$0.15	1,200	\$179.93	15	\$22.28	\$60.00	\$82.28	\$334.20	\$900.00	\$1,234.20	\$0.00	6.9
C-158	Men's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		

		Existing Fixtures						Proposed	Fixtures					1	1	Fixt	ares Retrofitte	d			Unit	installation Co	st		1	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	114	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
C-159	Counselor	3L-T8-1'x4' P	3	87	8	696	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	63	8	504	192	4704	\$0.15	903	\$135.48	8	\$23.93	\$60.00	\$83.93	\$191.44	\$480.00	\$671.44	\$0.00	5.0
C-160	Conference	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
C-160	Conference	1L-PL-T-6"	1	32	8	256	Existing to Remair	Existing to Remain	1	32	8	256	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<u> </u>
C-161	Chair	3L-T8-1'x4' P	3	87	8	696	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	8	504	192	4704	\$0.15	903	\$135.48	8	\$23.93	\$60.00	\$83.93	\$191.44	\$480.00	\$671.44	\$0.00	5.0
C-162	Women's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
C-163	Vestubule	2L-PL-T-9"	2	52	2	104	Existing to Remair	QHE2X32T8/UNV/ISL-SC Existing to Remain	2	52	2	104	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
C-164	Classroom	2L-T8-1'x4' P	2	59	15	885	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	15	630	255	4704	\$0.15	1,200	\$179.93	15	\$22.28	\$60.00	\$82.28	\$334.20	\$900.00	\$1,234.20	\$0.00	6.9
C-165	Classroom	2L-T8-1'x4' P	2	59	14	826	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	14	588	238	4704	\$0.15	1,120	\$167.93	14	\$22.28	\$60.00	\$82.28	\$311.92	\$840.00	\$1,151.92	\$0.00	6.9
								QHE2X32T8/UNV/ISL-SC																		
D-100	Area "D"  Mechanical Room	4L-T8-1'x4'	4	114	80	9120	Relamp, Reballast	Sylvania Lamps	4	84	80	6720	2400	4704	\$0.15	11,290	\$1,693.44	80	\$25.44	\$60.00	\$85,44	\$2,035.20	\$4,800.00	\$6,835.20	\$0.00	4.0
D-100	weenamear Room	4110-1 24	*	114	80	9120	Retainp, Rebanast	FO28/835/XP/ECO3 Sylvania Ballast QHE4X32T8/UNV/ISL-SC	*	04	80	6720	2400	4704	30.13	11,290	31,093.44	80	323.44	300.00	303.44	32,033.20	34,000.00	30,833.20	30.00	4.0
D-101	Receiving	4L-T8-1'x4'	4	114	42	4788	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	4	84	42	3528	1260	4704	\$0.15	5,927	\$889.06	42	\$25.44	\$60.00	\$85.44	\$1,068.48	\$2,520.00	\$3,588.48	\$0.00	4.0
D-102	Custodians	2L-T8-2'x2'	2	59	9	531	Relamp, Reballast	QHE4X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	9	405	126	4704	\$0.15	593	\$88.91	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	8.3
D-103	Toilet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-104	Lockers	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-104A	Lockers	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-105	Passage	4L-T8-1'x4'	4	114	2	228	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	4	84	2	168	60	4704	\$0.15	282	\$42.34	2	\$25.44	\$60.00	\$85.44	\$50.88	\$120.00	\$170.88	\$0.00	4.0
D-106	Corridor	2L-T8-2'x2'	2	59	6	354	Relamp, Reballast	Sylvania Ballast QHE4X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3	2	45	6	270	84	4704	\$0.15	395	\$59.27	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	8.3
D-108	Vestibule	2L-T8-2'x2'	2	59	2	118	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	45	2	90	28	4704	\$0.15	132	\$19.76	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	8.3
								FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC																		
D-109	Faculty	2L-T8-1'x4' P	2	59	12	708	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
D-110	Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
D-111	Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
D-113	Passage	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
D-114	Faculty Dining	2L-T8-1'x4' P	2	59	27	1593	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
D-115	Cafeteria - A	1L-PL-T-6"	1	26	72	1872	Existing to Remain	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Existing to Remain	1	26	72	1872	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<u> </u>

		Existing Fixtures					1	Proposed	Fixtures						1	Fixt	ures Retrofitte	d			Unit	Installation Co	ost		1	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts		Burn Hour	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
D-115	Cafeteria - A	2L-T8-WALL	2	59	40	2360	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	40	1680	680	4704	\$0.15	3,199	\$479.81	40	\$22.28	\$60.00	\$82.28	\$891.20	\$2,400.00	\$3,291.20	\$0.00	6.9
D-116	Corridor	2L-T8-2'x2'	2	59	46	2714	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	46	2070	644	4704	\$0.15	3,029	\$454.41	46	\$22.28	\$60.00	\$82.28	\$1,024.88	\$2,760.00	\$3,784.88	\$0.00	8.3
D-117	Corridor	2L-T8-2'x2'	2	59	13	767	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	13	585	182	4704	\$0.15	856	\$128.42	13	\$22.28	\$60.00	\$82.28	\$289.64	\$780.00	\$1,069.64	\$0.00	8.3
D-117	Corridor	1L-PL-T-6"	1	26	2	52	Existing to Remair	QHE2X32T8/UNV/ISL-SC Existing to Remain	1	26	2	52	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
D-118	School Store	3L-T8-2'x2'	3	87	6	522	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	6	408	114	4704	\$0.15	536	\$80.44	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	6.3
D-119	Store Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
D-120	Distributive Education	2L-T8-1'x4' P	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
D-124	Women's Toilet	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
D-125	Vestibule	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-126	Corridor	2L-T8-2'x2'	2	59	32	1888	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	32	1440	448	4704	\$0.15	2,107	\$316.11	32	\$22.28	\$60.00	\$82.28	\$712.96	\$1,920.00	\$2,632.96	\$0.00	8.3
D-126	Corridor	1L-PL-T-6"	1	26	4	104	Existing to Remair	Existing to Remain	1	26	4	104	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
D-126 D-127	Corridor Servery	1L-MH 400W 2L-T8-2'x2'	2	450 59	8	3600 236	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	1 2	450 45	8	3600 180	0 56	4704 4704	\$0.15 \$0.15	0 263	\$0.00 \$39.51	0 4	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$89.12	\$0.00 \$240.00	\$0.00 \$329.12	\$0.00 \$0.00	8.3
	,				·			FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2																	
D-127	Servery	3L-T8-2'x2'	3	87	39	3393	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	39	2652	741	4704	\$0.15	3,486	\$522.85	39	\$23.93	\$60.00	\$83.93	\$933.27	\$2,340.00	\$3,273.27	\$0.00	6.3
D-127	Servery	3L-T8-2'x2'	3	87	11	957	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	11	748	209	4704	\$0.15	983	\$147.47	11	\$23.93	\$60.00	\$83.93	\$263.23	\$660.00	\$923.23	\$0.00	6.3
D-127 D-127	Servery	1L-PL-T-6" 2L-PL-33"-P	1 2	26 78	12	312 156	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	1 2	26 78	12	312 156	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	
D-127 D-128	Servery Dishwash	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
D-129	Vestibule	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-130	Toilet	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
D-131	Lockers	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-132	Lockers	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-133	Toilet	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
D-134	Passage	3L-T8-2'x4'	2	87	2	174	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0
D-135	Janitor Closet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3

	SOUTH BRUNSWICK H	GH SCHOOL Existing Fixtures					I	Proposed	Fivtures		APPENDIX I	E	1		1	Fiets	ıres Retrofitte	a	1		Unit l	Installation Co	net	LIGHTIN	IG AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Troposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Enouge	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
D-137	Pantry	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
D-138	Kitchen	3L-T8-2'x2'	3	87	16	1392	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	16	1088	304	4704	\$0.15	1,430	\$214.50	16	\$23.93	\$60.00	\$83.93	\$382.88	\$960.00	\$1,342.88	\$0.00	6.3
D-139	Refuse	1L-T8-1'x4'	1	30	1	30	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE1X32T8/UNV/ISL-SC	1	22	1	22	8	4704	\$0.15	38	\$5.64	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	14.6
D-140	Alcove	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
D-141	Office	2L-T8-1'x4' P	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
D-142	Storage	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
D-143	Cafeteria - B	1L-PL-T-6"	1	26	63	1638	Existing to Remair	Existing to Remain	1	26	63	1638	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>†</b>
D-143	Cafeteria - B	2L-T8-WALL	2	59	40	2360	Relamp, Reballast	Sylvania Lamps	2	42	40	1680	680	4704	\$0.15	3,199	\$479.81	40	\$22.28	\$60.00	\$82.28	\$891.20	\$2,400.00	\$3,291.20	\$0.00	6.9
D-145	Corridor	2L-T8-2'x2'	2	59	32	1888	Relamp, Reballast	FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	45	32	1440	448	4704	\$0.15	2,107	\$316.11	32	\$22.28	\$60.00	\$82.28	\$712.96	\$1,920.00	\$2,632.96	\$0.00	8.3
D-145	Corridor	1L-PL-T-6"				52	Existing to Remair	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC		26		52		4704	\$0.15		\$0.00		\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
D-145	Corridor	1L-PL-1-6"	1	26	2	52	Existing to Remair	Existing to Remain	1	26	2	52	0	4/04	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Area "E"																									
E-100	Boy's Team Room	3L-T8-2'x2'	3	87	20	1740	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	20	1360	380	4704	\$0.15	1,788	\$268.13	20	\$23.93	\$60.00	\$83.93	\$478.60	\$1,200.00	\$1,678.60	\$0.00	6.3
E-101	Showers	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
E-102	Toilets	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
E-103	Passage	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
E-104	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-105	Coaches	3L-T8-2'x2'	3	87	6	522	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	6	408	114	4704	\$0.15	536	\$80.44	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	6.3
E-106	Lockers	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-106	Lockers	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
E-107	Showers	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-108	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
E-109	Uniform Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-110	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
E-111	Alcove/Trainer	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
								QHE2X32T8/UNV/ISL-SC	1	1			1	1	1			l	1	l	1	1	1	l	1	1

	SOUTH BRUNSWICK H	GH SCHOOL Existing Fixtures					1	Proposed	Fixtures		APPENDIX E	<b>.</b>	1			Fixt	ıres Retrofitte	1	ı		Unit	Installation Co	net	LIGHTIN	NG AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Порозеа	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Enouge	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total	Total Labor	Total All	Rebate Estimate	Simple Payback
E-111	Alcove/Trainer	3L-T8-2'x2'	3	87	7	609	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	7	476	133	4704	\$0.15	626	\$93.84	7	\$23.93	\$60.00	\$83.93	\$167.51	\$420.00	\$587.51	\$0.00	6.3
E-112	Whirlpool	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
E-113	Uniform Washing	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
E-114	Work Room	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-115	Closet	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-116	Coaches	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-117	Lockers	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-118	Uniform Storage	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-119	Toilet	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
E-120	Passage	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
E-121	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-122	Girls Team Room	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-122	Girls Team Room	3L-T8-2'x2'	3	87	8	696	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	8	544	152	4704	\$0.15	715	\$107.25	8	\$23.93	\$60.00	\$83.93	\$191.44	\$480.00	\$671.44	\$0.00	6.3
E-123	Showers	2L-T8-2'x2'	2	59	5	295	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	5	225	70	4704	\$0.15	329	\$49.39	5	\$22.28	\$60.00	\$82.28	\$111.40	\$300.00	\$411.40	\$0.00	8.3
E-125	Toilet	2L-T8-2'x2'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	4	180	56	4704	\$0.15	263	\$39.51	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	8.3
E-125	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-126	Passage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-127	Janitor Closet	1L-T8-1'x4'	1	30	1	30	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE1X32T8/UNV/ISL-SC	1	22	1	22	8	4704	\$0.15	38	\$5.64	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	14.6
E-128	Toilets	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-129	Wash Area	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-130	Passage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-131	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3

