

LOCAL GOVERNMENT ENERGY AUDIT PROGRAM: ENERGY AUDIT REPORT

PREPARED FOR: COUNTY OF HUDSON

MEADOWVIEW PSYCHIATRIC

HOSPITAL

595 COUNTY AVE., SECAUCUS, NJ

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I. EXECUTIVE SUMMARY

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

County of Hudson Meadowview Complex – Psychiatric Hospital (Bldg 10)

595 County Avenue Secaucus, NJ, 07094

Municipal Contact Person: Kevin Barry Facility Contact Person: Michael Lenz

This audit is performed in connection with the New Jersey Clean Energy - Local Government Energy Audit Program. The energy audit is conducted to promote the mission of the office of Clean Energy, 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 for the Hudson County Meadowview Campus are as follows:

Electricity	\$690,991
Natural Gas	\$675,114
Total	\$1,366,105

The annual energy costs for the Campus are provided in lieu of individual buildings based on the utility bills provided.

The potential annual energy cost savings for each energy conservation measure (ECM) and renewable energy measure (REM) are shown below in Table 1. Be aware that the ECM's and REM's are not additive because of the interrelation of some of the measures. This audit is consistent with an ASHRAE level 2 audit. The cost and savings for each measure is \pm 20%. The evaluations are based on engineering estimations and industry standard calculation methods. More detailed analyses would require engineering simulation models, hard equipment specifications, and contractor bid pricing.

Table 1 Financial Summary Table

ENERGY	ENERGY CONSERVATION MEASURES (ECM's)						
ECM NO.	DESCRIPTION	NET INSTALLATION COST ^A	ANNUAL SAVINGS ^B	SIMPLE PAYBACK (Yrs)	SIMPLE LIFETIME ROI		
ECM #1	Lighting Equipment Upgrade	\$11,946	\$4,382	2.7	817.0%		
ECM #2	Lighting Controls Upgrade	\$2,940	\$230	12.8	95.9%		
ECM #3	AHU Supply & Return VFD Retrofit	\$58,625	\$25,295	2.3	547.2%		
ECM #4	Kitchen Exhaust Hood Controls	\$46,044	\$4,855	9.5	58.2%		
ECM #5	Variable Primary Chilled Water Flow	\$51,850	\$4,172	12.4	20.7%		
RENEWA	BLE ENERGY MEASURES (REM's)					
ECM NO.	DESCRIPTION	NET INSTALLATION COST	ANNUAL SAVINGS	SIMPLE PAYBACK (Yrs)	SIMPLE LIFETIME ROI		
REM #1	Solar Photovoltaic System	\$344,080	\$22,464	15.3	63.2%		
Notes: A. Cost takes into consideration applicable NJ Smart StartTM incentives. B. Savings takes into consideration applicable maintenance savings.							

The estimated demand and energy savings for each ECM and REM is shown below in Table 2. The descriptions in this table correspond to the ECM's and REM's listed in Table 1.

Table 2
Estimated Energy Savings Summary Table

ENERGY CONSERVATION MEASURES (ECM's)							
		ANNUAL UTILITY REDUCTION					
ECM NO.	DESCRIPTION	ELECTRIC DEMAND (KW)	ELECTRIC CONSUMPTION (KWH)	NATURAL GAS (THERMS)			
ECM #1	Lighting Equipment Upgrade	8.1	41,106	0			
ECM #2	Lighting Controls Upgrade	0	2,259	0			
ECM #3	AHU Supply & Return VFD Retrofit	0	247,986	0			
ECM #4	Kitchen Exhaust Hood Controls	0	27,934	2786			
ECM #5	Variable Primary Chilled Water Flow	0	40,900	0			
RENEWA	BLE ENERGY MEASURES (1	REM's)					
		ANNU	AL UTILITY REDU	CTION			
ECM NO.	DESCRIPTION	ELECTRIC DEMAND (KW)	ELECTRIC CONSUMPTION (KWH)	NATURAL GAS (THERMS)			
REM #1	Solar Photovoltaic System	34.8	49,700	0			

Concord Engineering Group (CEG) recommends proceeding with the implementation of all ECM's that provide a calculated simple payback at or under ten (10) years. The following Energy Conservation Measures are recommended for the facility:

- **ECM #1:** Lighting Equipment Upgrade
- ECM #3: AHU Supply and Return VFD Retrofit
- **ECM #4:** Kitchen Exhaust Hood Controls

Although ECM # 2 and ECM #5 do not provide a payback less than 10 years, it is recommended to consider the benefits of the conservation measures since the paybacks are close to 10 years and provide valuable energy savings in addition to the recommended ECMs.

ECM #1 – Lighting Equipment Upgrade

This ECM includes retrofit of all T-12 magnetic ballast fixtures with new energy efficiency T-8 bulbs and electronic ballasts. The majority of the building already utilizes T-8 fixtures however the retrofit of all remaining T-12 fixtures represents as simple and effective approach to reducing energy use. This ECM also benefits from the replacement of all fluorescent exit signs with LED exit signs as well as a few remaining incandescent bulbs with compact fluorescent bulbs. The total savings from this ECM is estimated to be \$4,382, which pays for the installation cost in only 2.7 years. This ECM has one of the quickest paybacks and is highly recommended for the facility.

ECM #3 – AHU Supply & Return VFD Retrofit

This ECM includes retrofitting the existing air handling units with variable frequency drives (VFDs). Installation of VFDs for the building's air handling units will allow the system to efficiently modulate with building loads. Currently the system simply dampens the supply and return air to modulate with load without any reduction in fan speed. The energy savings resulting from slower fan speeds and reduced motor horse power are complemented due to the system's operation 24 hours per day year round. Due to the substantial operating time, the energy savings from this ECM pays for the installation in approximately 2.3 years. The annual savings is approximately \$25,000 making this ECM the highest cost reduction and quickest payback of all ECMs evaluated.

ECM #4 – Kitchen Exhaust Hood Controls

This ECM includes the installation of sensors on the kitchen exhaust hoods as well as variable frequency drives on the make-up and exhaust fans. This ECM allows for the kitchen exhaust and make-up air system to change exhaust air quantities based on the variations in operating conditions of the kitchen equipment. This allows for a savings in fan horse power as well as make up air conditioning energy. The energy savings from this ECM is approximately \$25,000 annually which pays for the installation cost in 9.5 years. This ECM has a longer payback but provides valuable energy savings for the facility.

Operations and Maintenance Considerations

As with the majority of existing facilities, there are maintenance and operational measures that can provide significant energy savings and provide immediate benefit. The ECMs listed above represent investments that can be made to the facility which are justified by the savings seen overtime. However, the maintenance items and small operational improvements below are typically achievable with on site staff or maintenance contractors and in turn have the potential to provide substantial operational savings compared to the costs associated. The following are recommendations which should be considered a priority in achieving an energy efficient building:

- 1. Maintain all weather stripping on entrance doors.
- 2. Maintain insulation on the hot and chilled water pipes.
- 3. Clean all light fixtures to maximize light output. Although not an energy saving technique, this maintenance effort will provide better light quality and limit additional light from being added where it is not needed.
- 4. Provide more frequent air filter changes to decrease overall system power usage and maintain better IAQ.
- 5. Confirm that outside air economizers on the air handling units are functioning properly to take advantage of free cooling and avoid excess outside air during occupied periods.
- 6. Eliminate over ventilation where 100% outside air is not required. The historical use of the facility has changed over the years and with it changes the ventilation rate requirements. A major portion of the building utilized 100% outside air that may not still require it since the operation of the conditioned space has changed from operating rooms to in-patient space. Hudson County should have these spaces evaluated.
- 7. Implement a steam trap maintenance program. When steam traps fail, they will release steam which can accumulate to huge volumes of steam contributing to increase boiler plant flue costs. Steam traps should be inspected to ensure proper operation, or monitored with temperature sensors to alarm when steam is passing.

Solar Analysis

Renewable Energy Measures (REMs) through the installation of a solar PV system was also reviewed for the Meadowview Complex. Based on the limited (South facing) roof space available throughout the campus's buildings, a solar PV system mounted as shading over the parking lot was analyzed for the campus. The system proposed as REM #1 shows a typical installation, which could be expanded based on the County's ambition for investing in renewable energy. Savings are available for a system installed at grade versus a roof mounted system for easy access and ease of construction. If this measure is considered for implementation, it is highly recommended to combine this project with a reconstruction of the degraded parking lot behind the Psychiatric Hospital. The recommended 43.01 kW PV system will produce approximately 49,700 kWh of electricity annually. The system's calculated simple payback is 15.32 years is past the standard 10 year simple payback threshold; however, with alternative funding this payback could be lessened. CEG recommends the Owner review all funding options available when considering their financial analysis.

Retro-Commissioning

In addition to the above recommendations, based on the review of the facility's energy bills and discussions with the operations personnel, the energy audit team recommends Retro-Commissioning of this facility to meet the following objectives:

- Bring existing HVAC equipment to its proper operational state including air and water distribution systems
- Reduce energy use and energy costs
- Improve indoor air quality
- Verify the installation and performance of identified system upgrades
- Address overall building energy use and demand and identify areas of highest energy use and demand
- Identify the location of the most comfort problems or trouble spots in the building
- Review current O&M practices

Conclusion

Overall, the Psychiatric Hospital appears to be in a good position for energy improvement options. With the implementation of the above recommended measures the County will see beneficial energy savings that will provide significant life cycle cost reductions in a very short time period.

II. INTRODUCTION

The comprehensive energy audit covers the 63,000 square foot of the Hudson County Meadowview Psychiatric Hospital, which includes patient rooms, day rooms, therapy rooms, kitchen and dining rooms, laundry rooms, office spaces, library, storage spaces and mechanical spaces.

Electrical and natural gas utility information is collected and analyzed for one full year's energy use of the building. The utility information allows for analysis of the building's operational characteristics; calculate energy benchmarks for comparison to industry averages, estimated savings potential, and baseline usage/cost to monitor the effectiveness of implemented measures. A computer spreadsheet is used to calculate benchmarks and to graph utility information (see the utility profiles below).

The Energy Use Index (EUI) is established for the building. Energy Use Index (EUI) is expressed in British Thermal Units/square foot/year (BTU/ft²/yr), which is 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 the annual consumption of all energy sources to BTU's and dividing by the area (gross square footage) of the building. Blueprints (where available) are utilized to verify the gross area of the facility. The EUI is a good indicator of the relative potential for energy savings. A low EUI indicates less potential for energy savings, while a high EUI indicates poor building performance therefore a high potential for energy savings.

Existing building architectural and engineering drawings (where available) are utilized for additional background information. The building envelope, lighting systems, HVAC equipment, and controls information gathered from building drawings allow for a more accurate and detailed review of the building. The information is compared to the energy usage profiles developed from utility data. Through the review of the architectural and engineering drawings a building profile can be defined that documents building age, type, usage, major energy consuming equipment or systems, etc.

The preliminary audit information is gathered in preparation for the site survey. The site survey provides critical information in deciphering where energy is spent and opportunities exist within a facility. The entire site is surveyed to inventory the following to gain an understanding of how each facility operates:

- Building envelope (roof, windows, etc.)
- Heating, ventilation, and air conditioning equipment (HVAC)
- Lighting systems and controls
- Facility-specific equipment

The building site visit is performed to survey all major building components and systems. The site visit includes detailed inspection of energy consuming components. Summary of building occupancy schedules, operating and maintenance practices, and energy management programs

provided by the building manager are collected along with the system and components to determine a more accurate impact on energy consumption.

III. METHOD OF ANALYSIS

Post site visit work includes evaluation of the information gathered, researching possible conservation opportunities, organizing the audit into a comprehensive report, and making recommendations on HVAC, lighting and building envelope improvements. Data collected is processed using energy engineering calculations to anticipate energy usage for each of the proposed energy conservation measures (ECMs). The actual building's energy usage is entered directly from the utility bills provided by the owner. The anticipated energy usage is compared to the historical data to determine energy savings for the proposed ECMs.

It is pertinent to note, that the savings noted in this report are not additive. The savings for each recommendation is calculated as standalone energy conservation measures. Implementation of more than one ECM may in some cases affect the savings of each ECM. The savings may in some cases be relatively higher if an individual ECM is implemented in lieu of multiple recommended ECMs. For example implementing reduced operating schedules for inefficient lighting will result in a greater relative savings. Implementing reduced operating schedules for newly installed efficient lighting will result in a lower relative savings, because there is less energy to be saved. If multiple ECM's are recommended to be implemented, the combined savings is calculated and identified appropriately.

ECMs are determined by identifying the building's unique properties and deciphering the most beneficial energy saving measures available that meet the specific needs of the facility. The building construction type, function, operational schedule, existing conditions, and foreseen future plans are critical in the evaluation and final recommendations. Energy savings are calculated base on industry standard methods and engineering estimations. Energy consumption is calculated based on manufacturer's cataloged information when new equipment is proposed.

Cost savings are calculated based on the actual historical energy costs for the facility. Installation costs include labor and equipment costs to estimate the full up-front investment required to implement a change. Costs are derived from Means Cost Data, industry publications, and local contractors and equipment suppliers. The NJ Smart Start Building® program incentives savings (where applicable) are included for the appropriate ECM's and subtracted from the installed cost. Maintenance savings are calculated where applicable and added to the energy savings for each ECM. The life-time for each ECM is estimated based on the typical life of the equipment being replaced or altered. The costs and savings are applied and a simple payback, simple lifetime savings, and simple return on investment are calculated. See below for calculation methods:

ECM Calculation Equations:

$$Simple \ Payback = \left(\frac{Net \ Cost}{Yearly \ Savings}\right)$$

Simple Lifetime Savings = $(Yearly Savings \times ECM Lifetime)$

$$Simple\ Lifetime\ ROI = \frac{(Simple\ Lifetime\ Savings - Net\ Cost)}{Net\ Cost}$$

Lifetime Ma int enance Savings = (Yearly Ma int enance Savings \times ECM Lifetime)

Internal Rate of Re turn =
$$\sum_{n=0}^{N} \left(\frac{Cash \ Flow \ of \ Period}{(1 + IRR)^n} \right)$$

Net Pr esent Value =
$$\sum_{n=0}^{N} \left(\frac{Cash \ Flow \ of \ Period}{(1+DR)^n} \right)$$

Net Present Value calculations based on Interest Rate of 3%.

IV. HISTORIC ENERGY CONSUMPTION/COST

A. Energy Usage / Tariffs

The energy usage for the facility has been tabulated and plotted in graph form as depicted within this section. Each energy source has been identified and monthly consumption and cost noted per the information provided by the Owner.