	SOUTH BRUNSWICK H	GH SCHOOL Existing Fixtures						Proposed	Fixtures		APPENDIX E		ı		ı	Fixt	ıres Retrofitted	d			Unit	Installation Co	net	LIGHTIN	G AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Troposcu	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
E-132 E-133	Alcove Lobby	1L-PL-T-6" 2L-T8-2'x2'	2	26 59	4 18	104 1062	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	26 45	4 18	104 810	0 252	4704 4704	\$0.15 \$0.15	0 1,185	\$0.00 \$177.81	0 18	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$401.04	\$0.00 \$1,080.00	\$0.00 \$1,481.04	\$0.00 \$0.00	8.3
E-133 E-133	Lobby Lobby	1L-PL-T-6" 1L-MH 400W	1	26 450	3 4	78 1800	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	1	26 450	3 4	78 1800	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	
E-134	Vestibule	1L-PL-T-6"	1	26	2	52	Existing to Remair	Existing to Remain	1	26	2	52	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
E-135	Snack Bar	3L-T8-2'x4'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
E-136	Vestibule	1L-PL-T-6"	1	26	2	52	Existing to Remair	Existing to Remain	1	26	2	52	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
E-137	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-138	Toilets	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-139	Wash Area	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-140 E-141	Alcove Vestibule	1L-PL-T-6" 2L-T8-2'x2'	1 2	26 59	6	156 59	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	1 2	26 45	6	156 45	0 14	4704 4704	\$0.15 \$0.15	0 66	\$0.00 \$9.88	0	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$0.00	8.3
E-142	Passage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
							-	FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	J																	
E-143	Passage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-144	Shower	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
E-144	Shower	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
E-145	Athletic Director	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-146	Office	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-147	Corridor	2L-T8-2'x2'	2	59	64	3776	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	64	2880	896	4704	\$0.15	4,215	\$632.22	64	\$22.28	\$60.00	\$82.28	\$1,425.92	\$3,840.00	\$5,265.92	\$0.00	8.3
E-148	Vestibule	1L-PL-T-6"	1	26	2	52	Existing to Remair	Existing to Remain	1	26	2	52	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
E-149 E-149	Auxilary Gymnasiun Auxilary Gymnasiun	IL-MH 400W IL-MH-O - 400W	1	450 450	12 7	5400 3150	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	1	450 450	12 7	5400 3150	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	+
E-150, E-151	Elec. /Storage	1L-T8-1'x4'	1	30	15	450	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE1X32T8/UNV/ISL-SC	1	22	15	330	120	4704	\$0.15	564	\$84.67	15	\$22.28	\$60.00	\$82.28	\$334.20	\$900.00	\$1,234.20	\$0.00	14.6
E-152, E-153	Storage	1L-T8-1'x4'	1	30	0	0	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE1X32T8/UNV/ISL-SC	1	22	0	0	0	4704	\$0.15	0	\$0.00	0	\$22.28	\$60.00	\$82.28	\$0.00	\$0.00	\$0.00	\$0.00	
E-155	Gymnasium	IL-MH 400W	1	450	44	19800	Existing to Remair	Existing to Remain	1	450	44	19800	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
E-155 E-156	Gymnasium Corridor	IL-MH-Q - 400W 2L-T8-2'x2'	2	450 59	16 52	7200 3068	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	450 45	16 52	7200 2340	728	4704 4704	\$0.15 \$0.15	3,425	\$0.00 \$513.68	52	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$1,158.56	\$3,120.00	\$0.00 \$4,278.56	\$0.00 \$0.00	8.3
E-158	Vestibule	2L-PL-T-9"	2	52	2	104	Existing to Remair	Existing to Remain	2	52	2	104	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
E-159	Weight Room	3L-T8-1'x4' P	3	87	30	2610	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	30	1890	720	4704	\$0.15	3,387	\$508.03	30	\$23.93	\$60.00	\$83.93	\$717.90	\$1,800.00	\$2,517.90	\$0.00	5.0
E-160	Storage Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-161	Storage Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3

	SOUTH BRUNSWICK H	HIGH SCHOOL Existing Fixtures					ı	Proposed	Fivtures		APPENDIX F	Ē	ı	1	ı	Fixt	ıres Retrofitte	1			Unit	Installation C	net	LIGHTIN	G AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	1100000	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
E-162	Storage Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-163	Lockers	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
E-164	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
E-165	P.E.Office	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
E-166	P.E. Lockers	3L-T8-2'x2'	3	87	19	1653	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	19	1292	361	4704	\$0.15	1,698	\$254.72	19	\$23.93	\$60.00	\$83.93	\$454.67	\$1,140.00	\$1,594.67	\$0.00	6.3
E-167	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-169	Alcove	1L-PL-T-6"	1	26	1	26	Existing to Remair	Existing to Remain	1	26	1	26	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
E-170	Toilets	3L-T8-2'x2'	3	87	6	522	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	6	408	114	4704	\$0.15	536	\$80.44	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	6.3
E-171	Showers	2L-T8-2'x2'	2	59	9	531	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	9	405	126	4704	\$0.15	593	\$88.91	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	8.3
E-172	Toilets	3L-T8-2'x2'	3	87	5	435	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast OHE3X32T8/UNV/ISL-SC	3	68	5	340	95	4704	\$0.15	447	\$67.03	5	\$23.93	\$60.00	\$83.93	\$119.65	\$300.00	\$419.65	\$0.00	6.3
E-173	Showers	2L-T8-2'x2'	2	59	8	472	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	8	360	112	4704	\$0.15	527	\$79.03	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	8.3
E-174	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-175	Alcove	1L-PL-T-6"	1	26	1	26	Existing to Remair	Existing to Remain	1	26	1	26	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	- (2
E-176	P.E.Office	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
E-177	P.E. Lockers	3L-T8-2'x2'	3	87	15	1305	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	15	1020	285	4704	\$0.15	1,341	\$201.10	15	\$23.93	\$60.00	\$83.93	\$358.95	\$900.00	\$1,258.95	\$0.00	6.3
E-178	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
E-179	Lockers	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
E-180	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
E-181	Storage Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-182	Janitor Closet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
E-183	Comm. Closet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
E-184	Storage Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
E-185	Storage Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
								J.II.J.C.D.T.O.CH VIISID-SC						4704	\$0.15			0				<u> </u>				

		Existing Fixtures						Proposed	Fixtures							Fixt	ures Retrofitte	d			Unit I	nstallation Co	st		1	
Room Number	Room Name	Lighting Fixture Descriptio	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
100	Addition (2001) Vestibule/Foyer	2L-PL-C-	2	56	4	224	Existing to Remain	Existing to Remain	2	56	4	224	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
100 101	Vestibule/Foyer	ar pr T	2	0.4	11	1612	Polision to Bounda	Polision to Bounds	2	0.4	11	1612	0	4704	\$0.15	0	¢0.00	0	60.00	60.00	60.00	60.00	60.00	60.00	60.00	
101	Reception Work Room	2L-PL-T 4L-T8-2'x4'	4	84 114	18 2	1512 228	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	4	84 84	18 2	1512 168	60	4704 4704	\$0.15 \$0.15	282	\$0.00 \$42.34	2	\$0.00 \$25.44	\$0.00 \$60.00	\$0.00 \$85.44	\$0.00 \$50.88	\$0.00 \$120.00	\$0.00 \$170.88	\$0.00 \$0.00	4.0
								FO28/835/XP/ECO3 Sylvania Ballast OHE4X32T8/UNV/ISL-SC																		
103	Vice Principal	3L-T8-2'x4'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
104	Principal	3L-T8-2'x4'		0.00		348	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC				252	0.0	4704	\$0.15	452	\$67.74		\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	
104	Principal	3L-18-2'x4	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	4	252	96	4/04	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
105	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
106	Conference room	4L-T8-2'x4'	4	114	6	684	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	4	84	6	504	180	4704	\$0.15	847	\$127.01	6	\$25.44	\$60.00	\$85.44	\$152.64	\$360.00	\$512.64	\$0.00	4.0
								Sylvania Ballast																		
107	Music Room	2L-T8	2	59	46	2714	Relamp, Reballast	QHE4X32T8/UNV/ISL-SC	2	42	46	1932	782	4704	\$0.15	3,679	\$551.78	46	\$22.28	\$60.00	\$82.28	\$1,024.88	\$2,760.00	\$3,784.88	\$0.00	6.9
107	Music Room	2L-18	2	39	46	2/14	Reiamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	46	1932	782	4/04	\$0.15	3,079	\$331.78	40	\$22.28	\$60.00	382.28	\$1,024.88	\$2,700.00	\$3,784.88	\$0.00	0.9
								Sylvania Ballast																		
107	Music Room	4L-T8-2'x4'	4	114	40	4560	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	4	84	40	3360	1200	4704	\$0.15	5,645	\$846.72	40	\$25.44	\$60.00	\$85.44	\$1,017.60	\$2,400.00	\$3,417.60	\$0.00	4.0
							1,	FO28/835/XP/ECO3								.,							. ,			
								Sylvania Ballast QHE4X32T8/UNV/ISL-SC																		
108	Music Office	3L-T8-2'x4'	3	87	4	348	Relamp, Reballast	Sylvania Lamps	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
								FO28/835/XP/ECO3 Sylvania Ballast																		
								QHE3X32T8/UNV/ISL-SC																		
109	Music Instruction	2L-T8	2	59	12	708	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
								Sylvania Ballast																		
110	Storage Room	2L-T8-2'x4'	2	59	6	354	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	6	252	102	4704	\$0.15	480	\$71.97	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	6.9
110	biologe Room	20 10 2 34	_			334	reamp, recumen	FO28/835/XP/ECO3	_			232	102	4704	\$0.15	400	4,1.,,	Ů	922.20	\$66.66	502.20	0133.00	\$300.00	ψ493.00	40.00	0.7
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
111	Corridor	2L-T8-2'x4'	2	59	13	767	Relamp, Reballast	Sylvania Lamps	2	42	13	546	221	4704	\$0.15	1,040	\$155.94	13	\$22.28	\$60.00	\$82.28	\$289.64	\$780.00	\$1,069.64	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
112	Stair 'A'	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
113	Guidance office	4L-T8-2'x4'	4	114	7	798	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	4	84	7	588	210	4704	\$0.15	988	\$148.18	7	\$25.44	\$60.00	\$85.44	\$178.08	\$420.00	\$598.08	\$0.00	4.0
								FO28/835/XP/ECO3 Sylvania Ballast QHE4X32T8/UNV/ISL-SC																		
114	Conference Room	3L-T8-2'x4'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
								Sylvania Ballast																		
115	Office	3L-T8-2'x4'	3	87	3	261	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
115	Office	3L-18-2 X4	3	8/	3	201	Relamp, Reballast	FO28/835/XP/ECO3 Sylvania Ballast	3	0.3	3	189	12	4/04	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	50.00	5.0
116	Office	4L-T8-2'x4'	4	114	2	228	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps	4	84	2	168	60	4704	\$0.15	282	\$42.34	2	\$25.44	\$60.00	\$85.44	\$50.88	\$120.00	\$170.88	\$0.00	4.0
								FO28/835/XP/ECO3 Sylvania Ballast QHE4X32T8/UNV/ISL-SC																		
117	Office	4L-T8-2'x4'	4	114	2	228	Relamp, Reballast	Sylvania Lamps	4	84	2	168	60	4704	\$0.15	282	\$42.34	2	\$25.44	\$60.00	\$85.44	\$50.88	\$120.00	\$170.88	\$0.00	4.0
								FO28/835/XP/ECO3 Sylvania Ballast																		
								QHE4X32T8/UNV/ISL-SC																		
118	Food Lab	2L-T8	2	59	47	2773	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	47	1974	799	4704	\$0.15	3,758	\$563.77	47	\$22.28	\$60.00	\$82.28	\$1,047.16	\$2,820.00	\$3,867.16	\$0.00	6.9
								Sylvania Ballast																		
119	Closet	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
117	Closes	22 10°2 AT	2	3,	_	110	resump, reconnect	FO28/835/XP/ECO3 Sylvania Ballast	_	72	_	04	34	4704	30.13	100	423.99	_	322.20	300.00	302.20	344.50	3120.00	\$104.JU	30.00	0.7
121	Cafeteria	2L-T8	2	59	67	3953	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	67	2814	1139	4704	\$0.15	5,358	\$803.68	67	\$22.28	\$60.00	\$82.28	\$1,492.76	\$4,020.00	\$5,512.76	\$0.00	6.9
.2.	Carolina		_	3,		3,33	Amp, recouldst	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC			0,	2014	1137	4,04	ψ0.13	3,330	\$603.00		922.20	900.00	302.20	-1,772.70	,020.00	20,012.70	90.00	
121	Cafeteria	3L-PL-T	3	126	110	13860	Existing to Remair	Existing to Remain	3	126	110	13860	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	