The electric usage profile represents the actual electrical usage for the facility. Public Service Electric and Gas (PSE&G) provides electricity to the facility under their LPLS and LPLP rate structures. The electric utility measures consumption in kilowatt-hours (KWH) and maximum demand in kilowatts (KW). One KWH usage is equivalent to 1000 watts running for one hour. One KW of electric demand is equivalent to 1000 watts running at any given time. 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 historical data received for the facility.

The gas usage profile shows the total actual natural gas energy usage for the facility. Public Service Electric and Gas (PSE&G) provides natural gas to three (3) delivery points in this facility under the TSGNF and GSG rate structures. The gas utility measures consumption in cubic feet x 100 (CCF), and converts the quantity into Therms of energy. One Therm is equivalent to 100,000 BTUs of energy.

The third party commodity provider HESS Energy Service Company is responsible for the supply of electricity to the Hospital, Power House, Juvenile Center and the Buildings 1 to 3. Commodity (Supply) and delivery is billed separately for the service. There is no third party supplier for the electric service to the buildings 4-9 and also for the entire gas utility.

The overall cost for utilities is calculated by dividing the total cost by the total usage. Based on the utility history provided, the average cost for utilities for the campus is as follows:

<u>Description</u> <u>Average</u>

Electricity 10.7¢ / kWh

Natural Gas \$0.72 / Therm

Table 3 Electricity Billing Data

ELECTRIC USAGE SUMMARY

Utility Provider: PSE&G

Rate: LPLS, LPLP

Meter No: 778009754, 778000991

Customer ID No: 42 005 270 06, 42 000 410 06

Third Party Utility HESS

TPS Meter / Acct No: -

MONTH OF USE	CONSUMPTION KWH	DEMAND	TOTAL BILL
Jan-09	417,913	910	\$51,689
Feb-09	469,519	909	\$50,414
Mar-09	470,033	894	\$45,657
Apr-09	557,483	866	\$53,420
May-09	540,674	1199	\$49,635
Jun-09	545,921	1109	\$61,460
Jul-09	676,135	1306	\$75,815
Aug-09	683,033	1462	\$81,500
Sep-09	636,318	1500	\$74,798
Oct-09	458,147	1154	\$45,255
Nov-09	470,521	911	\$47,289
Dec-09	542,851	906	\$54,059
Totals	6,468,548	1500 Max	\$690,991

AVERAGE DEMAND 1094 KW average

AVERAGE RATE \$0.107 \$/kWh

Figure 1 Electricity Usage Profile

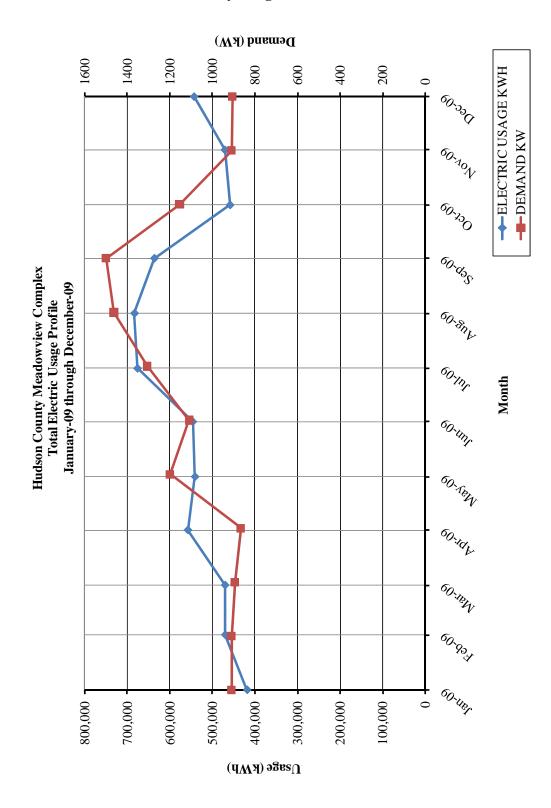


Table 4 Natural Gas Billing Data

NATURAL GAS USAGE SUMMARY

Utility Provider: PSE&G

Rate: TSGNF, GSG

Meter No: 1784801, 2369009, 2858907, 3007747

PG000011545808543339, PG000011223037043339,

Point of Delivery ID: PG000011223036243339

Third Party Utility Provider: -

TPS Meter No: -

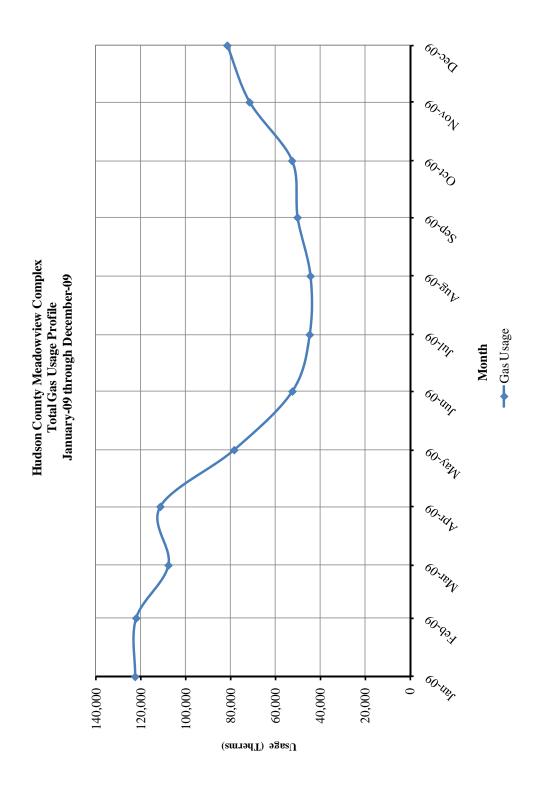
MONTH OF USE	CONSUMPTION (THERMS)	TOTAL BILL
Jan-09	122,573	\$128,718
Feb-09	122,095	\$117,923
Mar-09	107,714	\$77,430
Apr-09	111,312	\$14,899
May-09	78,362	\$52,911
Jun-09	52,403	\$33,832
Jul-09	44,680	\$29,540
Aug-09	44,326	\$31,337
Sep-09	50,127	\$32,454
Oct-09	52,558	\$30,830
Nov-09	71,497	\$49,301
Dec-09	81,464	\$75,939
TOTALS	939,111.26	\$675,113.89

AVERAGE RATE:

\$0.72

\$/THERM

Figure 2 Natural Gas Usage Profile



Energy Use Index (EUI)

Energy Use Index (EUI) is a measure of a building's annual energy utilization per square foot of building. This calculation is completed by converting all utility usage consumed by a building for one year, to British Thermal Units (BTU) and dividing this number by the building square footage. EUI is a good measure of a building's energy use and is utilized regularly for comparison of energy performance for similar building types. 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. The ORNL website determines how a building's energy use compares with similar facilities throughout the U.S. and in a specific region or state.

Source use differs from site usage when comparing a building's energy consumption with the national average. Site energy use is the energy consumed by the building at the building site only. Source energy use includes the site energy use as well as all of the losses to create and distribute the energy to the building. Source energy represents the total amount of raw fuel that is required to operate the building. It incorporates all transmission, delivery, and production losses, which allows for a complete assessment of energy efficiency in a building. The type of utility purchased has a substantial impact on the source energy use of a building. The EPA has determined that source energy is the most comparable unit for evaluation purposes and overall global impact. Both the site and source EUI ratings for the building are provided to understand and compare the differences in energy use.

The site and source EUI for this facility is calculated as follows:

Building Site
$$EUI = \frac{(Electric\ Usage\ in\ kBtu + Gas\ Usage\ in\ kBtu)}{Building\ Square\ Footage}$$

$$Building \ Source \ EUI = \frac{(Electric \ Usage \ in \ kBtu \ X \ SS \ Ratio + Gas \ Usage \ in \ kBtu \ X \ SS \ Ratio)}{Building \ Square \ Footage}$$

An energy use intensity index cannot be calculated for the Meadowview Campus or any of the individual buildings. This is because the campus power house provides steam and domestic hot water to the entire Meadowview Complex including buildings that are not analyzed in this report. In addition, the electric service to the campus is not sub-metered for each building. In order to obtain an energy use index for the campus, the utility information and the area of each building in the entire campus is required.

Table 5
Facility Energy Use Index (EUI) Calculation

ENERGY USE INTENSITY CALCULATION						
ENERGY TYPE	В	UILDING USE	E	SITE ENERGY	SITE- SOURCE	SOURCE ENERGY
	kWh	Therms	Gallons	kBtu	RATIO	kBtu
ELECTRIC	6,468,548			22,083,624	3.340	73,759,304
NATURAL GAS		939,111		93,911,126	1.047	98,324,949
FUEL OIL			0.0	0	1.010	0
PROPANE			0.0	0	1.010	0
TOTAL				115,994,751		172,084,254

*Site - Source Ratio data is provided by the Energy Star Performance Rating Methodology for Incorporating Source Energy Use document issued Dec 2007.

TOTAL BUILDING AREA	N/A	SQUARE FEET
BUILDING SITE EUI	N/A	kBtu/SF/YR
BUILDING SOURCE EUI	N/A	kBtu/SF/YR

As a comparison, data has been gathered by the US Department of Energy (DOE) for various facilities cataloguing the standard site and source energy utilization. This data has been published in the 2003 Commercial Building Energy Consumption Survey and is noted as follows for facilities of this type:

• Health Care: Long Term Care (Nursing Home, Assisted Living): 124 kBtu/SF Site Energy, 255 kBtu/SF Source Energy.

A comparison to the national average is not available for this facility since individual energy utility information for this facility cannot be obtained.

B. 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 tracking and assessment of energy consumption via the template forms located on the ENERGY STAR website (www.energystar.gov). The importance of benchmarking for local government municipalities is becoming more important as utility costs continue to increase and emphasis is being placed 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. It is vital that local government municipalities assess facility energy usage, benchmark energy usage utilizing Portfolio Manager, set priorities and goals to lessen energy usage and move forward with priorities and goals.

In accordance with the Local Government Energy Audit Program, CEG has created an ENERGY STAR account for the municipality to access and monitoring the facility's yearly energy usage as it compares to facilities of similar type. The login page for the account can be accessed at the following web address; the username and password are also listed below:

https://www.energystar.gov/istar/pmpam/index.cfm?fuseaction=login.login



The utility bills and other information gathered during the energy audit process are entered into the Portfolio Manager. The following is a summary of the results for the facility:

Table 6
ENERGY STAR Performance Rating

ENERGY STAR PERFORMANCE RATING					
FACILITY DESCRIPTION	ENERGY PERFORMANCE RATING	NATIONAL AVERAGE			
Meadowview Campus		N/A			

An Energy Performance Rating cannot be established for the Campus or individual buildings. The Energy Star program does not have enough bin data available to calculate a campus wide

Energy Performance Rating at this time. Also, individual building ratings cannot be established due to the design of the Campus wide electric and gas distribution system. One year of utility data must be entered for each building or facility, since reliable building energy meters do not exist, this approach cannot be taken.

V. FACILITY DESCRIPTION

The 63,775 SF Psychiatric Hospital was built in 1958. This facility is a 4 story building with a 5th floor mechanical penthouse. The facility is comprised of patient rooms, office spaces, kitchen and dining room, storage spaces and mechanical rooms. The facility operates 24 hours per day, 7 days per week. The building construction consists of CMU block walls with a variety of façade types including brick, stucco, and concrete. The amount of insulation within the wall structure is unknown. The roof structure is made up of a rubber roof membrane with rigid insulation below the membrane. The roof appears to be in good condition with adequate insulation below the membrane.

The windows throughout the facility except for the north-west wing are renovated recently in 2007. Typical windows throughout the facility are double pane, ¼" clear glass with aluminum frames. The windows in the north-west are older and in poor condition. These windows have metal frames with single pane clear glass.

HVAC Systems

The majority of the building is heated and cooled by a central air handling unit AHU-1. The main air handling unit is located on the 5th floor mechanical room. This unit is a dual duct system comprised of a hot and cold deck with downstream VAV boxes to control the mixing of hot and cold air. The central AHU utilizes steam pre-heat and re-heat coils to pre-heat the supply air to approximately 65°F in the winter. The hot deck is heated with a downstream steam coil which heats the supply air to approximately 100°F. The cold deck utilizes a chilled water cooling coil, which cools the supply air to approximately 55°F. The AHU utilizes a large centrifugal supply fan with remote return / exhaust fan. Both fans are constant volume controlled by downstream dampers. Air is returned to the unit through a large mixing box for outside air and return air with economizer capability. The main AHU and associated ductwork is in poor condition. The supply ductwork is suffering considerable leakage at joints and coil connections. The main supply air control damper is disconnected and appears to be abandoned. The steam piping throughout the mechanical room is without insulation for approximately 50 - 57% of the piping. This unit operates 24/7.

The remaining AHUs (AHU-2 & AHU-3) are located on the 1st floor mechanical room and provide heating and cooling to the facilities support spaces. AHU-2 is a 100% outside air unit which was dedicated for the operating rooms that no longer exist in the building. This unit utilizes steam heating coils to provide air to downstream VAV boxes. The supply fan for AHU-1 is a constant volume fan. AHU-3 is a standard outside air / return air system that services the kitchen, maintenance area, and storage rooms. AHU-2 & AHU-3 are single duct systems with downstream VAV boxes. AHU-3 utilizes additional reheat coils and cooling coils to provide zone control in addition to downstream VAV boxes for the kitchen and storage rooms. AHU-3 utilizes a manual bypass duct and hand damper to control the supply air volume. AHU-2 and AHU-3 is in fair condition and appear to be operating correctly. These units operate 24/7.

Heat is provided by a campus steam loop that enters the building on the southwest corner basement mechanical room. The steam is distributed throughout the building at 50-75 PSI to steam coils and two large domestic hot water heaters. Steam condensate is collected and pumped

back to the campus boiler plant via steam driven condensate pumps (pressure pumps). The condensate receiver tank is vented through the roof. Considerable steam was noted as being vented through the roof through the condensate receiver vent. The steam distribution system appears to be original to the building.

The north-west wing of the building heating is supplied with electric baseboard heaters. The electric baseboard heaters are controlled with non-programmable thermostats located on an adjacent wall of each baseboard strip.

Exhaust System

Exhaust throughout the facility is provided through a centralized ductwork system and large centrifugal exhaust fans. The original kitchen hood exhaust fan has been abandoned and a new exhaust fan installed on a platform out the side wall next to the kitchen on the 2^{nd} floor. The central exhaust fans operate continuously. The kitchen is equipped with two exhaust hoods for the cooking ranges. The size of each range hood is 5'x16'. The kitchen exhaust fan is controlled manually by a switch on the kitchen hoods.

HVAC System Controls

The HVAC system utilizes a central control system that monitors and controls the majority of the HVAC equipment. The system is based on the Carrier Comfort System installed 3 to 4 years ago. This system controls all VAV boxes and AHUs. The control system includes monitoring and adjustment capability for temperature control for each zone. The system also includes linking to the campus control system located in the central heating plant. The campus control system has the capability for overriding control of all equipment in the psychiatric building.

The controls throughout the facility are primarily pneumatic controls for all major equipment points. Electronic controls have been Individual equipment controls include steam control valves, VAV box dampers, and AHU supply, return and outside air dampers. These controls are in poor condition in many cases. The main AHU-1 was noted to have outside air dampers open 100% and return dampers shut. This indicates a issue with the damper actuators, pneumatic system, or central front end system.

Domestic Hot Water

Domestic hot water for the kitchen and restrooms is provided by two large indirect hot water heaters (approximately 2500 gallons each). These hot water heaters provide hot water at 110°F. The kitchen utilizes booster heaters for kitchen hot water needs. The domestic hot water is circulated through the building by a small domestic hot water pump that runs 24/7.

Lighting

Lighting throughout building is primarily fluorescent tube lay-in fixtures. There is a combination of T-8 lamps with electronic ballasts and T-12 lamps with magnetic ballasts. Kitchen, dining room and control room are lit with older fixtures with T12 lamps. The exit signs in the building are a lit with a combination of LED lights and compact fluorescent lights. Majority of the interior

lighting is manually switched. The office areas and non patient areas are unoccupied at night and typically lighting is turned off during unoccupied periods. Patient rooms are equipped with compact fluorescent night lights. Outside lighting is provided with high pressure sodium fixtures.

VI. MAJOR EQUIPMENT LIST

The equipment list contains major energy consuming equipment that through implementation of energy conservation measures could yield substantial energy savings. 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 in some cases if a manufactures 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.

Refer to the Major Equipment List Appendix for this facility.

VII. ENERGY CONSERVATION MEASURES

ECM #1: Lighting Upgrade

Description:

The majority of the office spaces, patient rooms and corridors in the Psychiatric Hospital building are lit with modern fixtures with T8 lamps and electronic ballasts. The kitchen and the dining areas and the Control building lighting is provided with older fixtures with T12 lamps and magnetic ballasts. It is recommended to replace all of the T12 fixtures in these areas with higher efficiency fluorescent T8 fixtures with electronic ballasts. The new, energy efficient T8 fixtures will provide adequate lighting and will save on electrical costs due to better performance of the lamp and ballasts. This ECM also includes maintenance savings through the reduced number of lamps replaced per year. The expected lamp life of a T8 lamp is approximately 30,000 burnhours, in comparison to the existing T12 lamps which is approximately 20,000 burnhours. The facility will need approximately 33% less lamps replaced per year for each one for one fixture replaced.

In addition, there are some exit signs with fluorescent bulbs throughout the hospital building. It is recommended to replace all of the fluorescent exit signs with high efficiency LED signs. LED is an acronym for light-emitting-diode. LED's are small light sources that are readily associated with electronic equipment. LED exit signs have been manufactured in a variety of shapes and sizes. The benefits of LED technology are substantial. LED exit signs will last for 20-30 years without maintenance. This results in tremendous maintenance savings considering that the fluorescent lamps in the existing fixtures need to be replaced at a rate of once in 3-4 years. Lamp costs (\$2-\$7 each) and labor costs (\$8-\$20 per lamp) add up rapidly. Additionally, a LED exit sign total fixture input can be as low as 2 Watts.

This ECM includes replacement or retrofit of all T12 fixtures with T8 fixtures with electronic ballasts in the main hospital building and control room. In addition, this ECM will replace all of the existing exit signs with new LED exit fixtures. The basis of design is the Progress Lighting PE001 LED Exit Sign or equal. The included battery provides 1-1/2 hours of emergency power.

Energy Savings Calculations:

The **Investment Grade Lighting Audit Appendix** outlines the hours of operation, proposed retrofits, costs, savings, and payback periods for each set of fixtures in the each building.

There are incentives available from NJ Smart Start® Program for these retrofits. Incentives are calculated as follows:

From the Smart Start Incentive appendix, the replacement of a T-12 fixture to a T-5 or T-8 fixture warrants the following incentive: T-5 or T-8 (1-4 lamp) is \$15 per fixture. The replacement of an incandescent exit sign with a new LED exit sign is \$10 per fixture.

Smart Start® Incentives

= $(\# \text{ of } 1-4 \text{ lamp fixtures} \times \$15) + (\# \text{ of LED Exist signs} \times \$10)$

Total number of 1-4 lamp T12 fixtures: 98 Total number of fluorescent LED signs: 18

Total Smart Start incentives = \$1,650

Replacement and Maintenance Savings are calculated as follows:

Savings = (reduction in lamps replaced per year) × (replacement \$ per lamp + Labor \$ per lamp)

Considering that the typical T12 lamp life is 20,000 Hours while that of T8 is 30,000:

Reduction in lamp replacement due to T12 to T8 conversion: 27
Cost of a lamp replacement including labor for all types: \$7

Maintenance savings =\$7 x 27 = \$189

There isn't any significant maintenance savings by switching to LED exit signs from fluorescent exit signs.

Total maintenance savings = \$189

Energy Savings Summary:

ECM #1 - ENERGY SAVINGS SUMMARY			
Installation Cost (\$):	\$13,596		
NJ Smart Start Equipment Incentive (\$):	\$1,650		
Net Installation Cost (\$):	\$11,946		
Maintenance Savings (\$/Yr):	\$189		
Energy Savings (\$/Yr):	\$4,193		
Total Yearly Savings (\$/Yr):	\$4,382		
Estimated ECM Lifetime (Yr):	25		
Simple Payback	2.7		
Simple Lifetime ROI	817.0%		
Simple Lifetime Maintenance Savings	\$4,727		
Simple Lifetime Savings	\$109,548		
Internal Rate of Return (IRR)	37%		
Net Present Value (NPV)	\$64,357.31		

ECM #2: Lighting Controls Upgrade

Description:

In some areas the lighting is left ON unnecessarily. In many cases the lights are left ON because of the inconvenience to manually switch lights off when a room is left ON or when a room is first occupied. This is common in rooms that are occupied for only short periods and only a few times per day. In some instances lights are left ON due to the misconception that it is better to keep the lights ON rather than to continuously switch lights ON and OFF. Although increased switching reduces lamp life, the energy savings outweigh the lamp replacement costs. The payback timeframe for when to turn the lights off is approximately two minutes. If the lights are expected to be off for at least a two minute interval, then it pays to shut them OFF.

Lighting controls come in many forms. Sometimes an additional switch is adequate to provide reduced lighting levels when full light output is not needed. Occupancy sensors detect motion and will switch the lights ON when the room is occupied. Occupancy sensors can either be mounted in place of a current wall switch, or on the ceiling to cover large areas. Photocell control senses light levels and turn off or reduce lights when there is adequate daylight. Photocells are mostly used outside, but are becoming more popular in energy-efficient interior lighting designs as well.

The U.S. Department of Energy sponsored a study to analyze energy savings achieved through various types of building system controls. The referenced savings is based on the "Advanced Sensors and Controls for Building Applications: Market Assessment and Potential R&D Pathways," document posted for public use April 2005. The study has found that commercial buildings have the potential to achieve significant energy savings through the use of building controls. The average energy savings are as follows based on the report:

• Occupancy Sensors for Lighting Control - 20%.

Energy savings achieved for "Occupancy Sensors for Lighting Control" average 20%. Savings resulting from the implementation of this ECM for energy management controls are estimated to be 10% of the total light energy controlled by occupancy sensors. The estimated savings is below the average listed above due to the continuous occupancy nature of healthcare facilities. The majority of the savings is expected to be in the after hours when rooms are left with lights ON.

The ECM includes installation of ceiling mounted occupancy sensors or replacement of standard wall switches with sensors wall switches for individual all offices, class rooms, and bathrooms. Sensors shall be manufactured by Sensorswitch, Watt Stopper or equivalent. See the "Investment Grade Lighting Audit" appendix for details.

The **Investment Grade Lighting Audit Appendix** of this report includes the summary of lighting controls implemented in this ECM and outlines the estimated hours of operation, proposed controls, costs, savings, and payback periods. The calculations adjust the lighting power usage by 10% for all areas that include occupancy sensors.

Energy Savings Calculations:

Energy Savings = $(10\% \times Occuapancy Sensored Light Energy (kWh/Yr))$

$$Savings = Energy Savings(kWh) \times Ave Elec Cost \left(\frac{\$}{kWh}\right)$$

Installation cost per dual-technology sensor (Basis: Sensor switch or equivalent) is \$160/unit including material and labor.

From the NJ Smart Start appendix, the installation of a lighting control device warrants the following incentive: occupancy = \$20 per fixture.

Energy Savings Summary:

ECM #2 - ENERGY SAVINGS SUMMARY				
Installation Cost (\$):	\$3,360			
NJ Smart Start Equipment Incentive (\$):	\$420			
Net Installation Cost (\$):	\$2,940			
Maintenance Savings (\$/Yr):	\$0			
Energy Savings (\$/Yr):	\$230			
Total Yearly Savings (\$/Yr):	\$230			
Estimated ECM Lifetime (Yr):	25			
Simple Payback	12.8			
Simple Lifetime ROI	95.9%			
Simple Lifetime Maintenance Savings	\$0			
Simple Lifetime Savings	\$5,760			
Internal Rate of Return (IRR)	6%			
Net Present Value (NPV)	\$1,071.82			

ECM #3: AHU Supply and Return Fan VFD Retrofit

Description:

Two of the Air Handling Units (AHUs) in the Hospital building are variable volume units and they can be retrofitted with Variable Frequency Drives. AHU #1 is a dual duct system serving majority of the hospital. The unit provides hot and cold air to the mixing boxes in the spaces via a 125 HP supply air fan. The supply air volume to the hot and cold decks is varied based on the static pressure of each duct. A 40 HP return fan brings the return air to the unit through a large mixing box for outside air with economizer capability. The mixing box adjusts the static pressure by relieving return air into the atmosphere. AHU #3 is a unit feeding the kitchen area with a 10HP supply fan. AHU-3 utilizes a manual bypass duct and hand damper to control the supply air volume. An automatic damper controls and a Variable Frequency Drive (VFD) can be retrofitted for this unit in order to modulate supply air volume based on static air pressure.

This ECM includes the installation of new VFDs for the AHU #1 supply and return fans and the AHU #3 supply fan. VFD's will modulate fan speed based on supply air static pressure via central energy management system.

Energy and cost savings calculations are based on basic engineering principles along with a VFD savings calculation software "FanSave Version 4.0.B," provided by ABB. It was reported that the air handling unit operates continuously 24 hours a day, 7 days a week.

Energy Savings Calculations:

Hours of Operation

Total occupied hours	= 8760 Hot	urs
AHU-1 Supply Fan Horse power	= 125 HP	(Premium Efficiency Motor)
AHU-1 Return Fan Horse power	=40 HP	(Premium Efficiency Motor)
AHU-3 Supply Fan Horse power	= 10 HP	(Standard Efficiency Motor)

FanSave Calculations

FanSave software calculates fan energy consumption savings based on the principles below.

$$Fan\ Electric\ HP = \frac{Q_{CFM}\ \times Total\ Pressure_{in\ WG}}{6356\times\eta_{Fan}\ \times\eta_{motor}\ \times\eta_{transmission}}$$

Fan Energy Consumption (kWh) = Motor HP
$$\times 0.746 \frac{kW}{HP} \times$$
 Hours of operation (Hr)

$$Total\ Fan\ Energy\ Consumption\ (kWh) = \sum (Energy\ Consumption\ of\ Each\ Motor)$$

Fan Energy Cost (\$) = Total Comsumption(kWh) × Average Cost of Electric $\left(\frac{\$}{kWh}\right)$

FanSave uses Affinity Laws in order to calculate energy savings by reducing fan speed. Affinity laws, also known as Fan Laws are as following:

$$Q = Flow$$
, $n = Fan Speed$, $p = total pressure$

$$\frac{Q_2}{Q_1} = \frac{n_2}{n_1}$$
 $\frac{p_2}{p_1} = \left(\frac{n_2}{n_1}\right)^2$ $\frac{HP_2}{HP_1} = \left(\frac{n_2}{n_1}\right)^3$

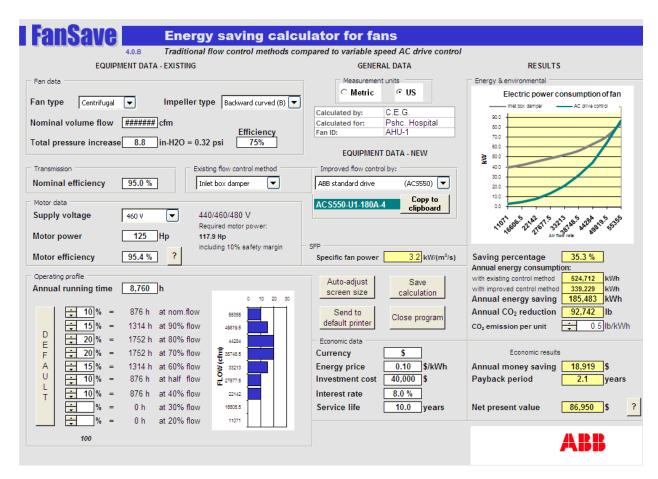
Fan Save Input:

$$\eta_{Fan} = 75\%$$
 $\eta_{transmission} = 95\%$

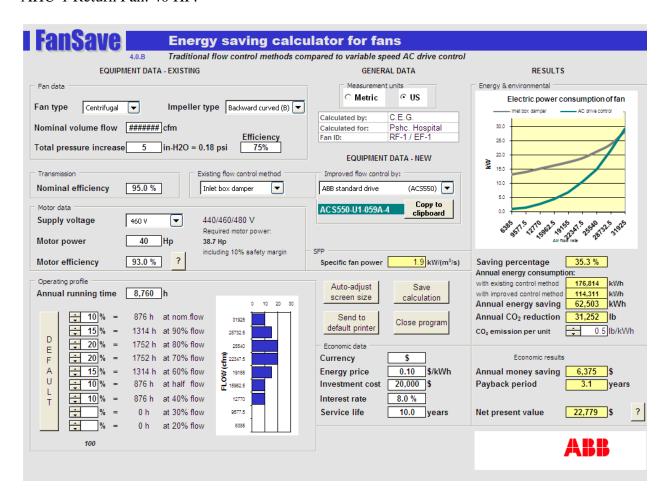
Existing Flow Control Method is selected as Inlet Box Damper. Total flow of the unit is 55,553 CFM with 8.8 in-WC static pressure.