		Existing Fixtures						Proposed	Fixtures							Fixt	ures Retrofitte	d			Unit	Installation Co	st			
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts		Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
122	Snack Area	2L-T8-2'x2'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	3	135	42	4704	\$0.15	198	\$29.64	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	8.3
123	Janitor Closet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
125	Food Service	4L-T8-2'x4'	4	114	24	2736	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	4	84	24	2016	720	4704	\$0.15	3,387	\$508.03	24	\$25.44	\$60.00	\$85.44	\$610.56	\$1,440.00	\$2,050.56	\$0.00	4.0
126	Kitchen	3L-T8-2'x4'	3	87	0	0	Relamp, Reballast	OHE4X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	0	0	0	4704	\$0.15	0	\$0.00	0	\$23.93	\$60.00	\$83.93	\$0.00	\$0.00	\$0.00	\$0.00	
127	Storage	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
128	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
129	Health Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
130	Health Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
131	Stair 'B'	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
132	Corridor	2L-T8-2'x4'	2	59	18	1062	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	18	756	306	4704	\$0.15	1,439	\$215.91	18	\$22.28	\$60.00	\$82.28	\$401.04	\$1,080.00	\$1,481.04	\$0.00	6.9
133	Gymnasium	2L-MH-PENDANT	2	900	24	21600	Remov, Replace (Potential Fixture)	Lamar LGLU654H5UR95	6	364	24	8736	12864	4704	\$0.15	60,512	\$9,076.84	24	\$594.52	\$300.00	\$894.52	\$14,268.48	\$7,200.00	\$21,468.48	\$2,400.00	2.1
134	Office	3L-T8-2'x4'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
135	Storage	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
136	Corridor	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
137	Boy's Lockers	2L-T8-2'x4'	2	59	16	944	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	16	672	272	4704	\$0.15	1,279	\$191.92	16	\$22.28	\$60.00	\$82.28	\$356.48	\$960.00	\$1,316.48	\$0.00	6.9
138	Boy's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
139 140	Boy's Shower Corridor	2L-PL-C- 2L-PL-C-	2	56 56	8	448 112	Existing to Remair	Existing to Remain Existing to Remain	2	56 56	8	448 112	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	
141	Girls Lockers	2L-T8-2'x4'	2	59	16	944	Existing to Remair Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	16	672	272	4704	\$0.15	1,279	\$191.92	16	\$22.28	\$60.00	\$82.28	\$356.48	\$960.00	\$1,316.48	\$0.00	6.9
142	Girl's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
143 144	Girl's Shower Corridor	2L-PL-C- 2L-T8-2'x4'	2	56 59	8	448 531	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	56 42	8	448 378	0 153	4704 4704	\$0.15 \$0.15	720	\$0.00 \$107.96	9	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$200.52	\$0.00 \$540.00	\$0.00 \$740.52	\$0.00 \$0.00	6.9
145	Corridor	2L-T8-2'x4'	2	59	11	649	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	11	462	187	4704	\$0.15	880	\$131.95	11	\$22.28	\$60.00	\$82.28	\$245.08	\$660.00	\$905.08	\$0.00	6.9
146	Girl's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9

	SOUTH BRUNSWICK H						ı		***		APPENDIX I		1	1			Th				** **			LIGHTIN	NG AUDIT	
		Existing Fixtures						Proposed		ı	1						ires Retrofitte	d I		1	Unit	Installation Co	st			
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
147	Janitor Closet	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
148	Boy's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
149	Custodian	2L-T8-2'x4'	2	59	0	0	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	0	0	0	4704	\$0.15	0	\$0.00	0	\$22.28	\$60.00	\$82.28	\$0.00	\$0.00	\$0.00	\$0.00	
147	Custodian	2110-2 44		3,		Ü	Relamp, Rebanast	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	-	42		Ü	· ·	4704	30.13	0	30.00	0	322.20	300.00	302.20	30.00	30.00	30.00	30.00	
150	Stair 'C'	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
151	Mechanical Room	2L-T8-PENDANT	2	59	24	1416	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	24	1008	408	4704	\$0.15	1,919	\$287.88	24	\$22.28	\$60.00	\$82.28	\$534.72	\$1,440.00	\$1,974.72	\$0.00	6.9
152	Corridor	2L-T8-2'x4'	2	59	21	1239	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	21	882	357	4704	\$0.15	1,679	\$251.90	21	\$22.28	\$60.00	\$82.28	\$467.88	\$1,260.00	\$1,727.88	\$0.00	6.9
								QHE2X32T8/UNV/ISL-SC																		
152	Corridor Student Conton	2L-PL-T 2L-T8	2	84	4 40	336	Existing to Remair	Existing to Remain	2	84	4	336 1680	0 680	4704 4704	\$0.15	2 100	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
153	Student Center	2L-18	2	59	40	2360	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	40	1680	680	4704	\$0.15	3,199	\$479.81	40	\$22.28	\$60.00	\$82.28	\$891.20	\$2,400.00	\$3,291.20	\$0.00	6.9
154	Child Study Team	4L-T8-2'x4'	4	114	4	456	Relamp, Reballast	Sylvania Lamps	4	84	4	336	120	4704	\$0.15	564	\$84.67	4	\$25.44	\$60.00	\$85.44	\$101.76	\$240.00	\$341.76	\$0.00	4.0
								FO28/835/XP/ECO3 Sylvania Ballast QHE4X32T8/UNV/ISL-SC																		
155	Conference Room	4L-T8-2'x4'	4	114	2	228	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE4X32T8/UNV/ISL-SC	4	84	2	168	60	4704	\$0.15	282	\$42.34	2	\$25.44	\$60.00	\$85.44	\$50.88	\$120.00	\$170.88	\$0.00	4.0
156	Office	4L-T8-2'x4'	4	114	2	228	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	4	84	2	168	60	4704	\$0.15	282	\$42.34	2	\$25.44	\$60.00	\$85.44	\$50.88	\$120.00	\$170.88	\$0.00	4.0
157	Office	4L-T8-2'x4'	4	114	2	228	Relamp, Reballast	OHE4X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	4	84	2	168	60	4704	\$0.15	282	\$42.34	2	\$25.44	\$60.00	\$85.44	\$50.88	\$120.00	\$170.88	\$0.00	4.0
158	Waiting	3L-T8-2'x4'	3	87	2	174	Relamp, Reballast	OHE4X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0
159	Health Suite	4L-T8-2'x4'	4	114	6	684	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	4	84	6	504	180	4704	\$0.15	847	\$127.01	6	\$25.44	\$60.00	\$85.44	\$152.64	\$360.00	\$512.64	\$0.00	4.0
								QHE4X32T8/UNV/ISL-SC																		
159	Health Suite Nurse Office	2L-PL-C-	2	56 87	2	224	Existing to Remair Relamp, Reballast	Existing to Remain	2	56 63	2	224	0 48	4704	\$0.15	0	\$0.00	2	\$0.00	\$0.00	\$0.00 \$83.93	\$0.00	\$0.00	\$0.00 \$167.86	\$0.00	5.0
160	Nurse Office	3L-T8-2'x4'	3	8/	2	174	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	03	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$107.80	\$0.00	5.0
161	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
162	Men's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
163	Women's Toilet	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
	Total First Floor				4175	366082					4175	289136	76946			361,954	\$54,293.10	3433				\$92,782	\$211,740	\$304,522	\$2,400	5.6
	Second Floor																									
	Area "A"	av mo u un			40	10.00	D.1 D.1 "	0.1			40	200	20.5	450.4	00.45	4.420	001501	40	000.00	0.00.00	002.25	0.404.0	01.000.07	** ***	00.05	4
A-212	Storage Room	2L-T8-1'x4' P	2	59	18	1062	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	18	756	306	4704	\$0.15	1,439	\$215.91	18	\$22.28	\$60.00	\$82.28	\$401.04	\$1,080.00	\$1,481.04	\$0.00	6.9
A-213	Electric Room	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
A-233	Stair No. A-1	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-233	Stair No. A-1	8' Fixture w/ x2 4' 2L T8	4	114	1	114	Existing to Remair	QHE3X32T8/UNV/ISL-SC	4	114	1	114	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	$\vdash$

	SOUTH BRUNSWICK H	GH SCHOOL Existing Fixtures						Proposed	Fixtures		APPENDIX F		1			Fixt	ures Retrofitte	d	ı		Unit	Installation Co	net	LIGHTIN	IG AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Troposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Enouge	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
A-211	Corridor	2L-T8-2'x2'	2	59	14	826	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	14	630	196	4704	\$0.15	922	\$138.30	14	\$22.28	\$60.00	\$82.28	\$311.92	\$840.00	\$1,151.92	\$0.00	8.3
A-210	Corridor	2L-T8-2'x2'	2	59	36	2124	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	36	1620	504	4704	\$0.15	2,371	\$355.62	36	\$22.28	\$60.00	\$82.28	\$802.08	\$2,160.00	\$2,962.08	\$0.00	8.3
A-232	Corridor	2L-T8-2'x2'	2	59	43	2537	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	43	1935	602	4704	\$0.15	2,832	\$424.77	43	\$22.28	\$60.00	\$82.28	\$958.04	\$2,580.00	\$3,538.04	\$0.00	8.3
A-231	Storage Room	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
A-230	Classroom C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-229	Classroom C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-228	Classroom C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-227	Classroom C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-209	Classroom A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-208	Business Room 1	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-207	Storage Room	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
A-206	Business Room 2	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-214	Small Group A	2L-T8-1'x4' P	2	59	6	354	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	6	252	102	4704	\$0.15	480	\$71.97	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	6.9
A-215	Small Group B	2L-T8-1'x4' P	2	59	12	708	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
A-216	Classroom B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-217	Computer Room	2L-T8-1'x4' P	2	59	26	1534	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	26	1092	442	4704	\$0.15	2,079	\$311.88	26	\$22.28	\$60.00	\$82.28	\$579.28	\$1,560.00	\$2,139.28	\$0.00	6.9
A-218	Storage Room	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-219	Storage Room	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-220	Storage Room	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-222	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-221	Janitor	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
A-223	Girls Restroom	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9

	SOUTH BRUNSWICK H						T		<b>.</b>		APPENDIX	E					Th				** 1.	Installation C		LIGHTI	NG AUDIT	
Room		Existing Fixtures	Lamps per		Oty of	Total		Proposed	Lamps per		Oty of	Total	Wattage	Average		Energy	res Retrofitte Energy	d	Material	Labor	Unit	Installation C			Rebate	Simple
Number	Room Name	Lighting Fixture Description	Fixture	Watts	Fixtures	Watts	Description		Fixture	Watts	Fixtures	Watts	Reduction	Burn Hours	Ave \$/kwh	Savings, kWh	Savings, \$	Qty	Each	Each	Total Each	Materials	Total Labor	Total All	Estimate	Payback
A225	Boys Restroom	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
A-224	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
A-201	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
A-226	Storage Room	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-2	Stair No. A-2	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
4.2	Stair No. A-2	8' Fixture w/ x2 4' 2L T8	4	114		114	Eviatina to Damais	Sylvania Ballast QHE3X32T8/UNV/ISL-SC	4	114		114	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
A-2 A-205	Corridor	2L-T8-2'x2'	2	59	26	1534	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FBO30/835XP/6/ECO3	2	45	26	1170	364	4704	\$0.15	1,712	\$256.84	26	\$22.28	\$60.00	\$82.28	\$579.28	\$1,560.00	\$2,139.28	\$0.00	8.3
C-201	Class	2L-T8-1'x4' P	2	59	19	1121	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	19	798	323	4704	\$0.15	1,519	\$227.91	19	\$22.28	\$60.00	\$82.28	\$423.32	\$1,140.00	\$1,563.32	\$0.00	6.9
					40			FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC			40		0			0		0								
C-204 C-204	Large Group Large Group	1L-MH-10" 100W 1L-Incandescent-10" 150W	1	125 150	24	5000 3600	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	1	125 150	24	5000 3600	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	-
C-202	Projector	1L-INCAND-6"	1	100	15	1500	Existing to Remair	Existing to Remain	1	100	15	1500	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
?	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
?	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
?	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
								QHE3X32T8/UNV/ISL-SC																		
	Area "B"																									
B-247	Classroom A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-248	Classroom A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-249	Classroom A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-250	Classroom A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Ballast OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-251	Small Group-E	2L-T8-1'x4' P	2	59	12	708	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
D 231	Shair Goup 2	22 10 134 1			12	700	reminp, recommen	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	-	12	12	304	204	4704	\$6.15	300	Q1-13.74		922.20	300.00	302.20	9207.30	\$720.00	5,07.50	50.00	0.7
B-252	Small Group-D	2L-T8-1'x4' P	2	59	6	354	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	6	252	102	4704	\$0.15	480	\$71.97	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	6.9
B-253	Small Group-C	2L-T8-1'x4' P	2	59	12	708	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
B-18/B-1	Alum. Entry/Stair No. B-	1 3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
B-1	Stair No. B-1	8' Fixture w/ x2 4' 2L T8	4	114	1	114	Existing to Remair	Existing to Remain	4	114	1	114	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
B-254	Corridor	2L-T8-2'x2'	2	59	42	2478	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	42	1890	588	4704	\$0.15	2,766	\$414.89	42	\$22.28	\$60.00	\$82.28	\$935.76	\$2,520.00	\$3,455.76	\$0.00	8.3
B-242	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		

	SOUTH BRUNSWICK H	HIGH SCHOOL Existing Fixtures						Proposed	Fixtures		APPENDIX I	E	ı			Fixt	ares Retrofitte	d	ı		Unit	Installation C	net	LIGHTIN	G AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Troposea	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-243	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-244	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-245	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-246	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-241	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-241A	Comm. Cl.	3L-T8-2'x2'	3	87	3	261	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	3	204	57	4704	\$0.15	268	\$40.22	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	6.3
B-239	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-240	Janitor	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-238	Girls Restroom	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-237	Boys Restroom	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
B-236	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-235	Elec. Cl.	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-234	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-230	Corridor	2L-T8-2'x2'	2	59	40	2360	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	40	1800	560	4704	\$0.15	2,634	\$395.14	40	\$22.28	\$60.00	\$82.28	\$891.20	\$2,400.00	\$3,291.20	\$0.00	8.3
B-233	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-232	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-231	Classroom-A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-227	House LDR	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-228	Secretary	2L-T8-1'x4' P	2	59	6	354	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	6	252	102	4704	\$0.15	480	\$71.97	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	6.9
B-226	Asst. Prin.	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-225	Storage Room	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
B-224	Chemistry	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9