Other input and output values can be seen in the below screenshot from the software.

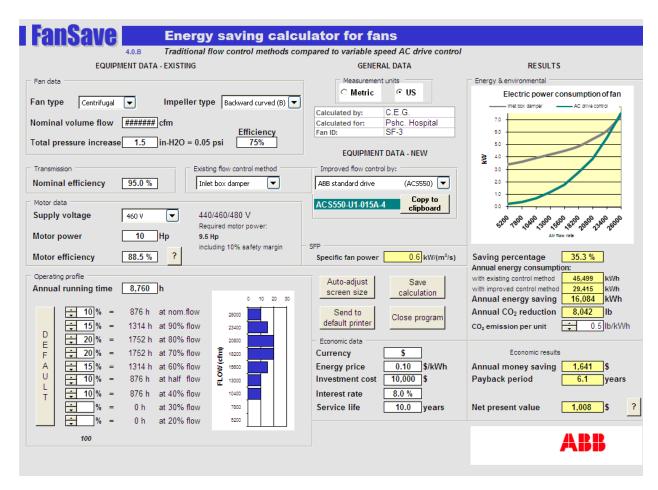
AHU-1 Supply Fan: 125 HP



AHU-1 Return Fan: 40 HP:



AHU Supply Fan: 10 HP:



Results

FanSave 4.0.B calculates approximately ~35% fan power savings by replacing inlet box dampers controls with variable fan speed controls on the AHU-1 supply fan and return fans and AHU-3 supply fan. Results for both fans are tabulated below.

SUMMARY OF ENERGY SAVINGS						
				ENERGY	ENERGY	
		FLOW,	ENERGY	SAVINGS,	COST	
FAN	HP	CFM	SAVINGS	KWH	SAVINGS	
AHU - 1 Supply	125	55355	35.3%	185,483	\$18,919	
AHU - 1 Return	40	31925	35.3%	62,503	\$6,375	
AHU - 3 Supply	10	26000	35.3%	16,084	\$1,641	
Total				247,986	\$25,295	

Estimated total cost of three variable frequency drives, work required for the installation, wiring and programming and a new 10 HP motor is \$70,000.

NJ SmartStart incentives for VFD's: \$65/HP for 20+ HP

175 HP x \$65/HP = \$11,375

Energy Savings Summary:

ECM #3 - ENERGY SAVINGS SUMMARY				
Installation Cost (\$):	\$70,000			
NJ Smart Start Equipment Incentive (\$):	\$11,375			
Net Installation Cost (\$):	\$58,625			
Maintenance Savings (\$/Yr):	\$0			
Energy Savings (\$/Yr):	\$25,295			
Total Yearly Savings (\$/Yr):	\$25,295			
Estimated ECM Lifetime (Yr):	15			
Simple Payback	2.3			
Simple Lifetime ROI	547.2%			
Simple Lifetime Maintenance Savings	\$0			
Simple Lifetime Savings	\$379,419			
Internal Rate of Return (IRR)	43%			
Net Present Value (NPV)	\$243,340.11			

ECM #4: Hospital Kitchen Exhaust Hood Controls

Description:

The Psychiatric Hospital kitchen is equipped with two exhaust hoods for the cooking ranges. The size of each range hood is 5'x16'. The kitchen exhaust fan is controlled manually by a switch on the kitchen hoods.

Standard kitchen hood controls consist of switches and relays that interlock the kitchen grease hood exhaust fan(s) with the 100% outside air unit that provides make-up air for this system. Normal occupation of kitchen hood system is limited to occupied hours. During the site inspection it was noted that the kitchen exhaust fan runs for approximately 14 hours a day. Based on the operation, there is great potential energy savings through better controls of the hood exhaust fan and make-up air unit. It should be noted that make up air is supplied via transfer air from the food line area and adjacent corridors.

This energy conservation measure involves installing a Melink Kitchen Hood Variable Air Volume Controller; variable frequency drive on the kitchen hood exhaust fan; and turn off all the kitchen hood exhaust systems when the kitchen is closed. When the cooking appliances are turned on, the hood exhaust fan speed will increase based on the hood exhaust temperature. During heavy cooking, the kitchen hood exhaust fan increases to 100% speed until the smoke/vapor is removed. Energy savings are also realized when the kitchen equipment is operating at less than full load due to minimal cooking operations. During these times the fan speed decreases, removing only the necessary amount of air, saving exhaust fan energy and make up air conditioning energy.

Energy Calculations Summary:

Detailed calculations for the proposed kitchen hood control system can be found in the **Kitchen Exhaust Calculations Appendix.** It is pertinent to note that the calculation assumes the exhaust fans and make-up air unit are manually turned off for approximately 8 hours per day.

Installed cost of the kitchen hood control system is \$46,044. The calculated energy savings equals approximately \$6,505 per year.

KITCHEN EXHAUST CONTROLS CALCULATION						
ECM INPUTS	EXISTING	PROPOSED	SAVINGS			
ECM INPUTS	Uncontrolled Kitchen Exhaust	MELINK Kitchen Exhaust Controls				
Fan Power Usage (kWh)	37,171	17,324	19,847			
Gas Usage (MMbtu)	969	690	279			
Cooling Energy (kWh)	28,128	20,041	8,087			
Average Gas Cost (\$/Therm)	0.72	0.72				
Electric Cost (\$/KWH)	0.102 0.102					
S	AVINGS CALCULAT	TIONS				
ECM RESULTS	EXISTING PROPOSED SAVIN					
Gas Energy Cost (\$)	\$6,977 \$4,971		\$2,006			
Electric Energy Cost (\$)	\$6,661 \$3,811		\$2,849			
Total Energy Cost (\$)	\$13,638 \$8,783 \$4,					
COMMENTS:	*ECM is based on calculations using spreadsheets privded by MELINK Intelli-hood controls manufacturer.					

Energy Savings Summary:

ECM #4 - ENERGY SAVINGS SUMMARY				
Installation Cost (\$):	\$46,044			
NJ Smart Start Equipment Incentive (\$):	\$0			
Net Installation Cost (\$):	\$46,044			
Maintenance Savings (\$/Yr):	\$0			
Energy Savings (\$/Yr):	\$4,855			
Total Yearly Savings (\$/Yr):	\$4,855			
Estimated ECM Lifetime (Yr):	15			
Simple Payback	9.5			
Simple Lifetime ROI	58.2%			
Simple Lifetime Maintenance Savings	\$0			
Simple Lifetime Savings	\$72,829			
Internal Rate of Return (IRR)	6%			
Net Present Value (NPV)	\$11,917.81			

ECM #5: Variable Volume Primary Chilled Water Pumping

Description:

The Hospital utilizes chilled water cooling via two 165 ton water cooled York Centrifugal Chillers. The chilled water is circulated through the building via two (2) 30 HP primary chilled water pumps. The existing air side chilled water coils are controlled with three-way control valves.

In general chilled water pumps are sized to meet the peak demand of system coils, and in many cases are oversized in the event additional load is added to the system. In a constant volume system this means that pumps are running inefficiently and using more energy during off load hours. The installation of variable flow controls on the pumps can optimize the energy necessary to meet the flow requirements of the system during various load hours.

The proposed variable primary volume pumping scenario will require the conversion of the three-way valves to two-way valves by installing an isolation valve in the bypass pipe. Verification of the existing 165 ton chiller minimum evaporator flow will be required to ensure continuous and reliable operation of the chiller. This ECM requires installation of two (2) variable speed drives and a pressure sensor will need to be installed at the furthest coil on the loop to control the flow through the system.

Energy Savings Calculations:

Cooling Season Run Hrs. = 4000 hrs/yr.

Average Cost of Electricity = \$0.102/kWh

Motor HP (Each) = 30 HP

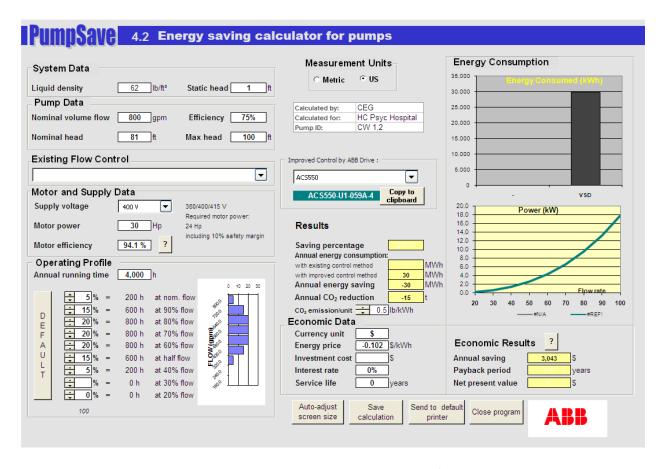
Total GPM = 800 GPM

Nominal Piping System Head = 80 Ft Head

Motor Efficiency = 94.1%

Pump Efficiency (Estimated) = 75%

Variable flow pumping energy calculations are based on calculation software "PumpSave v4.2," provided by ABB. Existing operation calculations are based on 80% constant flow throughout the cooling season. It is assumed that only one (1) pump is run at any given time.



Installation cost for the system conversion is estimated to be \$55,450. This includes two (2) 30HP VFDs, 2-way valve installation on three (3) of the major air handling units, controls and programming. The cost does not include motor replacement since the existing motor are NEMA Premium Efficiency type motors.

Current Consumption, kWh = Pump Power, kW × Hours of Operation × Ave. Load, %

Current Consumption, kWh =
$$30 \text{ HP} \times 0.746 \frac{\text{kW}}{\text{HP}} \times 4000 \text{ Hrs} \times 80\% = 70,900 \text{ kWh}$$

Current Cost of Pump Operation =
$$70,900 \text{ kWh} \times \frac{\$0.102}{\text{kWh}} = \$7,232$$

ENERGY SAVINGS CALCULATIONS						
	Electric Usage	Electric Cost				
Existing	70,900	\$7,232				
Proposed	30,000	\$3,060				
Savings	40,900	\$4,172				

From the NJ Smart Start[®] Program appendix, the unit falls under the category "Variable Frequency Drive" and warrants an incentive based on horsepower. The program incentives are calculated as follows:

SmartStart ® Incentive = Horse Power
$$\times \frac{\$}{\text{Horse Power}}$$

= 2 Pumps
$$\times$$
 30 HP $\times \frac{$60}{HP}$ = \$3,600

Energy Savings Summary:

ECM #5 - ENERGY SAVINGS SUMMARY				
Installation Cost (\$):	\$55,450			
NJ Smart Start Equipment Incentive (\$):	\$3,600			
Net Installation Cost (\$):	\$51,850			
Maintenance Savings (\$/Yr):	\$0			
Energy Savings (\$/Yr):	\$4,172			
Total Yearly Savings (\$/Yr):	\$4,172			
Estimated ECM Lifetime (Yr):	15			
Simple Payback	12.4			
Simple Lifetime ROI	20.7%			
Simple Lifetime Maintenance Savings	\$0			
Simple Lifetime Savings	\$62,577			
Internal Rate of Return (IRR)	2%			
Net Present Value (NPV)	(\$2,047.52)			

VIII. RENEWABLE/DISTRIBUTED ENERGY MEASURES

Globally, renewable energy has become a priority affecting international 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 under the direction of the Board of Public Utilities and instituted a Renewable Energy Incentive Program to provide additional funding to private and public entities for installing qualified renewable 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 for the Meadowview Campus, to evaluate if there is any potential for solar or wind energy generation.

Solar energy produces clean energy and reduces a building's carbon footprint. This is accomplished via photovoltaic panels which could be mounted on all south and southwestern facades of the building. Flat roof, as well as sloped 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). Parking lots can also be utilized for the installation of a solar array. A truss system can be installed that is high enough to park a vehicle under the array, this way no parking lot area is lost. The state of New Jersey 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 campus and believes that a parking lot canopy system would be more appropriate given the small amount of space available on the roof. The proposed arrays will be installed in the Psych Hospital's Parking Lot. This lot was selected based on proximity with the existing electrical system site distribution. The new parking lot arrays should be directly tied into closest building. Given the additional expense for a step up transformer and installation of high voltage wire it is more economical to run secondary distribution voltage wire to adjacent buildings to be fed from the solar arrays. A depiction of the proposed area layouts is shown in Renewable / Distributed Energy Measures Calculation, Appendix F following the financial calculations. Based on measurements of the parking lot it was determined that a system size of 43.01 kilowatts could be installed. The total system has an estimated kilowatt hour production of 49,700 KWh annually, reducing the overall electric consumption by approximately 0.8%. 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.

The proposed photovoltaic array layout is designed based on the specifications for the Sun Power SPR-230 panel. This panel has a "DC" rated full load output of 230 watts, and has a total panel conversion efficiency of 18%. Although panels rated at higher wattages are available through Sun Power and other various manufacturers, in general most manufacturers who produce commercially available solar panels produce a similar panel in the 200 to 250 watt range. This

provides more manufacturer options to the public entity if they wish to pursue the proposed solar recommendation without losing significant system capacity.

The array system capacity was sized on available parking lot space on the campus. Estimated solar array generation was then calculated based on the National Renewable Energy Laboratory PVWatts Version 1.0 Calculator. In order to calculate the array generation an appropriate location with solar data on file must be selected. In addition the system DC rated kilowatt (kW) capacity must be inputted, a DC to AC de-rate factor, panel tilt angle, and array azimuth angle. The DC to AC de-rate factor is based on the panel nameplate DC rating, inverter and transformer efficiencies (95%), mismatch factor (98%), diodes and connections (100%), dc and ac wiring(98%, 99%), soiling, (95%), system availability (95%), shading (if applicable), and age(new/100%). The overall DC to AC de-rate factor has been calculated at an overall rating of 81%. The PVWatts Calculator program then calculates estimated system generation based on average monthly solar irradiance and user provided inputs. The monthly energy generation and offset electric costs from the PVWatts calculator is shown in the Renewable/Distributed Energy Measures Calculation appendix.