		Existing Fixtures						Proposed	Fixtures						1	Fixtu	ıres Retrofitte	d			Unit	Installation Co	ost		7	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts		Average Burn Hour	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-223	Chem. Prep.	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
B-223	Chem. Prep.				3						3			4704	\$0.15			0								
B-222	Chemistry	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
								Sylvania Ballast																		
B-221	Physics	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
	,		_	-			, , , , , , , , , , , , , , , , , , , ,	FO28/835/XP/ECO3	_							-,			4	4			,	4-,		
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-220	Phys. Prep.	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast																		
								QHE2X32T8/UNV/ISL-SC																		
B-220 B-219	Phys. Prep. Physics	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps	2	42	5 30	1260	510	4704 4704	\$0.15 \$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
22.7	111,510.5	22 10 1 44 1	_		50	1770	remin, recums	FO28/835/XP/ECO3	_		30	1200	310	4704	90.15	2,377	Ψ3333.00	50	J22.20	\$60.00	302.20	\$000.40	\$1,000.00	\$2,100.10	50.00	0.7
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-211	Corridor	2L-T8-2'x2'	2	59	50	2950	Relamp, Reballast	Sylvania Lamps	2	45	50	2250	700	4704	\$0.15	3,293	\$493.92	50	\$22.28	\$60.00	\$82.28	\$1,114.00	\$3,000.00	\$4,114.00	\$0.00	8.3
								FBO30/835XP/6/ECO3 Sylvania Ballast																		
								QHE2X32T8/UNV/ISL-SC																		
B-212	AP Chemistry	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
								Sylvania Ballast																		
B-213	AP Chem. Prep.	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
			_	-			, , , , , , , , , , , , , , , , , , , ,	FO28/835/XP/ECO3	_								*****					*******		******		
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-213	AP Chem. Prep.				3						3			4704	\$0.15			0								
B-214	Chemistry	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
								Sylvania Ballast																		
B-215	AP Biology	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800,00	\$2,468.40	\$0.00	6.9
							1,	FO28/835/XP/ECO3								,							. ,	. ,		
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-216	Bio. Prep.	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast																		
B-216	n' n				3			QHE2X32T8/UNV/ISL-SC			3			4704	\$0.15			0								
B-210	Bio. Prep. Biology 2/Mixed	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast																		
								QHE2X32T8/UNV/ISL-SC																		
B-218	Storage Room	3L-T8-2'x2'	3	87	5	435	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3	3	68	5	340	95	4704	\$0.15	447	\$67.03	5	\$23.93	\$60.00	\$83.93	\$119.65	\$300.00	\$419.65	\$0.00	6.3
								Sylvania Ballast																		
B-2	Stair No. B-2	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
								FBO30/835/XP/ECO3																		
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
B-2 B-209A	Stair No. B-2	8' Fixture w/ x2 4' 2L T8 2L-T8-WALL	2	114 59	2	114 118	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	2	114 42	1 2	114 84	0 34	4704 4704	\$0.15 \$0.15	0 160	\$0.00 \$23.99	2	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$44.56	\$0.00 \$120.00	\$0.00 \$164.56	\$0.00 \$0.00	6.9
B-209A	Chem Storage	2L-10-WALL	2	39		110	Relamp, Rebanast	FO28/835/XP/ECO3 Sylvania Ballast	2	***	2	04	34	4704	30.13	100	323.99		322.20	300.00	302.20	344.30	3120.00	3104.30	30.00	0.9
B-209	Science Storage	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
								FBO30/835/XP/ECO3																		
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
B-208	Small Group-F	2L-T8-1'x4' P	2	59	9	531	Relamp, Reballast	Sylvania Lamps	2	42	9	378	153	4704	\$0.15	720	\$107.96	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast																		
B-207	Classroom-E	2L-T8-1'x4' P	2	70	10	1101	Dalama D.L.II.	QHE2X32T8/UNV/ISL-SC	2	40	19	700	323	4704	\$0.15	1.610	\$227.91	19	\$22.28	\$60.00	602.20	6400.00	£1 140.00	\$1,563.32	80.00	
B-207	Ciassroom-E	2118-1 X4 P	2	59	19	1121	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	19	798	323	4704	\$0.15	1,519	\$227.91	19	322.28	\$00.00	\$82.28	\$423.32	\$1,140.00	\$1,503.32	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-206	Classroom-D	2L-T8-1'x4' P	2	59	19	1121	Relamp, Reballast	Sylvania Lamps	2	42	19	798	323	4704	\$0.15	1,519	\$227.91	19	\$22.28	\$60.00	\$82.28	\$423.32	\$1,140.00	\$1,563.32	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast																		
								QHE2X32T8/UNV/ISL-SC																		
B-201	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
								Sylvania Ballast																		
					1		l	QHE2X32T8/UNV/ISL-SC	1	1		1	1	1	1	1		1		1		1	1			1

	SOUTH BRUNSWICK H						ı		***		APPENDIX	E					D				** **			LIGHTI	NG AUDIT	
		Existing Fixtures						Proposed			1						ures Retrofitte	d			Unit	Installation C	ost			
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-202	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-203	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
D 201	al p	ar ma u u p			20	1100	D	Sylvania Ballast QHE2X32T8/UNV/ISL-SC			20	0.40	240	450.4	00.15	1.500	4220.00	20	622.20	0.00.00	002.20	0.115.40	04 200 00	01 (15 (0	00.00	
B-204	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-205	Classroom-B	2L-T8-1'x4' P	2	59	12	708	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
	Addition (2001)																									
200	Corridor	2L-T8-2'x4'	2	59	9	531	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	9	378	153	4704	\$0.15	720	\$107.96	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	6.9
200	Corridor	2L-T8	2	59	22	1298	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	22	924	374	4704	\$0.15	1,759	\$263.89	22	\$22.28	\$60.00	\$82.28	\$490.16	\$1,320.00	\$1,810.16	\$0.00	6.9
200		N. W. G				704		Sylvania Ballast QHE2X32T8/UNV/ISL-SC				704		4004	00.45		40.00		****	60.00	60.00	00.00	00.00	0.00	60.00	
200 218	Corridor Corridor	2L-PL-C- 2L-T8-2'x4'	2	56 59	14 18	784 1062	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	2	56 42	14 18	784 756	0 306	4704 4704	\$0.15 \$0.15	0 1,439	\$0.00 \$215.91	0 18	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$401.04	\$0.00 \$1,080.00	\$0.00 \$1,481.04	\$0.00 \$0.00	6.9
							,p,	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC								1,102	7						,	,		
218	Corridor	2L-PL-C-	2	56	21	1176	Existing to Remair	Existing to Remain	2	56	21	1176	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
218 229	Corridor Corridor	3L-PL-T 2L-T8-2'x4'	2	126 59	18	504 1062	Existing to Remain	Existing to Remain Sylvania Lamps	2	126 42	4 18	504 756	0 306	4704 4704	\$0.15 \$0.15	1.439	\$0.00 \$215.91	0 18	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$401.04	\$0.00	\$0.00 \$1,481.04	\$0.00 \$0.00	6.9
229	Corridor	2L-18-2 X4	2	39	18	1002	Relamp, Reballast	FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	18	/30	300	4704	\$0.15	1,439	\$215.91	18	\$22.28	\$60.00	382.28	3401.04	\$1,080.00	51,481.04	\$0.00	6.9
229 212	Corridor	2L-PL-C-	2	56	5	280	Existing to Remair	Existing to Remain	2	56	5	280	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
212	Corridor	2L-T8-2'x4'	2	59	13	767	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	13	546	221	4704	\$0.15	1,040	\$155.94	13	\$22.28	\$60.00	\$82.28	\$289.64	\$780.00	\$1,069.64	\$0.00	6.9
212	Corridor	2L-PL-C-	2	56	8	448	Existing to Remair	Existing to Remain	2	56	8	448	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
212	Corridor	3L-PL-T	3	126	17	2142	Existing to Remain	Existing to Remain	3	126	17	2142	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
240	Storage Room	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
239	Technology Lab	2L-T8	2	59	35	2065	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	35	1470	595	4704	\$0.15	2,799	\$419.83	35	\$22.28	\$60.00	\$82.28	\$779.80	\$2,100.00	\$2,879.80	\$0.00	6.9
								QHE2X32T8/UNV/ISL-SC																		
239	Technology Lab	1L-MH	1	32	1	32	Existing to Remair	Existing to Remain	1	32	1	32	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
238	Science Room	2L-T8	2	59	34	2006	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	34	1428	578	4704	\$0.15	2,719	\$407.84	34	\$22.28	\$60.00	\$82.28	\$757.52	\$2,040.00	\$2,797.52	\$0.00	6.9
238	Science Room	1L-MH	1	32	1	32	Existing to Remair	Existing to Remain	1	32	1	32	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
236	Prep Room	3L-T8-2'x4'	3	87	6	522	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	6	378	144	4704	\$0.15	677	\$101.61	6	\$23.93	\$60.00	\$83.93	\$143.58	\$360.00	\$503.58	\$0.00	5.0
237	Storage Room	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
235	Science Room	2L-T8	2	59	35	2065	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	35	1470	595	4704	\$0.15	2,799	\$419.83	35	\$22.28	\$60.00	\$82.28	\$779.80	\$2,100.00	\$2,879.80	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
235 234	Science Room Stair "C"	1L-MH 2L-T8-2'x4'	1 2	32 59	1 4	32 236	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	1 2	32 42	1 4	32 168	0 68	4704 4704	\$0.15 \$0.15	0 320	\$0.00 \$47.98	0 4	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$89.12	\$0.00 \$240.00	\$0.00 \$329.12	\$0.00 \$0.00	6.9
234	Staff C	211 0-2 34	2	39	4	230	ксыпр, кеванаst	FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	4	108	08	+/04	30.13	320	.p+/.78	*	344.48	300.00	302.28	307.12	3240.00	\$329.12	30.00	0.9
232	Janitor	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
233	Girls Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
233	GIIIS KESITOOM	211 0-2 34	2	39		118	Aciamp, Kebanast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	64	34	+/04	aU.13	100	943.YY	2	344.48	300.00	302.28	344.30	\$120.00	\$104.30	30.00	0.9
231	Boys Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
								QHE2X32T8/UNV/ISL-SC																		

	SOUTH BRUNSWICK HI	GH SCHOOL Existing Fixtures					I	Proposed	Fivtures		APPENDIX E		I		1	Fiets	ıres Retrofitte	a			Unit	Installation Co	vet .	LIGHTIN	IG AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Порозеа	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
230	Classroom	2L-T8	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
202	Janitor	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
201	Girls Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
203	Boys Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
204	Faculty	4L-T8-2'x4'	4	114	17	1938	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE4X32T8/UNV/ISL-SC	4	84	17	1428	510	4704	\$0.15	2,399	\$359.86	17	\$25.44	\$60.00	\$85.44	\$432.48	\$1,020.00	\$1,452.48	\$0.00	4.0
204	Faculty	2L-T8	2	59	31	1829	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	31	1302	527	4704	\$0.15	2,479	\$371.85	31	\$22.28	\$60.00	\$82.28	\$690.68	\$1,860.00	\$2,550.68	\$0.00	6.9
204	Faculty	IL-MH	1	32	1	32	Existing to Remair	Existing to Remain	1	32	1	32	0	4704 4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
204	Faculty Toilet	3L-PL-T 2L-T8-2'x4'	2	126 59	1	126 59	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	126 42	1	126 42	17	4704	\$0.15 \$0.15	80	\$0.00 \$12.00	1	\$0.00 \$22.28	\$0.00 \$60.00	\$82.28	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$0.00	6.9
206	Toilet	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
207	SGI	2L-T8	2	59	13	767	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	13	546	221	4704	\$0.15	1,040	\$155.94	13	\$22.28	\$60.00	\$82.28	\$289.64	\$780.00	\$1,069.64	\$0.00	6.9
208	SGI	2L-T8	2	59	13	767	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	13	546	221	4704	\$0.15	1,040	\$155.94	13	\$22.28	\$60.00	\$82.28	\$289.64	\$780.00	\$1,069.64	\$0.00	6.9
209	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
210	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
211	Computer Lab	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
213	Stair "A"	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
214	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
215	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
216	Classroom	2L-T8	2	59	25	1475	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	25	1050	425	4704	\$0.15	1,999	\$299.88	25	\$22.28	\$60.00	\$82.28	\$557.00	\$1,500.00	\$2,057.00	\$0.00	6.9
217 241	Stair "D" Elevator Equipment Rm	2L-PL-WALL 2L-T8-2'x4'	2	26 59	1	52 59	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	26 42	1	52 42	17	4704 4704	\$0.15 \$0.15	80	\$0.00 \$12.00	1	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$0.00	6.9
220	Storage Room	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
219	Art Room (208')	2L-T8-TRACK	2	59	104	6136	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	104	4368	1768	4704	\$0.15	8,317	\$1,247.50	104	\$22.28	\$60.00	\$82.28	\$2,317.12	\$6,240.00	\$8,557.12	\$0.00	6.9
219 221	Art Room	3L-PL-T	3	126	19	2394	Existing to Remair	Existing to Remain	3	126	19	2394	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	4.0
221	Kiln	4L-T8-2'x4'	4	114	1	114	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE4X32T8/UNV/ISL-SC	4	84	1	84	30	4704	\$0.15	141	\$21.17	1	\$25.44	\$60.00	\$85.44	\$25.44	\$60.00	\$85.44	\$0.00	4.0

	SOUTH BRUNSWICK H								<b>T</b>		APPENDIX	E	1	ı			res Retrofitte				** 1.	Installation Co		LIGHTI	NG AUDIT	
Room		Existing Fixtures	Lamps per		Qty of	Total		Proposed	Lamps per		Qty of	Total	Wattage	Average		Energy	Energy		Material	Labor		Total			Rebate	Simple
Number	Room Name	Lighting Fixture Description	Fixture	Watts	Fixtures	Watts	Description		Fixture	Watts	Fixtures	Watts	Reduction	Burn Hours	Ave \$/kwh	Savings, kWh	Savings, \$	Qty	Each	Each	Total Each	Materials	Total Labor	Total All	Estimate	Payback
222	Storage Room	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
224	IDF	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
223	Storage Room	2L-T8-2'x4'	2	59	6	354	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	6	252	102	4704	\$0.15	480	\$71.97	6	\$22.28	\$60.00	\$82.28	\$133.68	\$360.00	\$493.68	\$0.00	6.9
224	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
225	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
226	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
227	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
228	Stair "B"	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
								QHE2X32T8/UNV/ISL-SC						4704	\$0.15			0								+
	Total Second Floor				2149	136667					2149	103783	32884	4704	\$0.15	154686.336	23202,9504	0 1957				\$43,755	\$117,420	\$161,175	\$0	6,9462951
					2149	130007					2149	103/63	32004			154000.550	23202.9304	1937				\$43,733	\$117,420	\$101,175	30	0.9402931
	Third Floor Area "A"																									
A-330	Stair No. A-1	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-330 A-331	Stair No. A-1 Storage Room	8' Fixture w/ x2 4' 2L T8 3L-T8-2'x2'	3	114 87	4	114 348	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	114 68	4	114 272	76	4704 4704	\$0.15 \$0.15	0 358	\$0.00 \$53.63	4	\$0.00 \$23.93	\$0.00 \$60.00	\$0.00 \$83.93	\$0.00 \$95.72	\$0.00 \$240.00	\$0.00 \$335.72	\$0.00 \$0.00	6.3
A-328	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-327	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-326	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-325	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-329	Corridor	2L-T8-2'x2'	2	59	44	2596	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	44	1980	616	4704	\$0.15	2,898	\$434.65	44	\$22.28	\$60.00	\$82.28	\$980.32	\$2,640.00	\$3,620.32	\$0.00	8.3
A-313	Small Group	2L-T8-1'x4' P	2	59	7	413	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	7	294	119	4704	\$0.15	560	\$83.97	7	\$22.28	\$60.00	\$82.28	\$155.96	\$420.00	\$575.96	\$0.00	6.9
A-312	Small Group	2L-T8-1'x4' P	2	59	9	531	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	9	378	153	4704	\$0.15	720	\$107.96	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	6.9
A-311	Corridor	2L-T8-2'x2'	2	59	14	826	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	45	14	630	196	4704	\$0.15	922	\$138.30	14	\$22.28	\$60.00	\$82.28	\$311.92	\$840.00	\$1,151.92	\$0.00	8.3
A-310	Corridor	2L-T8-2'x2'	2	59	36	2124	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	36	1620	504	4704	\$0.15	2,371	\$355.62	36	\$22.28	\$60.00	\$82.28	\$802.08	\$2,160.00	\$2,962.08	\$0.00	8.3
A-309	Comm. Cl.	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3

		Existing Fixtures						Proposed	Fixtures		, ,					Fixtu	ires Retrofitte	d		1	Unit	installation Co	st			
Room Number	Room Name	Lighting Fixture Descriptio	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage	Average Burn Hour	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Paybaci
A-308	Classroom-A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-307	Classroom-A	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Ballast OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/FCO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-306	Computer	2L-T8-1'x4' P	2	59	25	1475	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	25	1050	425	4704	\$0.15	1,999	\$299.88	25	\$22.28	\$60.00	\$82.28	\$557.00	\$1,500.00	\$2,057.00	\$0.00	6.9
							,	FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC								3,222	*******				4			42,000.000		
A-314	Small Group-G	2L-T8-1'x4' P	2	59	9	531	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	9	378	153	4704	\$0.15	720	\$107.96	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	6.9
A-315	Small Group-H	2L-T8-1'x4' P	2	59	9	531	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	9	378	153	4704	\$0.15	720	\$107.96	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	6.9
A-316	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-317	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Ballast OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-318	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-320	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-321	Janitor Closet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	68	1	68	19	4704	\$0.15	89	\$13.41		\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
								FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3																	
A-319	Women's Restroom	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
A-323	Men's Restroom	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
A-322	Vestibule	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-305	Corridor	2L-T8-2'x2'	2	59	26	1534	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	26	1170	364	4704	\$0.15	1,712	\$256.84	26	\$22.28	\$60.00	\$82.28	\$579.28	\$1,560.00	\$2,139.28	\$0.00	8.3
?	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
A-324	Storage Room	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	OHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-300	Stair No. A-2	3L-T8-2'x2'	3	87	2	174	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	2	136	38	4704	\$0.15	179	\$26.81	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	6.3
A-300 A-304	Stair No. A-2 Classroom	8' Fixture w/ x2 4' 2L T8 2L-T8-1'x4' P	4 2	114 59	1 20	114 1180	Existing to Remair Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Existing to Remain Sylvania Lamps	4 2	114 42	1 20	114 840	0 340	4704 4704	\$0.15 \$0.15	0 1,599	\$0.00 \$239.90	0 20	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$445.60	\$0.00 \$1,200.00	\$0.00 \$1,645.60	\$0.00 \$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC															,			
A-303	Classroom	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
A-302	Classroom	2L-T8-1'x4' P	2	59	18	1062	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	18	756	306	4704	\$0.15	1,439	\$215.91	18	\$22.28	\$60.00	\$82.28	\$401.04	\$1,080.00	\$1,481.04	\$0.00	6.9
A-301	Classroom	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9

	SOUTH BRUNSWICK F							D	Ti-t		APPENDIX	Ē		,		E'-t	D. 4 6'44				Tinte	Installation C		LIGHTII	NG AUDIT	
Room	Room Name	Existing Fixtures  Lighting Fixture Description	Lamps per	Watts	Qty of	Total	Description	Proposed	Lamps per	Watts	Qty of	Total	Wattage	Average	Ave \$/kwh	Energy	res Retrofitte Energy	Qty	Material	Labor	Total Each	Total	Total Labor	Total All	Rebate	Simple
Number			Fixture		Fixtures	Watts	_		Fixture		Fixtures	Watts	Reduction	Burn Hours	š	Savings, kWh	Savings, \$		Each	Each		Materials			Estimate	Payback
A-338	Toilet	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-337	Toilet	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
A-336	Meeting	3L-T8-1'x4' P	3	87	1	87	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	3	63	1	63	24	4704	\$0.15	113	\$16.93	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	5.0
A-334	Passage	2L-T8-1'x4' P	2	59	5	295	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps	2	42	5	210	85	4704	\$0.15	400	\$59.98	5	\$22.28	\$60.00	\$82.28	\$111.40	\$300.00	\$411.40	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
	Area "B"																									
B-356	Workroom	2L-T8-1'x4' P	2	59	21	1239	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	21	882	357	4704	\$0.15	1,679	\$251.90	21	\$22.28	\$60.00	\$82.28	\$467.88	\$1,260.00	\$1,727.88	\$0.00	6.9
B-358	Files	3L-T8-1'x4' P	3	87	5	435	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	3	63	5	315	120	4704	\$0.15	564	\$84.67	5	\$23.93	\$60.00	\$83.93	\$119.65	\$300.00	\$419.65	\$0.00	5.0
B-359	Conference	3L-T8-1'x4' P	3	87	4	348	Relamp, Reballast	Sylvania Ballast QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	3	63	4	252	96	4704	\$0.15	452	\$67.74	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	5.0
D 240	0.0	AT TO ILLUD		50		400		Sylvania Ballast QHE3X32T8/UNV/ISL-SC		42		101		450.4	00.15	240	225.00	2	000.00	0.000	000.00	0	6400.00	0044.04	00.00	
B-360	Guidance	2L-T8-1'x4' P	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
B-361	Guidance	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-357	Reception	2L-T8-1'x4' P	2	59	14	826	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	14	588	238	4704	\$0.15	1,120	\$167.93	14	\$22.28	\$60.00	\$82.28	\$311.92	\$840.00	\$1,151.92	\$0.00	6.9
								QHE2X32T8/UNV/ISL-SC																		
B-362	Conference	3L-T8-1'x4' P	3	87	3	261	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	3	189	72	4704	\$0.15	339	\$50.80	3	\$23.93	\$60.00	\$83.93	\$71.79	\$180.00	\$251.79	\$0.00	5.0
B-364	House LDR	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-365	Workroom	2L-T8-1'x4' P	2	59	25	1475	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	25	1050	425	4704	\$0.15	1,999	\$299.88	25	\$22.28	\$60.00	\$82.28	\$557.00	\$1,500.00	\$2,057.00	\$0.00	6.9
B-366	Passage	2L-T8-1'x4' P	2	59	5	295	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	5	210	85	4704	\$0.15	400	\$59.98	5	\$22.28	\$60.00	\$82.28	\$111.40	\$300.00	\$411.40	\$0.00	6.9
B-371	Meeting	3L-T8-1'x4' P	3	87	1	87	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	3	63	1	63	24	4704	\$0.15	113	\$16.93	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	5.0
								FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC				-					******		-							
B-369	Toilet	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-370	Toilet	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-372	Small Group	2L-T8-1'x4' P	2	59	12	708	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
B-300	Stair No. B-1	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
B-300 B-346	Stair No. B-1 Corridor	8' Fixture w/ x2 4' 2L T8 2L-T8-2'x2'	2	114 59	1 42	114 2478	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	2	114 45	1 42	114 1890	0 588	4704 4704	\$0.15 \$0.15	2,766	\$0.00 \$414.89	0 42	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$935.76	\$0.00 \$2.520.00	\$0.00 \$3,455.76	\$0.00 \$0.00	8.3
	Corridor			39				FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC				1090				,							,			0.3
B-349	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9

	SOUTH BRUNSWICK H	IGH SCHOOL Existing Fixtures					I	Proposed	Fivtures		APPENDIX I	E	1		1	First	ares Retrofitte		1		Unit	Installation Co	net	LIGHTIN	G AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Troposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-348	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-347	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-346	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-345	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-344	Small Group-K	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
B-342	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-343	Janitor Closet	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-341	Women's Restroom	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-340	Men's Restroom	2L-T8-2'x4'	2	59	3	177	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	3	126	51	4704	\$0.15	240	\$35.99	3	\$22.28	\$60.00	\$82.28	\$66.84	\$180.00	\$246.84	\$0.00	6.9
B-339	Alcove	2L-T8-2'x2'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	45	1	45	14	4704	\$0.15	66	\$9.88	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	8.3
B-338	Elec. Cl.	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-337	Storage Room	3L-T8-2'x2'	3	87	1	87	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	68	1	68	19	4704	\$0.15	89	\$13.41	1	\$23.93	\$60.00	\$83.93	\$23.93	\$60.00	\$83.93	\$0.00	6.3
B-336	Small Group-L	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
B-335	Small Group-M	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
B-334	Small Group-N	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
B-333	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-331	Guidance	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-330	Guidance	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-329A	Elec. Cl.	1L-T8-1'x4'	1	30	1	30	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE1X32T8/UNV/ISL-SC	1	22	1	22	8	4704	\$0.15	38	\$5.64	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	14.6
B-329	Secretary/Reception	2L-T8-1'x4' P	2	59	15	885	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	15	630	255	4704	\$0.15	1,200	\$179.93	15	\$22.28	\$60.00	\$82.28	\$334.20	\$900.00	\$1,234.20	\$0.00	6.9
B-328	Asst. Principal	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-327	House Leader	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9