The proposed solar array is qualified by the New Jersey Board of Public Utilities Net Metering Guidelines as a Class I Renewable Energy Source. These guidelines allow onsite customer generation using renewable energy sources such as solar and wind with a capacity of 2 megawatts (MW) or less. This limits a customer system design capacity to being a net user and not a net generator of electricity on an annual basis. Although these guidelines state that if a customer does net generate (produce more electricity than they use), the customer will be credited those kilowatt-hours generated to be carried over for future usage on a month to month basis. Then, on an annual basis if the customer is a net generator the customer will then be compensated by the utility the average annual PJM Grid LMP price per kilowatt-hour for the over generation. Due to the aforementioned legislation, the customer is at limited risk if they generate more than they use at times throughout the year. With the inefficiency of today's energy storage systems, such as batteries, the added cost of storage systems is not warranted and was not considered in the proposed design.

CEG has reviewed financing options for the owner. Direct purchase involves the county paying for 100% of the total project cost upfront via one of the methods noted in the Installation Funding Options section below. These calculations include a utility inflation rate as well as the degradation of the solar panels over time. Based on our calculation the following is the payback period for this method of payment:

FINANCIAL SUMMARY - PHOTOVOLTAIC SYSTEM					
PAYMENT TYPE	SIMPLE PAYBACK	NET PRESENT VALUE	INTERNAL RATE OF RETURN		
Direct Purchase	15.32 Years	\$240,501	4.5 %		

^{*}The solar energy measure is shown for reference in the executive summary ECM table

Given the large amount of capital required by the County to invest in a solar system whether through a Direct Purchase option CEG does not recommend the County pursue this route. It would be more advantageous for the County to solicit Power Purchase Agreement (PPA) Providers who will own, operate, and maintain the system for a period of 15 years. During this time the PPA Provide would sell all of the electric generated by Solar Arrays to the County at a reduced rate compared to their existing electric rate.

In addition to the Solar Analysis, CEG also conducted a review of the applicability of wind energy for the facility. Wind energy production is another option available through the Renewable Energy Incentive Program. Wind turbines of various types can be utilized to produce clean energy on a per building basis. Cash incentives are available per kWh of electric usage. Based on CEG's review of the applicability of wind energy for the facility; the low average wind speed, proximity to residential neighbor hoods, and limited site space make the County not a good candidate for wind.

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 The Electric and Natural Gas Usage Profiles included within this report to reference the respective electricity and natural gas usage load profiles.

Electricity:

The Total Electric Usage Profile of the Meadowview Complex demonstrates a fairly flat electrical load profile. The summer (May-August) demonstrates increased consumption typical to air conditioning load as exemplified by the various types of packaged air conditioning units, split system AC units, chillers, and window air conditioning units throughout the campus. The monthly energy consumption peaks around August when the space cooling load is the largest. Most of the cooling is achieved in the campus buildings via air cooled equipment. Air cooled air conditioners are significantly less efficient than water cooled equipment, which increases the electric power demand of the facility as well as the consumption. There is a fairly steady yearlong electric load most likely attributable to the 24 hour operation of many of the buildings in the campus, such as the County Psychiatric Hospital, Juvenile Detention Center and the Rehabilitation Programs.

Natural Gas:

The Natural Gas Usage Profile demonstrates a somewhat typical heating load profile. An increase in consumption is observed October through May during the standard heating season. However, significant gas consumption remains throughout year. This is because the majority of the facilities in this complex operates 24/7 and requires natural gas for hot water production and cooking. Heating and domestic hot water are supplied to the entire complex by a central steam boiler plant. The plant provides hot water to a large nursing home complex, not owned by the county. This, along with the other facility's constant need for domestic hot water, creates a large baseline natural gas load for the campus.

Tariff Analysis:

Electricity:

The facility receives electric service through Public Service Electric and Gas Company (PSE&G) on two different rate structures. Buildings #4-9 receives the service on Large Power and Lighting Service (LPLS) rate schedules. LPLS is the secondary service to the facilities between 150 - 750 kW demand ranges. The service for the rest of the campus buildings receive the service on Large

Power and Lighting Service (LPLP) rate schedules, which is the secondary service for the facilities with electrical demand above 750KW.

For electric supply (generation), the customer can elect to use the utility's Basic Generation Service (BGS) or a Third Party Supplier (TPS). This facility uses a Third Party Supplier for the buildings #1-3, 10, 12, 15 and the Basic Generation Service (BGS) from the PSE&G for buildings #4-9. They pay according to the BGS default service for only buildings #4-9 and the TPS for the rest of the campus. The Delivery Service includes the following charges: Annual Demand Charge (kW Demand all months), Summer Demand Charge (kW Demand June – Sept), Distribution Kilowatthour Charge (kWh Usage), as well as other supplemental charges.

Natural Gas:

This facility receives natural gas service through Public Service Electric and Gas Company (PSE&G) on GSG (General Service Gas) and TSG-NF (Non-Firm Transportation Gas Service) rates. GSG is a firm delivery service (higher level of delivery) for general purposes where customer does not qualify for RSG (residential) and customer's usage does not exceed 3,000 therms in any month. Customers may either purchase gas supply from a Third Party (TPS) or from Public Services Basic Gas Supply Service (BGSS) default service as detailed in the rate schedule. Currently this facility receives the commodity supply from PSEG at BGSS default rates. This service is used at the Meadowview buildings for low consumption purposes such as cooking and laundry. The service described above has a much higher priority of delivery, based on the pipeline capacity. The "firm" service is the highest priority, and does not get interrupted.

TSG-NF is an interruptible delivery for general purposes where the maximum requirement for interruptible gas is not less than 150 Therms per hour and where the customer has the installed capability to utilize an alternate type of fuel, except as provided for in Special Provisions. Customers may either purchase gas supply from a Third Party Supplier (TPS) or from Public Service's Basic Gas Supply Service default service as detailed in this rate schedule. This service is used mainly at the central steam plant, which delivers steam to the various buildings throughout the campus. Currently this facility receives the commodity supply from PSEG at BGSS default rates. The service described above has a lower priority of delivery, based on the pipeline capacity. If the gas demand in the pipeline increases, this facility can switch to oil as primary fuel for the boilers because the plant is capable of utilizing oil as boiler fuel.

Both of these rate schedules have a Delivery Charge Mechanism which includes: 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 Supply Charge (Commodity Charge) serviced through the utility or by a Third Party Supplier (TPS).

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. Should the TPS un-deliver to the utility on behalf of the client, the utility will automatically supply this default service to the client. 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.

Recommendations:

CEG recommends a global approach that will be consistent with all facilities within the County. One area for potential improvement is seen in the electric costs. The average price per kWh (kilowatt hour) for the electrical service to the buildings #4-9 is \$0.11/kWh, (this is the average "price to compare" if the client intends to shop for energy) based on the default BGS supply charges. The price per kWh (kilowatt hour) for the rest of the campus is \$0.69/kWh based on the default TPS supply charges (This is the average "price to compare"). It is recommended to shop for pricing based on the combined load profile for all buildings owned by the County. The more diversified the load patterns, the more advantageous the load profile becomes.

The load factor for this facility is slightly below 50% which will allow for Hudson County Correctional Center to procure fairly competitive pricing. The higher the load factor, the more advantageous. Although many additional factors play a role in energy procurement, having a load factor above 50% is beneficial.

The average price per dekatherm for natural gas is \$ 7.20 / dth (dth, dekatherm is the common unit of measure). Energy commodities are among the most volatile of all commodities, however at this point and time, energy is competitive. Based on this facility's average annual natural gas costs Hudson County Correctional Center is already receiving extremely competitive natural gas costs. It is recommended that the County receive further advisement on these prices through an energy advisor. The County should also consider procuring energy (natural gas) through alternative supply sources as well.

It is recommended that the County schedule a meeting with the 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 are currently available. Through its meeting with the Local Distribution Company (LDC), the municipality can learn more about the competitive supply process. Hudson County can acquire a list of approved Third Party Suppliers from the New Jersey Board of Public Utilities website at www.nj.gov/bpu. Hudson County should consider using a billing-auditing service to further analyze the utility invoices, manage the data and use the information for ongoing demand-side management projects. Furthermore, special attention should be given to credit mechanisms, imbalances, balancing charges and commodity charges when meeting with the utility representative. The County should ask the utility representative about alternative billing options, such as consolidated billing when utilizing the service of a Third Party Supplier. Finally, if the supplier for energy (natural gas) is changed, closely monitor balancing, particularly when the contract is close to termination. This could be performed with the aid of an "energy advisor".

X. INSTALLATION FUNDING OPTIONS

CEG has reviewed various funding options for the facility 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.
- iv. Pay For Performance The New Jersey Smart Start Pay for Performance program includes incentives based on savings resulted from implemented ECMs. The program is available for all buildings that were audited as part of the NJ Clean Energy's Local Government Energy Audit Program. The facility's participation in the program is assisted by an approved program partner. An "Energy Reduction Plan" is created with the facility and approved partner to shown at least 15% reduction in the building's current energy use. Multiple energy conservation measures implemented together are applicable toward the total savings of at least 15%. No more than 50% of the total energy savings can result from lighting upgrades / changes.

Total incentive is capped at 50% of the project cost. The program savings is broken down into three benchmarks; Energy Reduction Plan, Project Implementation, and Measurement and Verification. Each step provides additional incentives as the energy reduction project continues. The benchmark incentives are as follows:

- 1. Energy Reduction Plan Upon completion of an energy reduction plan by an approved program partner, the incentive will grant \$0.10 per square foot between \$5,000 and \$50,000, and not to exceed 50% of the facility's annual energy expense. (Benchmark #1 is not provided in addition to the local government energy audit program incentive.)
- 2. Project Implementation Upon installation of the recommended measures along with the "Substantial Completion Construction Report," the incentive will grant savings per KWH or Therm based on the program's rates. Minimum saving must be 15%. (Example \$0.11 / kWh for 15% savings, \$0.12/ kWh for 17% savings, ... and \$1.10 / Therm for 15% savings, \$1.20 / Therm for 17% saving, ...) Increased incentives result from projected savings above 15%.
- 3. Measurement and Verification Upon verification 12 months after implementation of all recommended measures, that actual savings have been achieved, based on a completed verification report, the incentive will grant additional savings per kWh or Therm based on the program's rates. Minimum savings must be 15%. (Example \$0.07 / kWh for 15% savings, \$0.08/ kWh for 17% savings, ... and \$0.70 / Therm for 15% savings, \$0.80 / Therm for 17% saving, ...) Increased incentives result from verified savings above 15%.

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.

XI. ADDITIONAL RECOMMENDATIONS

The following recommendations include no cost/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. Clean all light fixtures to maximize light output.
- D. Provide more frequent air filter changes to decrease overall system power usage and maintain better IAQ.
- E. Confirm that outside air economizers on the rooftop units and air handling units are functioning properly to take advantage of free cooling and avoid excess outside air during occupied periods.
- F. Implement a steam trap maintenance program. When steam traps fail, they will release steam which can accumulate to huge volumes of steam contributing to increase boiler plant flue costs. Steam traps should be inspected to ensure proper operation, or monitored with temperature sensors to alarm when steam is passing.

In addition to the recommendations above, implementing Retro-Commissioning would be beneficial for this facility. Retro-Commissioning is a means to verify your current equipment is operating at its designed efficiency, capacity, airflow, and overall performance. Retro-Commissioning provides valuable insight into systems or components not performing correctly or efficiently. The commissioning process defines the original system design parameters and recommends revisions to the current system operating characteristics.

XII. ENERGY AUDIT ASSUMPTIONS

The assumptions utilized in this energy audit include but are not limited to following:

- A. Cost Estimates noted within this report are based on industry accepted costing data such as RS MeansTM Cost Data, contractor pricing and engineering estimates. All cost estimates for this level of auditing are +/- 20%. Prevailing wage rates for the specified region has been utilized to calculate installation costs. The cost estimates indicated within this audit should be utilized by the owner for prioritizing further project development post the energy audit. Project development would include investment grade auditing and detailed engineering.
- B. Energy savings noted within this audit are calculated utilizing industry standard procedures and accepted engineering assumptions. For this level of auditing, energy savings are not guaranteed.
- C. Information gathering for each facility is strongly based on interviews with operations personnel. Information dependent on verbal feedback is used for calculation assumptions including but not limited to the following:
 - a. operating hours
 - b. equipment type
 - c. control strategies
 - d. scheduling
- D. Information contained within the major equipment list is based on the existing owner documentation where available (drawings, O&M manuals, etc.). If existing owner documentation is not available, catalog information is utilized to populate the required information.
- E. Equipment incentives and energy credits are based on current pricing and status of rebate programs. Rebate availability is dependent on the individual program funding and applicability.
- F. Equipment (HVAC, Plumbing, Electrical, & Lighting) noted within an ECM recommendation is strictly noted as a **basis for calculation** of energy savings. The owner should use this equipment information as a benchmark when pursuing further investment grade project development and detailed engineering for specific energy conservation measures.
- G. Utility bill annual averages are utilized for calculation of all energy costs unless otherwise noted. Accuracy of the utility energy usage and costs are based on the information provided. Utility information including usage and costs is estimated where incomplete data is provided.

ECM COST & SAVINGS BREAKDOWN

CONCORD ENGINEERING GROUP

Hudson County - Meadowview Psychiatric Hospital

ECM ENER	RGY AND FINANCIAL COSTS AND SA	AVINGS SUMMA	RY					son County - Meadow							
			INSTALL	ATION COST			YEARLY SAVIN	GS	ECM	LIFETIME ENERGY SAVINGS	LIFETIME MAINTENANCE SAVINGS	LIFETIME ROI	SIMPLE PAYBACK	INTERNAL RATE OF RETURN (IRR)	NET PRESENT VALUE (NPV)
ECM NO.	DESCRIPTION	MATERIAL	LABOR	REBATES, INCENTIVES	NET INSTALLATION COST	ENERGY	MAINT./ SREC	TOTAL	LIFETIME	(Yearly Saving * ECM Lifetime)	(Yearly Maint Svaing * ECM Lifetime)	(Lifetime Savings - Net Cost) / (Net Cost)	(Net cost / Yearly Savings)	$\sum_{n=0}^{N} \frac{C_n}{(1 + IRR)^n}$	2 (2 + DR)*
		(\$)	(\$)	(\$)	(S)	(\$/Yr)	(\$/Yr)	(\$/Yr)	(Yr)	(\$)	(S)	(%)	(Yr)	(\$)	(\$)
ECM #1	Lighting Equipment Upgrade	\$5,438	\$8,158	\$1,650	\$11,946	\$4,193	\$189	\$4,382	25	\$109,548	\$4,727	817.0%	2.7	36.67%	\$64,357.31
ECM #2	Lighting Controls Upgrade	\$1,344	\$2,016	\$420	\$2,940	\$230	\$0	\$230	25	\$5,760	\$0	95.9%	12.8	6.02%	\$1,071.82
ECM #3	AHU Supply & Return VFD Retrofit	\$26,500	\$43,500	\$11,375	\$58,625	\$25,295	\$0	\$25,295	15	\$379,419	\$0	547.2%	2.3	42.94%	\$243,340.11
ECM #4	Kitchen Exhaust Hood Controls	\$46,044	\$0	\$0	\$46,044	\$4,855	\$0	\$4,855	15	\$72,829	\$0	58.2%	9.5	6.37%	\$11,917.81
ECM #5	Variable Primary Chilled Water Flow	\$18,900	\$36,550	\$3,600	\$51,850	\$4,172	\$0	\$4,172	15	\$62,577	\$0	20.7%	12.4	2.45%	(\$2,047.52)
REM RENI	EWABLE ENERGY AND FINANCIAL	COSTS AND SAV	INGS SUMMARY	•											
REM #1	Solar Photovoltaic System	\$344,080	\$0	\$0	\$344,080	\$5,069	\$17,395	\$22,464	25	\$561,610	\$434,875	63.2%	15.3	4.19%	\$47,095.91

Notes: 1) The variable Cn in the formulas for Internal Rate of Return and Net Present Value stands for the cash flow during each period.

2) The variable DR in the NPV equation stands for Discount Rate

3) For NPV and IRR calculations: From n=0 to N periods where N is the lifetime of ECM and Cn is the cash flow during each period.

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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 February, 2010:

Electric Chillers

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

Energy Efficiency must comply with ASHRAE 90.1-2004

Gas Cooling

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

Desiccant Systems

\$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
Occupancy Controlled Thermostat (Hospitality & Institutional Facility)	\$75 per thermostat

Energy Efficiency must comply with ASHRAE 90.1-2004

Ground Source Heat Pumps

	\$450 per ton, EER \geq 16
Closed Loop & Open Loop	\$600 per ton, EER \geq 18
	\$750 per ton, EER \geq 20

Energy Efficiency must comply with ASHRAE 90.1-2004

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, AFUE ≥ 92%

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

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
Gas Fired Tankless Water Heaters	\$300 per unit

Prescriptive Lighting

Retro fit of T12 to T-5 or T-8 Lamps w/Electronic Ballast in Existing Facilities	\$15 per fixture (1-4 lamps)	
Replacement of T12 with new T-5 or T- 8 Lamps w/Electronic Ballast in Existing Facilities	\$25 per fixture (1-2 lamps) \$30 per fixture (3-4 lamps)	
Replacement of incandescent with screw-in PAR 38 or PAR 30 (CFL) bulb	\$7 per bulb	
T-8 reduced Wattage (28w/25w 4', 1-4 lamps) Lamp & ballast replacement	\$10 per fixture	
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	
HID ≥ 100w Retrofit with induction lamp, power coupler and generator (must be 30% less watts/fixture than HID system)	\$50 per fixture	
HID ≥ 100w Replacement with new HID ≥ 100w	\$70 per fixture	
LED Refrigerator/Freezer case lighting replacement of fluorescent in medium and low temperature display case	\$42 per 5 foot \$65 per 6 foot	

Lighting Controls – Occupancy Sensors

Wall Mounted	\$20 per control	
Remote Mounted	\$35 per control	
Daylight Dimmers	\$25 per fixture	
Occupancy Controlled hi-low 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
Daylight Dimming - office	\$50 per fixture controlled

Premium Motors

Three-Phase Motors	\$45 - \$700 per motor
Fractional HP Motors Electronic Communicated Motors (replacing shaded pole motors in refrigerator/freezer cases)	\$40 per electronic communicated motor

Other Equipment Incentives

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
Custom Measures	\$0.16 KWh and \$1.60/Therm of 1st year savings, or a buy down to a 1 year payback on estimated savings. Minimum required savings of 75,000 KWh or 1,500 Therms and a IRR of at least 10%.
Multi Measures Bonus	15%

Portfolio Manager "Statement of Energy Performance"

An Energy Performance Rating cannot be established for the Campus or individual buildings. The Energy Star program does not have enough bin data available to calculate a campus wide Energy Performance Rating at this time. Also, individual building ratings cannot be established due to the design of the Campus wide electric and gas distribution system. One year of utility data must be entered for each building or facility, since reliable building energy meters do not exist, this approach cannot be taken.

Concord Engineering Group

"Meadowview Complex - Psychiatric Hospital"

Chillers

Ciliicis			
Tag	CH-1	CH-2	
Type	Water Cooled		
Location	Contro	l House	
Area Served	Air Hand	ling Units	
Manufacturer	Yo	ork	
Qty.		2	
Model #	YTC3C3B2	YTC3C3B2	
Serial #	GCEM212164	GCEM212265	
Nominal Tons	2 x	165	
Refrigerant	R1	123	
Service	Regular		
EWT	52		
LWT	42		
Efficiency (kW/Ton)	0.62		
Chilled Water GPM, DT	396 GPM, 10°F		
Condenser Water GPM	495 GPM, 8.4°F		
Volt / Phase	460/3		
Approx. Age	14		
ASHRAE Service Life	20		
Remaining Life	6		
Notes	IGV's for le	oad control.	

Concord Engineering Group

"Meadowview Complex - Psychiatric Hospital"

Pumps

1 umps			
Tag	CHP-1, 1A	CWP 1, 1A	
Location	Control Room	Control Room	
Area Served	Condenser Water	Chilled Water	
Manufacturer	Aurora	Aurora	
Qty.	2	2	
Model #	-	-	
Serial #	-	-	
HP	30HP	30HP	
RPM	1,770	1770	
GPM	~600	400	
Ft. Hd	-	-	
Motor Frame Size	286T	286T	
Motor Efficiency	94.1%	94.1%	
Volts / Phase	460/3	460/3	
Approx. Age	10	15	
ASHRAE Service Life	20	20	
Remaining Life	10	5	
		Constant volume	
Notes	Constant Volume Pump	pumps. 3-way valves on	
		air handling units	

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"Meadowview Complex - Psychiatric Hospital"

Condensate Pumps

Tag	CRU - 1	
T	Pressure Powered Condensate	
Туре	Pump, Type PP C	
Location	Control Building	
Area Served	Steam Converters for Domestic	
Area Serveu	Water Heater	
Manufacturer	Sprirax Sarco	
Qty.	3	
Order #	F1157105	
Serial #	67612	
Size	3 x 2	
Max Pressure, psig	125	
GPM	-	
Approx. Age	16	
ASHRAE Service Life	15	
Remaining Life	(1)	
Notes		

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"Meadowview Complex - Psychiatric Hospital"

Cooling Tower

Cooling Tower		
Tag	Cooling Tower	
Location	Control Room Roof	
Area Served	Chillers	
Manufacturer	BAC	
Qty.	1	
Model #	-	
Serial #	-	
Service	Regular	
Nominal Capacity *	600	
GPM *	1,000	
Ambient Air WB	-	
Number of Cells	1	
Fan-1 HP	20 HP	
Fan-1 Eff	88.50%	
Fan-2 HP	7.5 HP	
Fan-2 Eff	84%	
V/Ph/Hz	460/3	
FLA	26.4, 10.6 Amps	
Approx. Age	14	
ASHRAE Service Life	22	
Remaining Life	8	
Notes	2 speed fan	

^{*} Estimated based on chiller information

Concord Engineering Group

"Meadowview Complex - Psychiatric Hospital"

Air Handling Units

All Hallulling Ullus	ATTI 4 D 114	D 1D 1G 1	
Tag	AHU - 1: Built-up, Dual Duct System		
Unit Type	Hot Deck	Cold Deck	
Location	5th Flo	or MER	
Area Served	1 to 4tl	n Floors	
Manufacturer		-	
Model #	-	-	
Serial #	-	-	
Total Supply Flow, CFM	55,	355	
Ecomonizer	Air side	100% OA	
Supply Fan HP	125 HF	P (SF#1)	
Supply Fan Motor Eff	95.40%		
Return Fan HP	40 HP (RF #1)		
Return Fan Motor Eff	93.00%		
Cooling Type	- Chilled Water		
Cooling Capacity, Mbh	-	3,230	
Heating Type	Steam*	-	
Preheat input, lb/hr	1276	-	
Heating input, lb/hr	375	-	
Reheat, lb/hr	4252	-	
Volts / Phase	460/3	460/3	
Approx. Age	Not known	Not known	
ASHRAE Service Life	15	15	
Remaining Life	0	0	
Notes	The system is old. It was retrofitted in 1995		

^{*} Steam supplied to the coils at 50 psig

^{* 1000} lb/hr steam at 50 psig provides approximately 910 Mbh

Concord Engineering Group

"Meadowview Complex - Psychiatric Hospital"

Air Handling Units

Air Handling Units			
Tag	AHU-2	AHU - 3	
Unit Type	Standard	Standard	
Location	Control Bldg 2nd Fl.	Control Bldg 2nd Fl.	
Area Served	Part 1st and 2nd Floor	Kitchen	
Manufacturer	Temtrol	-	
Model #	F-CS11	-	
Serial #	65177	-	
Total Supply Flow, CFM	4,780	26000	
Ecomonizer	Air side 100% OA	None	
Supply Fan HP	5 HP (SF #2)	10 (SF #3)	
Supply Fan Motor Eff	Low	88.50%	
Return Fan HP	-	None	
Return Fan Motor Eff	-	-	
Cooling Type	Chilled Water	None	
Cooling Capacity, Mbh	350	-	
Heating Type	Steam	Steam	
Preheat input, lb/hr	467	-	
Heating input, lb/hr		-	
Reheat, lb/hr	258.7	2890, 67 (Two zones)	
Volts / Phase	260 (Zones #5 - 12)	460/3	
Approx. Age	10 (est)	Not known	
ASHRAE Service Life	15	15	
Remaining Life	5	0	
Notes	Newer unit		

^{*} Steam supplied to the coils at 50 psig

^{* 1000} lb/hr steam at 50 psig provides approximately 910 Mbh

Concord Engineering Group

"Meadowview Complex - Psychiatric Hospital"

Air Compressor

Tag	Compressor 1	Compressor 2, 3
Type	Triple head, Dual, Reciprocating	Triple head, Dual, Reciprocating
Location	Control Bldg 2nd Fl.	Control Bldg 2nd Fl.
Area Served	HVAC Actuators	HVAC Actuators
Manufacturer	Air Compressor Products, Inc	Air Compressor Products, Inc
Qty.	1	2
Model #	C5SB-5 12D 3	-
Serial #	1195-5653	-
Motor HP	2 x 5HP	3 HP Each
Motor Efficiency	82.50%	82.50%
Pressure	100	100
Capacity	50	50
Volts / Phase	120	120
FLA	-	-
Approx. Age	15	19
ASHRAE Service Life	20	20
Remaining Life	5	1
Notes		New 3 HP motors

Concord Engineering Group

"Meadowview Complex - Psychiatric Hospital"

Exhaust Fans and Heating & Ventilation Units

Tag	EF-2	EF-3	EF-4
Location	5th Floor MER	5th Floor MER	5th Floor MER
Area Served	Dishwasher hood	Partial 1st Floor	Kitchen Range Hood
Manufacturer	-	-	-
Model # / Serial #	-	-	-
Heating Coil	None	None	None
Capacity (Btu/h)	-	-	-
Fan HP	1.5 HP	3/4 HP	7.5 HP
Motor Efficiency	Standard	88.50%	Standard
Flow, CFM	6935	3,055	24,925
Fan RPM	664	1525	459
Volts / Phase	460/3	460/3	460/3
Amps	1.4	0.7	7.0
Approx. Age	30	30	30
ASHRAE Service Life	15	15	15
Remaining Life	(15)	(15)	(15)
Notes			

Tag	EF-5	EF-9	EF-11
Location	5th MER	Control Room 2nd Fl	Control Room 2nd Fl
Area Served	Toilet Exhaust Fan	Partial 2nd Floor	Partial 2nd Floor
Manufacturer	-	-	-
Model # / Serial #	-	-	-
Heating Coil	-	-	-
Capacity (Btu/h)	-	-	-
Fan HP	5	3/4	1
Motor Efficiency	87.50%	82.00%	82.50%
Flow, CFM	11050	2,500	2,250
Fan RPM	815	875	1067
Volts / Phase	460/3	460/3	460/3
Amps	-	-	-
Approx. Age	Not known	Not known	Not known
ASHRAE Service Life	15	15	15
Remaining Life	0	0	0
Notes			

KWH COST: \$0.102

CEG Job #: 9C09162

Project: HUDSON COUNTY IMPROVEMENT AUTHORITY ENERGY AUDIT

Building - 10 Psychiatric Hospital

Address: 595 County Ave. Secaucus, NJ. 07094

Building SF: 63,775

ECM #1: Lighting Upgrade - General

	#1: Lighting	Upgr	ade -	Gen	eral																	
	NG LIGHTING									PROF	POSED	LIGHTING							SAVING			
CEG	Fixture	Yearly	No.	No.	Fixture	Fixt	Total	kWh/Yr	Yearly	No.	No.	Retro-Unit	Watts	Total	kWh/Yr	Yearly	Unit Cost	Total	kW	kWh/Yr	Yearly	Yearly Simple
Type	Location	Usage	Fixts	Lamps	Type	Watts	kW	Fixtures	\$ Cost	Fixts	Lamps	Description	Used	kW	Fixtures	\$ Cost	(INSTALLED)	Cost	Savings	Savings	\$ Savings	Payback
	I	Contr	ol Roor	n	I																	
126.34	Main Equipment Area	8760	5	2	2' Channel, (2) 20w T12, Mag. Ballast, Pendant Mnt., No Lens	42	0.21	1,839.6	\$187.64	5	2	2' Channel, (2) 17w T8, Elect. Ballast, Pendant Mnt., No Lens	33	0.17	1445.4	\$147.43	\$70.00	\$350.00	0.05	394.2	\$40.21	8.70
121.34	Main Equipment Area	8760	5	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.38	3,285.0	\$335.07	5	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.29	2540.4	\$259.12	\$100.00	\$500.00	0.09	744.6	\$75.95	6.58
128.31	Main Equipment Area	8760	2	2	8 Foot, 2-Lamp, 75w T12, Mag. Ballast, Pendant Mnt., Prismatic	142	0.28	2,487.8	\$253.76	2	4	(2) 8' Lamps to (4) 4' Lamps; 4 Lamp, 32w T8, Elect. Ballast; retrofit	104	0.21	1822.08	\$185.85	\$100.00	\$200.00	0.08	665.76	\$67.91	2.95
305	Main Equipment Area	8760	5	1	1 Lamp Incandescent, 150 Watt Bulbs, Surface Mounted, Direct	150	0.75	6,570.0	\$670.14	5	1	42 W CFL Lamp	42	0.21	1839.6	\$187.64	\$20.00	\$100.00	0.54	4730.4	\$482.50	0.21
142.21	Staff Office	8760	2	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.34	3,013.4	\$307.37	2	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.17	1506.72	\$153.69	\$100.00	\$200.00	0.17	1506.72	\$153.69	1.30
113.11	Staff Office	8760	4	1	3 Foot, 1-Lamp, T12, Magnetic Ballast, Surface Mounted, Prismatic Lens	47	0.19	1,646.9	\$167.98	4	1	3' - 1-Lamp 25W T-8 Prismatic Lens / Elect Ballast; Metalux M/N SNF125	23	0.09	805.92	\$82.20	\$119.00	\$476.00	0.10	840.96	\$85.78	5.55
142.21	Staff Lounge	8760	4	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.69	6,026.9	\$614.74	4	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.34	3013.44	\$307.37	\$100.00	\$400.00	0.34	3013.44	\$307.37	1.30
127.21	Staff Lounge	8760	1	2	2x2, 2-Lamp, 34w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	66	0.07	578.2	\$58.97	1	3	3 Lamp, 17w T8, Elect. Ballast, Specular Reflector; retrofit	48	0.05	420.48	\$42.89	\$100.00	\$100.00	0.02	157.68	\$16.08	6.22
122.21	Kitchen Machine Room	2600	2	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.15	390.0	\$39.78	2	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.12	301.6	\$30.76	\$100.00	\$200.00	0.03	88.4	\$9.02	22.18
122.21	Bathroom in Staff Lounge	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.08	195.0	\$19.89	1	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.06	150.8	\$15.38	\$100.00	\$100.00	0.02	44.2	\$4.51	22.18
121.21	Bathroom in Staff Lounge	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	75	0.08	195.0	\$19.89	1	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.06	150.8	\$15.38	\$100.00	\$100.00	0.02	44.2	\$4.51	22.18
121.31	2nd Floor	8760	6	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., Prismatic Lens	75	0.45	3,942.0	\$402.08	6	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.35	3048.48	\$310.94	\$100.00	\$600.00	0.10	893.52	\$91.14	6.58