		Existing Fixtures						Proposed	Fixtures							Fixtu	ıres Retrofitte	d			Unit	Installation Co	ost		1	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts		Burn Hour	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-326	Biology/General	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
B-325	Bio Prep	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
B-325 B-324	Bio Prep Biology/General	2L-T8-1'x4' P	2	59	3 30	1770	Relamp, Reballast	Sylvania Lamps	2	42	3 30	1260	510	4704 4704	\$0.15 \$0.15	2,399	\$359.86	0 30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
B-324	Biology/General	2L-16-1 X4 F	2	39	30	1770	Relamp, Rebanast	FO28/835/XP/ECO3 Sylvania Ballast	2	42	30	1200	310	4704	30.13	2,399	3339.00	30	322.20	300.00	302.20	3008.40	31,000.00	32,400.40	30.00	0.9
B-323	Biology/General	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-322	Bio Prep	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
B-322	Bio Prep				3			QHE2X32T8/UNV/ISL-SC			3			4704	\$0.15			0								_
B-321	Biology/General	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
								FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-312	Corridor	2L-T8-2'x2'	2	59	50	2950	Relamp, Reballast	Sylvania Lamps FBO30/835XP/6/ECO3 Sylvania Ballast	2	45	50	2250	700	4704	\$0.15	3,293	\$493.92	50	\$22.28	\$60.00	\$82.28	\$1,114.00	\$3,000.00	\$4,114.00	\$0.00	8.3
B-332	Corridor	2L-T8-2'x2'	2	59	40	2360	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	45	40	1800	560	4704	\$0.15	2,634	\$395.14	40	\$22.28	\$60.00	\$82.28	\$891.20	\$2,400.00	\$3,291.20	\$0.00	8.3
B-332	Corrao	2L-10-2 X2	-	3,	40	2300	Kelamp, Kebanasi	FBO30/835XP/6/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	_	45	40	1800	300	4704	30.13	2,034	\$393.14	40	322.20	300.00	302.20	3871.20	32,400.00	\$3,291.20	30.00	6.5
B-319	Storage Room	3L-T8-2'x2'	3	87	5	435	Relamp, Reballast	Sylvania Lamps FBO30/835/XP/ECO3 Sylvania Ballast	3	68	5	340	95	4704	\$0.15	447	\$67.03	5	\$23.93	\$60.00	\$83.93	\$119.65	\$300.00	\$419.65	\$0.00	6.3
B-318	Biology/General	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	QHE3X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
B-317	Bio Prep	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	Sylvania Ballast QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
	-	21.710-7 74 7	2	3,		4/2	Relatilp, Reballast	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	-	42		330	130			040	\$73.70		322.20	300.00	302.20	3170.24	3400.00	\$030.24	30.00	0.7
B-317 B-316	Bio Prep Biology/General	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps	2	42	3 30	1260	510	4704 4704	\$0.15 \$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
							1,	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC															,,,,,,,,,,,			
B-315	Chemistry	2L-T8-1'x4' P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
B-314	Chem Prep	2L-T8-1'x4' P	2	59	8	472	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
							1,	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-314	Chem Prep	2L-T8-1'x4' P			3						3			4704	\$0.15		\$359.86	0								
B-313	Chemistry	2L-18-1 x4 P	2	59	30	1770	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	30	1260	510	4704	\$0.15	2,399	\$359.86	30	\$22.28	\$60.00	\$82.28	\$668.40	\$1,800.00	\$2,468.40	\$0.00	6.9
B-311	Stair No. B-2	3L-T8-2'x2'	3	87	4	348	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FBO30/835/XP/ECO3	3	68	4	272	76	4704	\$0.15	358	\$53.63	4	\$23.93	\$60.00	\$83.93	\$95.72	\$240.00	\$335.72	\$0.00	6.3
								Sylvania Ballast QHE3X32T8/UNV/ISL-SC																		
B-311	Stair No. B-2 Science Storage	8' Fixture w/ x2 4' 2L T8	4 2	114	1	114	Existing to Remair	Existing to Remain	4 2	114	1	114 168	0 68	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
B-310	Science Storage	2L-T8-1'x4' P	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	108	08	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
B-310A	Chem Storage	2L-T8-WALL	2	59	2	118	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC				<u></u>														
B-309	Small Group-O	2L-T8-1'x4' P	2	59	9	531	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	9	378	153	4704	\$0.15	720	\$107.96	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		
B-308	Classroom-B	2L-T8-1'x4' P	2	59	23	1357	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3	2	42	23	966	391	4704	\$0.15	1,839	\$275.89	23	\$22.28	\$60.00	\$82.28	\$512.44	\$1,380.00	\$1,892.44	\$0.00	6.9
								Sylvania Ballast QHE2X32T8/UNV/ISL-SC																		

		Folding Florence						n	El-t		APPENDIA	_				F!	D. 4 6'44				Tinte	Installation C		LIGHTII	7	
Room Number	Room Name	Existing Fixtures  Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Proposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
B-306	Classroom-D	2L-T8-1'x4' P	2	59	15	885	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	15	630	255	4704	\$0.15	1,200	\$179.93	15	\$22.28	\$60.00	\$82.28	\$334.20	\$900.00	\$1,234.20	\$0.00	6.9
B-305	Classroom-C	2L-T8-1'x4' P	2	59	12	708	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	12	504	204	4704	\$0.15	960	\$143.94	12	\$22.28	\$60.00	\$82.28	\$267.36	\$720.00	\$987.36	\$0.00	6.9
B-304	Classroom-C	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-303	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-302	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
B-301	Classroom-B	2L-T8-1'x4' P	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
	Addition (2001)																									1
300	Corridor	2L-T8-2'x4'	2	59	9	531	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	9	378	153	4704	\$0.15	720	\$107.96	9	\$22.28	\$60.00	\$82.28	\$200.52	\$540.00	\$740.52	\$0.00	6.9
300	Corridor	2L-T8	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
300	Corridor	2L-PL-C-	2	56	15	840	Existing to Remair	Existing to Remain	2	56	15	840	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
317	Corridor	2L-T8-2'x4'	2	59	18	1062	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	18	756	306	4704	\$0.15	1,439	\$215.91	18	\$22.28	\$60.00	\$82.28	\$401.04	\$1,080.00	\$1,481.04	\$0.00	6.9
317 328	Corridor Corridor	2L-PL-C- 2L-T8-2'x4'	2 2	56 59	26 18	1456 1062	Existing to Remair	Existing to Remain Sylvania Lamps	2 2	56 42	26 18	1456 756	306	4704 4704	\$0.15 \$0.15	0 1,439	\$0.00 \$215.91	0 18	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$401.04	\$0.00 \$1.080.00	\$0.00 \$1,481.04	\$0.00 \$0.00	6.9
		2L-16-2 X4					Relamp, Reballast	FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2		18	280		4704	\$0.15		\$215.91		\$0.00			\$401.04	\$1,080.00	\$0.00	\$0.00	6.9
328 311	Corridor Corridor	2L-T8-2'x4'	2	56	5 13	280 767	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	56 42	13	546	221	4704	\$0.15	1,040	\$155.94	13	\$22.28	\$0.00 \$60.00	\$82.28	\$289.64	\$780.00	\$1,069.64	\$0.00	6.9
311	Corridor	2L-PL-C-	2	56	10	560	Existing to Remair	Existing to Remain	2	56	10	560	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
311 338	Corridor Science Room	2L-PL-T 2L-T8	2	84 59	18 35	1512 2065	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	84 42	18 35	1512 1470	595	4704 4704	\$0.15 \$0.15	0 2,799	\$0.00 \$419.83	35	\$0.00 \$22.28	\$0.00 \$60.00	\$0.00 \$82.28	\$0.00 \$779.80	\$0.00 \$2,100.00	\$0.00 \$2,879.80	\$0.00	6.9
338	Science Room	1L-MH	1	32	1	32	Existing to Remair	Existing to Remain	1	32	1	32 1470	0	4704	\$0.15	0	\$0.00 \$419.83	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	
337	Science Room	2L-T8	2	59	35	2065	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	35		595	4704	\$0.15	2,799		35	\$22.28	\$60.00	\$82.28	\$779.80	\$2,100.00	\$2,879.80	\$0.00	6.9
337 335	Science Room Prep Room	1L-MH 3L-T8-2'x4'	3	32 87	6	32 522	Existing to Remair Relamp, Reballast	Existing to Remain Sylvania Lamps	1 3	32 63	1	32 378	0 144	4704 4704	\$0.15 \$0.15	0 677	\$0.00 \$101.61	6	\$0.00 \$23.93	\$0.00 \$60.00	\$0.00 \$83.93	\$0.00 \$143.58	\$0.00 \$360.00	\$0.00 \$503.58	\$0.00 \$0.00	5.0
	-							FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	,																	
336	Storage Room	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
334	Science Room	2L-T8	2	59	35	2065	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	35	1470	595	4704	\$0.15	2,799	\$419.83	35	\$22.28	\$60.00	\$82.28	\$779.80	\$2,100.00	\$2,879.80	\$0.00	6.9
334	Science Room	1L-MH	1	32	1	32	Existing to Remair	Existing to Remain	1	32	1	32	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
333	Stair "C"	2L-T8-2'x4'	2	59	8	472	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	8	336	136	4704	\$0.15	640	\$95.96	8	\$22.28	\$60.00	\$82.28	\$178.24	\$480.00	\$658.24	\$0.00	6.9
331	Janitor	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
332	Girls Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9

	SOUTH BRUNSWICK H	IGH SCHOOL Existing Fixtures					1	Proposed	Fivtures		APPENDIX	E	1			Eigh	ıres Retrofitte	a	I		Unit	Installation Co	net	LIGHTIN	G AUDIT	
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description	Froposed	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
330	Boys Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
329	Classroom	2L-T8	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
302	Janitor	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
301	Girls Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
303	Boys Restroom	2L-T8-2'x4'	2	59	2	118	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	2	84	34	4704	\$0.15	160	\$23.99	2	\$22.28	\$60.00	\$82.28	\$44.56	\$120.00	\$164.56	\$0.00	6.9
304	Classroom	2L-T8	2	59	20	1180	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	20	840	340	4704	\$0.15	1,599	\$239.90	20	\$22.28	\$60.00	\$82.28	\$445.60	\$1,200.00	\$1,645.60	\$0.00	6.9
305	SGI	2L-T8	2	59	10	590	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	10	420	170	4704	\$0.15	800	\$119.95	10	\$22.28	\$60.00	\$82.28	\$222.80	\$600.00	\$822.80	\$0.00	6.9
306	SGI	2L-T8	2	59	10	590	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	10	420	170	4704	\$0.15	800	\$119.95	10	\$22.28	\$60.00	\$82.28	\$222.80	\$600.00	\$822.80	\$0.00	6.9
307	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
308	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
309	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
310	Computer Lab	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
312	Stair "A"	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
313	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
314	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
315	Classroom	2L-T8	2	59	25	1475	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	25	1050	425	4704	\$0.15	1,999	\$299.88	25	\$22.28	\$60.00	\$82.28	\$557.00	\$1,500.00	\$2,057.00	\$0.00	6.9
316 316	Stair "D" Stair "D"	2L-PL-WALL 1L-MH	2	26 210	2	52 1050	Existing to Remair	Existing to Remain	2	26 210	5	52 1050	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	+
316	Stair "D"	IL-MH IL-MH	1	210	4	840	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	1	210	4	840	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	+-
319	Storage Room	2L-T8-2'x4'	2	59	1	59	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	1	42	17	4704	\$0.15	80	\$12.00	1	\$22.28	\$60.00	\$82.28	\$22.28	\$60.00	\$82.28	\$0.00	6.9
318	Media Center	2L-T8	2	59	63	3717	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE2X32T8/UNV/ISL-SC	2	42	63	2646	1071	4704	\$0.15	5,038	\$755.70	63	\$22.28	\$60.00	\$82.28	\$1,403.64	\$3,780.00	\$5,183.64	\$0.00	6.9
318	Media Center	3L-PL-T	3	126	20	2520	Existing to Remair	Existing to Remain	3	126	20	2520	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	1
320	Office Work Room	4L-T8-2'x4'	4	114	1	114	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE4X32T8/UNV/ISL-SC	4	84	1	84	30	4704	\$0.15	141	\$21.17	1	\$25.44	\$60.00	\$85.44	\$25.44	\$60.00	\$85.44	\$0.00	4.0
321	Storage Room	4L-T8-2'x4'	4	114	2	228	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast OHE4X32T8/UNV/ISL-SC	4	84	2	168	60	4704	\$0.15	282	\$42.34	2	\$25.44	\$60.00	\$85.44	\$50.88	\$120.00	\$170.88	\$0.00	4.0
322	A.V. Storage	3L-T8-2'x4'	3	87	2	174	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast QHE3X32T8/UNV/ISL-SC	3	63	2	126	48	4704	\$0.15	226	\$33.87	2	\$23.93	\$60.00	\$83.93	\$47.86	\$120.00	\$167.86	\$0.00	5.0

		Existing Fixtures						Proposed	Fixtures							Fixtu	ires Retrofitted	d			Unit I	nstallation Co	st			
Room Number	Room Name	Lighting Fixture Description	Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Description		Lamps per Fixture	Watts	Qty of Fixtures	Total Watts	Wattage Reduction	Average Burn Hours	Ave \$/kwh	Energy Savings, kWh	Energy Savings, \$	Qty	Material Each	Labor Each	Total Each	Total Materials	Total Labor	Total All	Rebate Estimate	Simple Payback
323	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
324	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
								Sylvania Ballast OHE2X32T8/UNV/ISL-SC																		
325	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
326	Classroom	2L-T8	2	59	27	1593	Relamp, Reballast	OHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	27	1134	459	4704	\$0.15	2,159	\$323.87	27	\$22.28	\$60.00	\$82.28	\$601.56	\$1,620.00	\$2,221.56	\$0.00	6.9
327	Stair "B"	2L-T8-2'x4'	2	59	4	236	Relamp, Reballast	QHE2X32T8/UNV/ISL-SC Sylvania Lamps FO28/835/XP/ECO3 Sylvania Ballast	2	42	4	168	68	4704	\$0.15	320	\$47.98	4	\$22.28	\$60.00	\$82.28	\$89.12	\$240.00	\$329.12	\$0.00	6.9
								QHE2X32T8/UNV/ISL-SC						4704	\$0.15			0								
														4704	\$0.15 \$0.15			0								+
	Total Third Floor				2095	127599					2095	94624	32975	4704	90.13	155114.4	23267.16	1971				\$44,012	\$118,260	\$162,272	\$0	6.974313
	Exterior Bldg Lighting																									
	Area "A" Cover Walkway Ltg	2L-PL-T-9"	2	52	11	572	Existing to Remair	Existing to Remain	2	52	11	572	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
	Soffit Ltg	2L-PL-T-9"	2	52	26	1352	Existing to Remair	Existing to Remain	2	52	26	1352	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
	Area "B"						·																			1
	Cover Walkway Ltg	2L-PL-T-9"	2	52	27	1404	Existing to Remair	Existing to Remain	2	52	27	1404	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Soffit Ltg	2L-PL-T-9"	2	52	15	780	Existing to Remair	Existing to Remain	2	52	15	780	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Area "C"	2L-PL-T-9"	2.	52	5	200	Polision to Donnie	Politica to Domaio	2	<i>r</i> 2	5	260	0	4704	60.16	0	\$0.00	0	\$0.00	60.00	60.00	\$0.00	\$0.00	\$0.00	\$0.00	+
	Cover Walkway Ltg Soffit Ltg	2L-PL-T-9"	2	52	33	260 1716	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	2	52 52	33	260 1716	0	4704 4704	\$0.15 \$0.15	0	\$0.00	0	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	+
	Door Exit Ltg	2L-PL-WALL	2	14	2	28	Existing to Remair	Existing to Remain	2	14	2	28	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
	Area "D"																							•		
	Soffit Ltg	2L-PL-T-9"	2	52	12	624	Existing to Remain	Existing to Remain	2	52	12	624	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Loading Dock Area Door Exit Ltg	1L-HPS 2L-PL-WALL	2	115 14	15	1725 28	Existing to Remair Existing to Remair	Existing to Remain Existing to Remain	1 2	115 14	15	1725 28	0	4704 4704	\$0.15 \$0.15	0	\$0.00 \$0.00	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	+
	Area "E"	EL I D WILL				20	Existing to remain	LABING TO REMAIN	_			-20	Ü	47.04	90.10	Ü	\$0.00	·	\$0.00	50.00	90.00	90.00	50.00	90.00	90.00	1
	Cover Walkway Ltg	2L-PL-T-9"	2	52	19	988	Existing to Remair	Existing to Remain	2	52	19	988	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Soffit Ltg	2L-PL-T-9"	2	52	21	1092	Existing to Remair	Existing to Remain	2	52	21	1092	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Door Exit Ltg "Addition"	2L-PL-WALL	2	14	4	56	Existing to Remain	Existing to Remain	2	14	4	56	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
	Cover Walkway Ltg	1L-100W-HPS-WALL	1	125	13	1625	Existing to Remair	Existing to Remain	1	125	13	1625	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
	Cover Walkway Ltg	2L-PL-C-	2	56	16	896	Existing to Remair	Existing to Remain	2	56	16	896	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	1
														4704	\$0.15			0								
	Total Exterior Bldg Ltg				221	13146					221	13146	0			0	\$0.00	0							NA	_
	Site Lighting				1				1																	+
	Parking Lot	1L-HPS-POLE	1	175	51	8925	Existing to Remair	Existing to Remain	1	175	51	8925	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	1
	Parking Lot	1L-HPS-POLE	1	460	11	5060	Existing to Remair	Existing to Remain	1	460	11	5060	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Parking Lot	1L-HPS-POLE	1	460	1	460	Existing to Remair	Existing to Remain	1	460	1	460	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Parking Lot	1L-HPS-POLE	2	920	2	1840	Existing to Remain	Existing to Remain	2	920	2	1840	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+
	Parking Lot	1L-HPS-POLE	2	920	13	11960	Existing to Remain	Existing to Remain	2	920	13	11960	0	4704	\$0.15	0	\$0.00	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Total Site Lighting				78	28245					78	28245	0			0	\$0.00	0							NA	

### South Brunswick High School Self Financed 90%-20 Year Term-5.0% Interest Rate

Total Project Cost  Net Project Cost  Percent Financed  Capital Outlay  Financing Principal	\$12,444,000 \$12,444,000 <b>90%</b> \$1,244,400 \$11,199,600		System Size (I Utility Rate (\$/ Utility Rate Infl REC Value (\$/ Term (years) Rate	kWh) lation	1,555.50 \$0.1400 3.00% \$0.350 <b>20</b> <b>5.0%</b>			Tax Rate	0.0%	6			
Year	0	1	2	3	4	5	6	7	8	9	10	11	12
Solar Generation (kWh) Utility Rate per kWh		2,437,851 \$0.140	2,425,662 \$0.144	2,413,533 \$0.149	2,401,466 \$0.153	2,389,458 \$0.158	2,377,511 \$0.162	2,365,624 \$0.167	2,353,795 \$0.172	2,342,026 \$0.177	2,330,316 \$0.183	2,318,665 \$0.188	2,307,071 \$0.194
Federal Tax Credit Cash effect of depreciation Avoided Utility Pmnt (from Solar Generation) Revenue from REC Sale Subtotal		\$0 \$0 \$341,299 \$853,248 \$1,194,547	\$0 \$349,780 \$848,982 \$1,198,762	\$0 \$358,472 \$844,737 \$1,203,209	\$0 \$367,381 \$840,513 \$1,207,894	\$0 \$376,510 \$836,310 \$1,212,820	\$0 \$385,866 \$832,129 \$1,217,995	\$395,455 \$827,968 \$1,223,423	\$405,282 \$823,828 \$1,229,110	\$415,353 \$819,709 \$1,235,063	\$425,675 \$815,611 \$1,241,286	\$436,253 \$811,533 \$1,247,785	\$447,094 \$807,475 \$1,254,569
Finance payment Interest expense Operations & Maintenance Subtotal		(\$898,685) (\$559,980) \$0 (\$559,980)	(\$898,685) (\$543,045) \$0 (\$543,045)	(\$898,685) (\$525,263) \$0 (\$525,263)	(\$898,685) (\$506,592) \$0 (\$506,592)	(\$898,685) (\$486,987) \$0 (\$486,987)	(\$898,685) (\$466,402) \$11,888 (\$454,515)	(\$898,685) (\$444,788) \$12,363 (\$432,425)	(\$898,685) (\$422,093) \$12,858 (\$409,236)	(\$898,685) (\$398,264) \$13,372 (\$384,892)	(\$898,685) (\$373,242) \$13,907 (\$359,336)	(\$898,685) (\$346,970) \$14,463 (\$332,507)	(\$898,685) (\$319,385) \$15,042 (\$304,343)
Net Savings Taxes on net savings (no tax on principle payment) Net savings after taxes Principal Payment Net Cash Flow After Taxes	(\$1,244,400)	\$634,567 \$0 \$634,567 (\$338,705) \$295,862	\$655,717 \$0 \$655,717 (\$355,640) \$300,077	\$677,946 \$0 \$677,946 (\$373,422) \$304,524	\$701,302 \$0 \$701,302 (\$392,093) \$309,209	\$725,833 \$0 \$725,833 (\$411,698) \$314,135	\$763,481 \$0 \$763,481 (\$432,283) \$331,198	\$790,998 \$0 \$790,998 (\$453,897) \$337,101	\$819,875 \$0 \$819,875 (\$476,592) \$343,283	\$850,171 \$0 \$850,171 (\$500,421) \$349,750	\$881,950 \$0 \$881,950 (\$525,442) \$356,507	\$915,278 \$0 \$915,278 (\$551,715) \$363,564	\$950,226 \$0 \$950,226 (\$579,300) \$370,925
Cumulative savings before taxes		\$634,567	\$1,290,284	\$1,968,231	\$2,669,533	\$3,395,366	\$4,158,847	\$4,949,845	\$5,769,720	\$6,619,891	\$7,501,841	\$8,417,119	\$9,367,344
Year	13	14	15	16	17	18	19	20	21	22	23	24	25
Solar Generation (kWh) Utility Rate per kWh	2,295,536 \$0.200	2,284,058 \$0.206	2,272,638 \$0.212	2,261,275 \$0.218	2,249,969 \$0.225	2,238,719 \$0.231	2,227,525 \$0.238	2,216,388 \$0.245	2,205,306 \$0.253	2,194,279 \$0.260	2,183,308 \$0.268	2,172,391 \$0.276	2,161,529 \$0.285
Federal Tax Credit Subtotal Avoided Utility Pmnt (from Solar Generation) Revenue from REC sale Subtotal	\$458,204 \$803,438 \$1,261,642	\$469,590 \$799,420 \$1,269,011	\$481,260 \$795,423 \$1,276,683	\$493,219 \$791,446 \$1,284,665	\$505,475 \$787,489 \$1,292,964	\$518,037 \$783,552 \$1,301,588	\$530,910 \$779,634 \$1,310,544	\$544,103 \$775,736 \$1,319,838	\$557,624 \$771,857 \$1,329,481	\$571,481 \$767,998 \$1,339,478	\$585,682 \$764,158 \$1,349,840	\$600,236 \$760,337 \$1,360,573	\$615,152 \$756,535 \$1,371,687
Finance payment Interest expense Operations & Maintenance Subtotal	(\$898,685) (\$290,420) \$15,643 (\$274,776)	(\$898,685) (\$260,006) \$16,269 (\$243,737)	(\$898,685) (\$228,072) \$16,920 (\$211,153)	(\$898,685) (\$194,542) \$17,596 (\$176,945)	(\$898,685) (\$159,335) \$18,300 (\$141,034)	(\$898,685) (\$122,367) \$19,032 (\$103,335)	(\$898,685) (\$83,551) \$19,794 (\$63,758)	(\$898,685) (\$42,795) \$20,585 (\$22,209)	\$0 \$0 \$21,409 \$21,409	\$0 \$0 \$22,265 \$22,265	\$0 \$0 \$23,156 \$23,156	\$0 \$0 \$24,082 \$24,082	\$0 \$0 \$25,045 \$25,045
Net Savings Taxes on net savings (no tax on principle payment) Net savings after taxes Principal Payment Net Cash Flow After Taxes	\$986,865 \$0 \$986,865 (\$608,265) \$378,600	\$1,025,273 \$0 \$1,025,273 (\$638,679) \$386,595	\$1,065,530 \$0 \$1,065,530 (\$670,612) \$394,918	\$1,107,720 \$0 \$1,107,720 (\$704,143) \$403,577	\$1,151,930 \$0 \$1,151,930 (\$739,350) \$412,580	\$1,198,253 \$0 \$1,198,253 (\$776,318) \$421,936	\$1,246,786 \$0 \$1,246,786 (\$815,134) \$431,652	\$1,297,629 \$0 \$1,297,629 (\$855,890) \$441,739	\$1,350,890 \$0 \$1,350,890 \$0 \$1,350,890	\$1,361,744 \$0 \$1,361,744 \$0 \$1,361,744	\$1,372,995 \$0 \$1,372,995 \$0 \$1,372,995	\$1,384,655 \$0 \$1,384,655 \$0 \$1,384,655	\$1,396,733 \$0 \$1,396,733 \$0 \$1,396,733
Cumulative savings before taxes	\$10,354,210	\$11,379,483	\$12,445,013	\$13,552,733	\$14,704,664	\$15,902,917	\$17,149,703	\$18,447,332	\$19,798,222	\$21,159,965	\$22,532,961	\$23,917,616	\$25,314,349

Internal Rate of Return After Taxes	26%
NPV of After Tax Cash Flows	\$3,059,098
NPV Discount Rate	8.00%

These Figures are estimates for discussion only.