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305	2nd Floor	8760	8	1	1 Lamp Incandescent, 150 Watt Bulbs, Surface Mounted, Direct	150	1.20	10,512.0	\$1,072.22	8	1	42 W CFL Lamp	42	0.34	2943.36	\$300.22	\$20.00	\$160.00	0.86	7568.64	\$772.00	0.21
	1	Firs	t Floor		,																	
116.14	Elevator Car 1	8760	6	1	2' Channel, (1) 20w T12, Mag. Ballast, Pendant Mnt., No Lens	22	0.13	1,156.3	\$117.94	6	1	2' Channel, (1) 17w T8, Elect. Ballast, Pendant Mnt., No Lens	17	0.10	893.52	\$91.14	\$60.00	\$360.00	0.03	262.8	\$26.81	13.43
116.14	Elevator Car 2	8760	6	1	2' Channel, (1) 20w T12, Mag. Ballast, Pendant Mnt., No Lens	22	0.13	1,156.3	\$117.94	6	1	2' Channel, (1) 17w T8, Elect. Ballast, Pendant Mnt., No Lens	17	0.10	893.52	\$91.14	\$60.00	\$360.00	0.03	262.8	\$26.81	13.43
242.21	107 Housekeeping	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	108 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	NW1 Corridor	8760	6	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.35	3,048.5	\$310.94	6	0	No Change	58	0.35	3048.48	\$310.94	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	2	2	Exit Sign - Flourescent	18	0.04	315.4	\$32.17	2	1	Exit Sign - LED	2	0.00	35.04	\$3.57	\$65.00	\$130.00	0.03	280.32	\$28.59	4.55
900	110 Telephone Room	520	2	2	Recessed Down Light, (2) 14w PL Lamps	30	0.06	31.2	\$3.18	2	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	109 Confidential Aide	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	112/13 Pesonnel	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	112 Restroom	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	30.2	\$3.08	1	0	No Change	58	0.06	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	Closet	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	\$1.59	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	114 Personnel	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	115/117/118 Offices	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.65	1,684.8	\$171.85	6	0	No Change	108	0.65	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	115 Restroom	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	30.2	\$3.08	1	0	No Change	58	0.06	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Closet	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	30.2	\$3.08	1	0	No Change	58	0.06	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	125 Medical Director	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

242.21	126 Medical Director	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	119 Storage	520	1	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.06	30.2	\$3.08	1	0	No Change	58	0.06	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900		520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	\$1.59	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	120 Storage	520	1	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.06	30.2	\$3.08	1	0	No Change	58	0.06	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900		520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	\$1.59	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	123 Janitor's Closet	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	\$1.59	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.11	N1 Corridor	8760	32	2	2-Lamp, T8, Electronic Ballast, Surface Mounted, Prismatic Lens	58	1.86	16,258.6	\$1,658.37	32	0	No Change	58	1.86	16258.56	\$1,658.37	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	11	2	Exit Sign - Flourescent	18	0.20	1,734.5	\$176.92	11	1	Exit Sign - LED	2	0.02	192.72	\$19.66	\$65.00	\$715.00	0.18	1541.76	\$157.26	4.55
242.21	130 Secretarial Office	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	2	Delamp Fixture - Over Lit	58	0.23	603.2	\$61.53	\$40.00	\$160.00	0.20	520	\$53.04	3.02
221.21	130 Restrooms and Hall	2600	3	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.17	452.4	\$46.14	3	0	No Change	58	0.17	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	128 Administrator	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.65	1,684.8	\$171.85	6	0	No Change	108	0.65	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	128 Restroom	2600	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	78.0	\$7.96	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	134 Quality Assurance	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.23	603.2	\$61.53	4	0	No Change	58	0.23	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	134 Restroom	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	\$1.59	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	134 Closet	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	30.2	\$3.08	1	0	No Change	58	0.06	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	135 Storage	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	\$1.59	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	139 Clinical Director	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.23	603.2	\$61.53	4	0	No Change	58	0.23	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	140 Conference Room	2600	6	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.35	904.8	\$92.29	6	0	No Change	58	0.35	904.8	\$92.29	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	141 MIS	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00

221.21	144 Restroom	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	143 On Call	8760	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	1,892.2	\$193.00	2	0	No Change	108	0.22	1892.16	\$193.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Restroom/Shower	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900		2600	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	78.0	\$7.96	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	149 Medical Records	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	149 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	Lobby	8760	16	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.93	8,129.3	\$829.19	16	0	No Change	58	0.93	8129.28	\$829.19	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	6	2	Exit Sign - Flourescent	18	0.11	946.1	\$96.50	6	1	Exit Sign - LED	2	0.01	105.12	\$10.72	\$65.00	\$390.00	0.10	840.96	\$85.78	4.55
222.21	150 Finance	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.23	603.2	\$61.53	4	0	No Change	58	0.23	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	152 Finance	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	151 Computer Training	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	S1 Corridor	8760	5	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.29	2,540.4	\$259.12	5	0	No Change	58	0.29	2540.4	\$259.12	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	2	2	Exit Sign - Flourescent	18	0.04	315.4	\$32.17	2	1	Exit Sign - LED	2	0.00	35.04	\$3.57	\$65.00	\$130.00	0.03	280.32	\$28.59	4.55
242.21	151 Transportation	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	151 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	153 Art Therapy	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	172 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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242.21	156 Library	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	157 Gym	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.65	1,684.8	\$171.85	6	0	No Change	108	0.65	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	161 Teaching	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Kitchen	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Storage	520	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.12	60.3	\$6.15	2	0	No Change	58	0.12	60.32	\$6.15	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21		2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	· 167 Locker Room	2600	5	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.29	754.0	\$76.91	5	0	No Change	58	0.29	754	\$76.91	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	166 Server Room	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.11	280.8	\$28.64	1	0	No Change	108	0.11	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	170 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	W1 Corridor	8760	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.12	1,016.2	\$103.65	2	0	No Change	58	0.12	1016.16	\$103.65	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	1	2	Exit Sign - Flourescent	18	0.02	157.7	\$16.08	1	1	Exit Sign - LED	2	0.00	17.52	\$1.79	\$65.00	\$65.00	0.02	140.16	\$14.30	4.55
222.21	165 Waiting Room	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.23	603.2	\$61.53	4	0	No Change	58	0.23	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	165 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	165 Storage	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	\$1.59	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	162 Treatment	2600	10	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	1.08	2,808.0	\$286.42	10	0	No Change	108	1.08	2808	\$286.42	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Room	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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242.21	Library	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
		Kit	chen																			
142.21	Dining	2600	3	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.52	1,341.6	\$136.84	3	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.26	670.8	\$68.42	\$100.00	\$300.00	0.26	670.8	\$68.42	4.38
142.21	Break Room	2600	2	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.34	894.4	\$91.23	2	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.17	447.2	\$45.61	\$100.00	\$200.00	0.17	447.2	\$45.61	4.38
122.21	Restroom	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.08	195.0	\$19.89	1	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.06	150.8	\$15.38	\$100.00	\$100.00	0.02	44.2	\$4.51	22.18
142.21	Wash Area	2600	7	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	1.20	3,130.4	\$319.30	7	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.60	1565.2	\$159.65	\$100.00	\$700.00	0.60	1565.2	\$159.65	4.38
142.21	Office	2600	1	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.17	447.2	\$45.61	1	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.09	223.6	\$22.81	\$100.00	\$100.00	0.09	223.6	\$22.81	4.38
142.21	Kitchen	2600	22	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	3.78	9,838.4	\$1,003.52	22	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	1.89	4919.2	\$501.76	\$100.00	\$2,200.00	1.89	4919.2	\$501.76	4.38
127.21	Kuchen	2600	2	2	2x2, 2-Lamp, 34w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	66	0.13	343.2	\$35.01	2	3	3 Lamp, 17w T8, Elect. Ballast, Specular Reflector; retrofit	48	0.10	249.6	\$25.46	\$100.00	\$200.00	0.04	93.6	\$9.55	20.95
121.21 E	Exhaust Hoods	2600	4	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	75	0.30	780.0	\$79.56	4	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.23	603.2	\$61.53	\$100.00	\$400.00	0.07	176.8	\$18.03	22.18
121.21 Ch	hemical Storage Room	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	75	0.08	195.0	\$19.89	1	2	2 Lamp, 32w T8, Elect. Ballast; retrofit	58	0.06	150.8	\$15.38	\$100.00	\$100.00	0.02	44.2	\$4.51	22.18
141.21	Office	2600	2	4	1x4, 4-Lamp, 40w T12,Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.34	894.4	\$91.23	2	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.17	447.2	\$45.61	\$100.00	\$200.00	0.17	447.2	\$45.61	4.38
141.11	Storage #1	2600	5	4	1x4, 4-Lamp, 40w T12,Mag. Ballast, Surface Mnt., Prismatic Lens	172	0.86	2,236.0	\$228.07	5	3	3 Lamp, 32w T8, Elect. Ballast; retrofit	86	0.43	1118	\$114.04	\$100.00	\$500.00	0.43	1118	\$114.04	4.38
603	Kitchen	8760	2	2	Exit Sign - Flourescent	18	0.04	315.4	\$32.17	2	1	Exit Sign - LED	2	0.00	35.04	\$3.57	\$65.00	\$130.00	0.03	280.32	\$28.59	4.55
600	Kitchen	8760	2	1	Exit Sign - LED	10	0.02	175.2	\$17.87	2	0	No Change	10	0.02	175.2	\$17.87	\$0.00	\$0.00	0.00	0	\$0.00	0.00
			d Floor																			
232.21	N2 Corridor	8760	7	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.57	5,028.2	\$512.88	7	0	No Change	82	0.57	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	2	2	Exit Sign - Flourescent	18	0.04	315.4	\$32.17	2	1	Exit Sign - LED	2	0.00	35.04	\$3.57	\$65.00	\$130.00	0.03	280.32	\$28.59	4.55

242.21	204 Social Services	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	205/206 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	207/208 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	211 Consultation Room	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.32	842.4	\$85.92	3	0	No Change	108	0.32	842.4	\$85.92	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	210 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	209/212 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	213 Phychiatry Office	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.32	842.4	\$85.92	3	0	No Change	108	0.32	842.4	\$85.92	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	214 Bathtub	8760	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	508.1	\$51.82	1	0	No Change	58	0.06	508.08	\$51.82	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	217/219 Dti.	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	217/218 Patient Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.05	119.6	\$12.20	2	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00