## South Brunswick High School Purchase

Total Project Cost  Capital Outlay	<b>\$12,444,000</b> <b>\$12,444,000</b>		System Size (kW Utility Rate (\$/kWh Utility Rate Inflatio REC Value (\$/kWh	n) n		<b>1,555.50</b> \$0.1400 3.00% \$0.350		Tax Rate	0.0%				
Year	0	1	2	3	4	5	6	7	8	9	10	11	12
Solar Generation (kWh)		2,437,851	2,425,662	2,413,533	2,401,466	2,389,458	2,377,511	2,365,624	2,353,795	2,342,026	2,330,316	2,318,665	2,307,071
Utility Rate per kWh		\$0.140	\$0.144	\$0.149	\$0.153	\$0.158	\$0.162	\$0.167	\$0.172	\$0.177	\$0.183	\$0.188	\$0.194
Capital Outlay	(\$12,444,000)												
Tax Credit Cash effect of depreciation Avoided Utility Pmnt (from Solar Generation) Revenue from REC Sale Subtotal		\$0 \$0 \$341,299 \$853,248 \$1,194,547	\$0 \$349,780 \$848,982 \$1,198,762	\$0 \$358,472 \$844,737 \$1,203,209	\$0 \$367,381 \$840,513 \$1,207,894	\$0 \$376,510 \$836,310 \$1,212,820	\$0 \$385,866 \$832,129 \$1,217,995	\$395,455 \$827,968 \$1,223,423	\$405,282 \$823,828 \$1,229,110	\$415,353 \$819,709 \$1,235,063	\$425,675 \$815,611 \$1,241,286	\$436,253 \$811,533 \$1,247,785	\$447,094 \$807,475 \$1,254,569
Operations & Maintenance		\$0	\$0	\$0	\$0	\$0	\$11,888	\$12,363	\$12,858	\$13,372	\$13,907	\$14,463	\$15,042
Subtotal		\$0	\$0	\$0	\$0	\$0	\$11,888	\$12,363	\$12,858	\$13,372	\$13,907	\$14,463	\$15,042
Net Savings	(\$12,444,000)	\$1,194,547	\$1,198,762	\$1,203,209	\$1,207,894	\$1,212,820	\$1,229,883	\$1,235,786	\$1,241,968	\$1,248,434	\$1,255,192	\$1,262,249	\$1,269,610
Taxes on net savings		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Savings after taxes		\$1,194,547	\$1,198,762	\$1,203,209	\$1,207,894	\$1,212,820	\$1,229,883	\$1,235,786	\$1,241,968	\$1,248,434	\$1,255,192	\$1,262,249	\$1,269,610
Cumulative Savings	\$0	\$1,194,547	\$2,393,309	\$3,596,518	\$4,804,412	\$6,017,232	\$7,247,115	\$8,482,901	\$9,724,869	\$10,973,303	\$12,228,496	\$13,490,744	\$14,760,355
Year	13	14	15	16	17	18	19	20	21	22	23	24	25
Solar Generation (kWh)	2,295,536	2,284,058	2,272,638	2,261,275	2,249,969	2,238,719	2,227,525	2,216,388	2,205,306	2,194,279	2,183,308	2,172,391	2,161,529
Utility Rate per kWh	\$0.200	\$0.206	\$0.212	\$0.218	\$0.225	\$0.231	\$0.238	\$0.245	\$0.253	\$0.260	\$0.268	\$0.276	\$0.285
Avoided Utility Pmnt (from Solar Generation) Revenue from REC sale Subtotal	\$458,204	\$469,590	\$481,260	\$493,219	\$505,475	\$518,037	\$530,910	\$544,103	\$557,624	\$571,481	\$585,682	\$600,236	\$615,152
	\$803,438	\$799,420	\$795,423	\$791,446	\$787,489	\$783,552	\$779,634	\$775,736	\$771,857	\$767,998	\$764,158	\$760,337	\$756,535
	\$1,261,642	\$1,269,011	\$1,276,683	\$1,284,665	\$1,292,964	\$1,301,588	\$1,310,544	\$1,319,838	\$1,329,481	\$1,339,478	\$1,349,840	\$1,360,573	\$1,371,687
Operations & Maintenance Subtotal	\$15,643	\$16,269	\$16,920	\$17,596	\$18,300	\$19,032	\$19,794	\$20,585	\$21,409	\$22,265	\$23,156	\$24,082	\$25,045
	\$15,643	\$16,269	\$16,920	\$17,596	\$18,300	\$19,032	\$19,794	\$20,585	\$21,409	\$22,265	\$23,156	\$24,082	\$25,045
Net Savings	\$1,277,285	\$1,285,280	\$1,293,603	\$1,302,262	\$1,311,265	\$1,320,620	\$1,330,337	\$1,340,424	\$1,350,890	\$1,361,744	\$1,372,995	\$1,384,655	\$1,396,733
Taxes on net savings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net savings after taxes	\$1,277,285	\$1,285,280	\$1,293,603	\$1,302,262	\$1,311,265	\$1,320,620	\$1,330,337	\$1,340,424	\$1,350,890	\$1,361,744	\$1,372,995	\$1,384,655	\$1,396,733
Cumulative Savings	\$16,037,639	\$17,322,919	\$18,616,522	\$19,918,784	\$21,230,048	\$22,550,669	\$23,881,006	\$25,221,430	\$26,572,319	\$27,934,063	\$29,307,058	\$30,691,714	\$32,088,446

After Tax IRR	8.8%	
NPV of Net Savings After Taxes	\$858,932	
NPV Discount Rate	8.00%	

### South Brunswick High School Depreciation Calculations

 Project Cost
 \$12,444,000

 NJ BPU Grant
 \$0

 Net Project Cost
 \$12,444,000

 Federal Tax Credit
 \$0

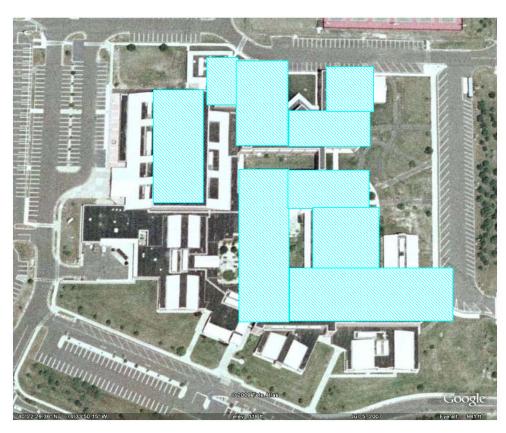
 Federal Depreciation Basis
 \$12,444,000

 Federal Tax Rate
 0%

Year	0	1	2	3	4	5	6	7	8	9	10	11	12
Depreciation percentage - Federal		20.00%	32.00%	19.20%	11.52%	11.52%	5.76%						
MACRS Depreciation Amount - Federal		\$2,488,800	\$3,982,080	\$2,389,248	\$1,433,549	\$1,433,549	\$716,774						
Federal Tax Credit		\$0											
Cash effect of Federal depreciation		\$0	\$0	\$0	\$0	\$0	\$0						
Total Annual tax savings on depreciation		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

These figures are estimates for discussion only. Actual results and depreciation methods may vary.

Building	Roof Area (sq ft)	Panel	Qty	Panel Sq Ft	Panel Total Sq Ft	Total KW	Total Annual kWh	Panel Weight (33 lbs)	W/SQFT
		Sunpower SPR305-							
High School	100,000	WHT	5100	19.3	98,286	1,555.50	2,437,851	168,300	15.83







### STATEMENT OF ENERGY PERFORMANCE **South Brunswick High School**

**Building ID: 1620945** 

For 12-month Period Ending: April 30, 20081

N/A

**Facility Owner** 

Date SEP becomes ineligible: N/A

Date SEP Generated: June 04, 2009

**Primary Contact for this Facility** 

**Facility** 

South Brunswick High School 750 Ridge Road

Monmouth Junction, NJ 08852

Year Built: 1996

Gross Floor Area (ft2): 427,000

Energy Performance Rating<sup>2</sup> (1-100) 7

Site Energy Use Summary<sup>3</sup>

Electricity (kBtu) 28,821,973 25,612,291 Natural Gas (kBtu)4 Total Energy (kBtú) 54,434,264

Energy Intensity<sup>5</sup>

Site (kBtu/ft²/yr) 127 Source (kBtu/ft²/yr) 288

Emissions (based on site energy use) Greenhouse Gas Emissions (MtCO2e/year) 5,752

**Electric Distribution Utility** 

PSE&G - Public Service Elec & Gas Co

**National Average Comparison** 

National Average Site EUI 78 National Average Source EUI 176 % Difference from National Average Source EUI 64% **Building Type** K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards<sup>6</sup> for Indoor Environmental Conditions:

Ventilation for Acceptable Indoor Air Quality N/A Acceptable Thermal Environmental Conditions N/A Adequate Illumination N/A Certifying Professional N/A

- 1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
- The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
   Values represent energy consumption, annualized to a 12-month period.
   Natural Gas values in units of volume (e.g. cubic feet) are converted to kBtu with adjustments made for elevation based on Facility zip code.
- 5. Values represent energy intensity, annualized to a 12-month period.
  6. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

# ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.

NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	$\overline{\mathbf{V}}$
Building Name	South Brunswick High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		
Туре	K-12 School	Is this an accurate description of the space in question?		
Location	750 Ridge Road, Monmouth Junction, NJ 08852	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of acute care or children's hospitals) nor can they be submitted as representing only a portion of a building		
High School (K-12 Sc	hool)			
CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	$\overline{\mathbf{V}}$
Gross Floor Area	427,000 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		
Open Weekends?	No	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		
Number of PCs	1,000	Is this the number of personal computers in the K12 School?		
Number of walk-in refrigeration/freezer units	4	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		
Presence of cooking facilities	Yes	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		
Percent Cooled	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		

Months	12 (Optional)	Is this school in operation for at least 8 months of the year?	
High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.	

APPENDIX G PG 3 OF 6

# ENERGY STAR® Data Checklist for Commercial Buildings

### **Energy Consumption**

Power Generation Plant or Distribution Utility: PSE&G - Public Service Elec & Gas Co

	Meter: Electric Meter 1 (kWh) Space(s): Entire Facility	
Start Date	End Date	Energy Use (kWh)
04/01/2008	04/30/2008	568,689.00
03/01/2008	03/31/2008	585,817.00
02/01/2008	02/29/2008	539,619.00
01/01/2008	01/31/2008	539,294.00
12/01/2007	12/31/2007	612,530.00
11/01/2007	11/30/2007	825,593.00
10/01/2007	10/31/2007	870,322.00
09/01/2007	09/30/2007	815,295.00
08/01/2007	08/31/2007	872,832.00
07/01/2007	07/31/2007	935,600.00
06/01/2007	06/30/2007	742,286.00
05/01/2007	05/31/2007	539,360.00
lectric Meter 1 Consumption (kWh)		8,447,237.00
lectric Meter 1 Consumption (kBtu)		28,821,972.64
otal Electricity Consumption (kBtu)		28,821,972.64
this the total Electricity consumption at this	building including all Electricity meters?	

el Type: Natural Gas				
Meter: Gas Meter 1 (therms) Space(s): Entire Facility				
Start Date	End Date	Energy Use (therms)		
03/27/2008	04/25/2008	20,747.00		
02/26/2008	03/27/2008	27,683.00		
01/25/2008	02/26/2008	31,466.00		
12/26/2007	01/25/2008	29,453.00		
11/26/2007	12/26/2007	27,967.00		
10/24/2007	11/26/2007	25,120.00		
09/25/2007	10/24/2007	15,504.00		
08/24/2007	09/25/2007	13,003.00		
07/26/2007	08/24/2007	15,241.00		

06/26/2007	07/26/2007	15,584.00		
05/25/2007	06/26/2007	15,362.00		
Gas Meter 1 Consumption (therms)		237,130.00		
Gas Meter 1 Consumption (kBtu)		23,713,000.00		
Total Natural Gas Consumption (kBtu)		23,713,000.00		
Is this the total Natural Gas consumption at this building including all Natural Gas meters?				
Additional Fuels				
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.				
Certifying Professional  (When applying for the ENERGY STAR, this must be the same PE that signed and stamped the SE		APPENDIX (		
(When applying for the LIVETCO TOTALS, the mass	too the same in a that signed and stamped the sa	PG 5 OF 6		
Name:	Date:			
Signature:				
Signature is required when applying for the ENERGY STAR.				

### PG 6 OF 6

### FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
South Brunswick High School
750 Ridge Road
Monmouth Junction, NJ 08852

Facility Owner

Primary Contact for this Facility

### **General Information**

South Brunswick High School				
Gross Floor Area Excluding Parking: (ft²)	427,000			
Year Built	1996			
For 12-month Evaluation Period Ending Date:	April 30, 2008			

**Facility Space Use Summary** 

High School				
Space Type	K-12 School			
Gross Floor Area(ft²)	427,000			
Open Weekends?	No			
Number of PCs	1,000			
Number of walk-in refrigeration/freezer units	4			
Presence of cooking facilities	Yes			
Percent Cooled	100			
Percent Heated	100			
Months <sup>o</sup>	12			
High School?	Yes			
School District <sup>o</sup>	South Brunswick School District			

**Energy Performance Comparison** 

	Evaluation Periods		Comparisons			
Performance Metrics	Current (Ending Date 04/30/2008)	Baseline (Ending Date 04/30/2008)	Rating of 75	Target	National Average	
Energy Performance Rating	7	7	75	N/A	50	
Energy Intensity						
Site (kBtu/ft²)	127	127	61	N/A	78	
Source (kBtu/ft²)	288	288	138	N/A	176	
Energy Cost						
\$/year	\$ 312,284.35	\$ 312,284.35	\$ 149,062.62	N/A	\$ 190,633.57	
\$/ft²/year	\$ 0.73	\$ 0.73	\$ 0.35	N/A	\$ 0.45	
Greenhouse Gas Emissions						
MtCO <sub>2</sub> e/year	5,752	5,752	2,746	N/A	3,511	
kgCO <sub>2</sub> e/ft2/year	13	13	6	N/A	8	

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Average column presents energy performance data your building would have if your building had an average rating of 50.

#### Notes

- o This attribute is optional.
- d A default value has been supplied by Portfolio Manager.