242.21 2600 2 4 224, 4-1-4mp, 32w T8, Elect. Ballast, Recessed. 108 0.22 561.6 857.28 2 0 No Change 108 0.22 561.6 857.28 \$0.00 \$0.00 0.00 0 0 0 0 0 0 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
Pool Room & Bathroom with Shower A700 1 1 Recessed Wall Mnt. Night Light, (1) 9w CFL 9 0.01 42.3 S4.31 1 0 No Change 0 0.00 0 S0.00 S0.00 S0.00 S0.00 S0.00 0.00 0 0 0 0 0 0 0	\$0.00 0.00 \$0.00 0.00 \$0.00 0.00 \$0.00 0.00 \$0.00 0.00
Signature Sign	\$0.00 0.00 \$0.00 0.00 \$0.00 0.00 \$0.00 0.00 \$0.00 0.00
Solution	\$0.00 0.00 \$0.00 0.00 \$0.00 0.00 \$0.00 0.00
900 221 Custodial Closet 520 2 2 Recessed Down Light, (2) 14w PL Lamps 30 0.06 31.2 \$3.18 2 0 No Change 0 0.00 0 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 0 0 0 0 0 0 0 0 0	\$0.00 0.00 \$0.00 0.00 \$0.00 0.00
242.21	\$0.00 0.00 \$0.00 0.00
920 Room & Bathroom 4700 1 1 Recessed Wall Mnt. Night Light, (1) 9w CFL 9 0.01 42.3 \$4.31 1 0 No Change 0 0.00 0 \$0.00 \$0.00 \$0.00 \$0.00 0 0 0 0 0 0 0 0 0	\$0.00 0.00
910	
222.21 222 Dining Room 2600 9 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.52 1,357.2 \$138.43 9 0 No Change 58 0.52 1357.2 \$138.43 \$0.00 \$0.00 0.00 0	\$0.00 0.00
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224 Day Room Prismatic Lens Prismatic Lens	\$0.00 0.00
603 8760 2 2 Exit Sign - Flourescent 18 0.04 315.4 \$32.17 2 1 Exit Sign - LED 2 0.00 35.04 \$3.57 \$65.00 \$130.00 0.03 280.32	\$28.59 4.55
232 Lobby 8760 11 3 1x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens 82 0.90 7,901.5 \$805.96 11 0 No Change 82 0.90 7901.52 \$805.96 \$0.00 \$0.00 0.00 0	\$0.00 0.00
603 8760 1 2 Exit Sign - Flourescent 18 0.02 157.7 \$16.08 1 1 Exit Sign - LED 2 0.00 17.52 \$1.79 \$65.00 \$65.00 0.02 140.16	\$14.30 4.55
242.21 Nurse's Station 8760 3 4 Elect. Ballast, Recessed, Prismatic Lens 108 0.32 2,838.2 \$289.50 3 0 No Change 108 0.32 2838.24 \$289.50 \$0.00 \$0.00 0.00 0	\$0.00 0.00
221.21 Valuables 2600 1 2 1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens 58 0.06 150.8 \$15.38 1 0 No Change 58 0.06 150.8 \$15.38 \$0.00 \$0.00 0.00 0	\$0.00 0.00
242.21 Medication Room 2600 1 4 Elect. Ballast, Recessed. Prismatic Lens 108 0.11 280.8 \$28.64 1 0 No Change 108 0.11 280.8 \$28.64 \$0.00 \$0.00 0.00 0	\$0.00 0.00
221.21 Quiet Room 2600 2 2 1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens 58 0.12 301.6 \$30.76 2 0 No Change 58 0.12 301.6 \$30.76 \$0.00 \$0.00 0	\$0.00 0.00
221.21 Quiet Room 2600 2 2 1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens 58 0.12 301.6 \$30.76 2 0 No Change 58 0.12 301.6 \$30.76 \$0.00 \$0.00 0.00 0	\$0.00 0.00
910 Restroom 2600 1 1 1 1x1 Recessed Down Light, (1) 23w CFL 23 0.02 59.8 \$6.10 1 0 No Change 0 0.00 0 \$0.00	\$0.00 0.00
910 Quiet Room Hall 2600 2 1 1x1 Recessed Down Light, (1) 23w CFL 23 0.05 119.6 \$12.20 2 0 No Change 0 0.00 0 \$0.0	\$0.00 0.00

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232.21	1 S2 Corridor	8760	7	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.57	5,028.2	\$512.88	7	0	No Change	82	0.57	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	3	2	Exit Sign - Flourescent	18	0.05	473.0	\$48.25	3	1	Exit Sign - LED	2	0.01	52.56	\$5.36	\$65.00	\$195.00	0.05	420.48	\$42.89	4.55
242.21	236/231 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920		4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	235/238 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920		4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	237 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	241/243 Patient Room & Bathroom	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920		4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	240/239 Patient Room & Bathroom	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920		4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	246/245 Patient Room & Bathroom with Shower	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920		4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.05	119.6	\$12.20	2	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	247/242 Patient	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00

920	Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	248 Therapeutic Services	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	244 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	225 Staff Restroom	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.11	280.8	\$28.64	1	0	No Change	108	0.11	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	227	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.65	1,684.8	\$171.85	6	0	No Change	108	0.65	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Restrooms	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
231.21	W2 Corridor	8760	15	3	1x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	1.23	10,774.8	\$1,099.03	15	0	No Change	82	1.23	10774.8	\$1,099.03	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	6	2	Exit Sign - Flourescent	18	0.11	946.1	\$96.50	6	1	Exit Sign - LED	2	0.01	105.12	\$10.72	\$65.00	\$390.00	0.10	840.96	\$85.78	4.55
222.21	· 276 Dining Room	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.23	603.2	\$61.53	4	0	No Change	58	0.23	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	270 Dilling Room	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	Clean Linen	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	273/274 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	272 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	271 Activity Room	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.65	1,684.8	\$171.85	6	0	No Change	108	0.65	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

	270/269 Patient				Recessed Wall Mnt.																	
920	Room & Bathroom	4700	1	1	Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	267 Soiled Linen	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.11	280.8	\$28.64	1	0	No Change	108	0.11	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	266/265 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.05	119.6	\$12.20	2	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	259/260 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.05	119.6	\$12.20	2	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	258/263 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	256 Director	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	257 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	254 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	255 Office	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	Restroom	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	Storage	650	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.12	75.4	\$7.69	2	0	No Change	58	0.12	75.4	\$7.69	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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242.21	Pantry	650	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.11	70.2	\$7.16	1	0	No Change	108	0.11	70.2	\$7.16	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	250 Mop Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	249 Laundry	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.31	West Stairway	8760	6	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.35	3,048.5	\$310.94	6	0	No Change	58	0.35	3048.48	\$310.94	\$0.00	\$0.00	0.00	0	\$0.00	0.00
		Thir	d Floor																			
232.21	N3 Corridor	8760	7	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.57	5,028.2	\$512.88	7	0	No Change	82	0.57	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	2	2	Exit Sign - Flourescent	18	0.04	315.4	\$32.17	2	1	Exit Sign - LED	2	0.00	35.04	\$3.57	\$65.00	\$130.00	0.03	280.32	\$28.59	4.55
242.21	305 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	306/308 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	307/311 Patient	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	309 Consultation Room	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.32	842.4	\$85.92	3	0	No Change	108	0.32	842.4	\$85.92	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	310 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	212/212 D	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	313/312 Patient Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	314 Bathtub	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	317/315 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	318/319 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21	359 Dining Room	2600	9	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.52	1,357.2	\$138.43	9	0	No Change	58	0.52	1357.2	\$138.43	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	321/320 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	323 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	324 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.21	Lobby	8760	10	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.82	7,183.2	\$732.69	10	0	No Change	82	0.82	7183.2	\$732.69	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603		8760	3	2	Exit Sign - Flourescent	18	0.05	473.0	\$48.25	3	1	Exit Sign - LED	2	0.01	52.56	\$5.36	\$65.00	\$195.00	0.05	420.48	\$42.89	4.55
242.21	Nurse's Station	8760	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.32	2,838.2	\$289.50	3	0	No Change	108	0.32	2838.24	\$289.50	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Valuables	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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242.21	Medication Room	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.11	280.8	\$28.64	1	0	No Change	108	0.11	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	329 Seclusion Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	329 Hall & Restroom	2600	3	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.07	179.4	\$18.30	3	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	336/331 Patient	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	335/338 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	337 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	340/339 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	341/343 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	344 Shower	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.05	119.6	\$12.20	2	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	346/345 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00

20.22 2.22		1				_																	
Second Reference Fig. Second Reference Seco	242.21	247/242 Patiana	2600	4	4	Elect. Ballast, Recessed,	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
200 200 2 2 2 2 2 2 2	920	Room & Bathroom	4700	1	1		9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
2221 388 Therapy 200 2 4 Ebect, Edular, Recessed, 108 0.22 561,6 577.38 2 0 No Change 106 0.23 561,6 577.38 50.00 50.00 0.00 0 50.00 0.00	910		2600	1	1		23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
Securition Securities Sec	242.21	348 Therapy	2600	2	4	Elect. Ballast, Recessed,	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
23221 W3 Carridor S760 6 3 22.6.3-Lamp, 32 w T8, 82 0.09 4.5999 \$439.61 6 0 No Change 82 0.09 4509.92 \$439.61 \$50.00 \$50.00 0.00	232.21	S3 Corridor	8760	6	3	Elect. Ballast, Recessed,	82	0.49	4,309.9	\$439.61	6	0	No Change	82	0.49	4309.92	\$439.61	\$0.00	\$0.00	0.00	0	\$0.00	0.00
23221 W3 Corridor Series 6 3 Electrolatis Recessed, 82 0.49 4309.5 5439.61 50.0 50.00 50.00 0.00 50.00 0.00	602		8760	2	2	Exit Sign - Flourescent	18	0.04	315.4	\$32.17	2	1	Exit Sign - LED	2	0.00	35.04	\$3.57	\$65.00	\$130.00	0.03	280.32	\$28.59	4.55
24221 325 Staff Restroom 2600 1 4 Elect. Ballast, Recessed. 108 0.11 280.8 \$28.64 1 0 0 No Change 108 0.11 280.8 \$28.64 \$50.00 \$50.00 0.00 0 \$50.00 0.00 0 \$50.00 0.00	232.21	W3 Corridor	8760	6	3	Elect. Ballast, Recessed,	82	0.49	4,309.9	\$439.61	6	0	No Change	82	0.49	4309.92	\$439.61	\$0.00	\$0.00	0.00	0	\$0.00	0.00
24221 235 Saff Restroom 2600 1	602		8760	4	2	Exit Sign - Flourescent	18	0.07	630.7	\$64.33	4	1	Exit Sign - LED	2	0.01	70.08	\$7.15	\$65.00	\$260.00	0.06	560.64	\$57.19	4.55
222.1 353 Activity Room 2600 6 4 Elect. Ballast, Recessed, 108 0.65 1.684.8 5171.85 6 0 No Change 108 0.65 1.684.8 5171.85 50.0 So.00 0.00 0 So.00 0.00 0 So.00 0.00 0	242.21	325 Staff Restroom	2600	1	4	Elect. Ballast, Recessed,	108	0.11	280.8	\$28.64	1	0	No Change	108	0.11	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21 358 Office 2600 2 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.12 301.6 \$30.76 2 0 No Change 58 0.12 301.6 \$30.76 \$50.00 \$0.00 0.00 0 \$0.00 0.00	242.21	353 Activity Room	2600	6	4	Elect. Ballast, Recessed,	108	0.65	1,684.8	\$171.85	6	0	No Change	108	0.65	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21 354 MICA 2600 4 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.23 603.2 \$61.53 4 0 No Change 58 0.23 603.2 \$61.53 \$0.00 \$0.00 0.00 0.00 0.00	222.21	358 Office	2600	2	2	Elect. Ballast, Recessed	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.11 350 Clean Linen 2600 3 2 Elect Ballast, Surface 58 0.17 452.4 \$46.14 3 0 No Change 58 0.17 452.4 \$46.14 \$50.00 \$0.00 0.00 0 \$0.00 0.00 0 \$0.00 0.00 0 \$0.00 0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 0 \$0.00 \$0	222.21	354 MICA	2600	4	2	Elect. Ballast, Recessed	58	0.23	603.2	\$61.53	4	0	No Change	58	0.23	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21 Laundry 2600 2 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.12 301.6 \$30.76 2 0 No Change 58 0.12 301.6 \$30.76 \$50.00 \$0.00 0.00	221.11	350 Clean Linen	2600	3	2	Elect Ballast, Surface	58	0.17	452.4	\$46.14	3	0	No Change	58	0.17	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21 349 Staff Lounge 2600 3 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.17 452.4 \$46.14 3 0 No Change 58 0.17 452.4 \$46.14 \$0.00 \$0.00 0.00 0.00 0.00 0.00 0.00 0	222.21	Laundry	2600	2	2	Elect. Ballast, Recessed	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.21 351 Soiled Linen 2600 3 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.17 452.4 \$46.14 3 0 No Change 58 0.17 452.4 \$46.14 \$0.00 \$0.00 0.00 0 \$0.00 0.00 0.00 0.0	222.21	349 Staff Lounge	2600	3	2	Elect. Ballast, Recessed	58	0.17	452.4	\$46.14	3	0	No Change	58	0.17	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.21 8760 7 3 Elect. Ballast, Recessed, 82 0.57 5,028.2 \$512.88 7 0 No Change 82 0.57 5028.24 \$512.88 \$0.00 \$0.00 0.00 0 \$0.00 0.00	222.21	351 Soiled Linen	2600	3	2	Elect. Ballast, Recessed	58	0.17	452.4	\$46.14	3	0	No Change	58	0.17	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.21 8760 7 3 Elect. Ballast, Recessed, 82 0.57 5,028.2 \$512.88 7 0 No Change 82 0.57 5028.24 \$512.88 \$0.00 \$0.00 0 \$0.00 0 \$0.00 0.00			Four	th Floor																			
	232.21	N4 Corridor	8760	7	3	Elect. Ballast, Recessed,	82	0.57	5,028.2	\$512.88	7	0	No Change	82	0.57	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00
602 8760 2 2 Exit Sign - Flourescent 18 0.04 315.4 \$32.17 2 1 Exit Sign - LED 2 0.00 35.04 \$3.57 \$65.00 \$130.00 0.03 280.32 \$28.59 4.55	602		8760	2	2	Exit Sign - Flourescent	18	0.04	315.4	\$32.17	2	1	Exit Sign - LED	2	0.00	35.04	\$3.57	\$65.00	\$130.00	0.03	280.32	\$28.59	4.55

242.21	405 Linen Storage	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	406/407 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	408/411 Patient	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	409 Consultation Room	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.32	842.4	\$85.92	3	0	No Change	108	0.32	842.4	\$85.92	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	410	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	415 Consultation Room	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.32	842.4	\$85.92	3	0	No Change	108	0.32	842.4	\$85.92	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	413/412 Patient	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	414 Bathroom	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	417/416 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

	418/420 Patient				I							T			1	ı		1	1			1
920	Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	422/419 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	Storage	520	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	12.0	\$1.22	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	421 Janitor's Closet	520	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	12.0	\$1.22	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	423 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	456 Dining Room	2600	9	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.97	2,527.2	\$257.77	9	0	No Change	108	0.97	2527.2	\$257.77	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.21	Lobby	8760	10	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.82	7,183.2	\$732.69	10	0	No Change	82	0.82	7183.2	\$732.69	\$0.00	\$0.00	0.00	0	\$0.00	0.00
602		8760	3	2	Exit Sign - Flourescent	18	0.05	473.0	\$48.25	3	1	Exit Sign - LED	2	0.01	52.56	\$5.36	\$65.00	\$195.00	0.05	420.48	\$42.89	4.55
242.21	Nurse's Station	8760	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.32	2,838.2	\$289.50	3	0	No Change	108	0.32	2838.24	\$289.50	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	Valuables	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.06	150.8	\$15.38	1	0	No Change	58	0.06	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	Medication Room	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.11	280.8	\$28.64	1	0	No Change	108	0.11	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	424 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.21	429 Seclusion Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.12	301.6	\$30.76	2	0	No Change	58	0.12	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	429 Hall & Restroom	2600	3	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.07	179.4	\$18.30	3	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	4054401 P:	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	436/431 Patient Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00

910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	435/438 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	437 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	440/439 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	441/443 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	444 Shower	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.05	119.6	\$12.20	2	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21		2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	446/445 Patient Room & Bathroom	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	448 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.22	561.6	\$57.28	2	0	No Change	108	0.22	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.21	447/442 Patient	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.43	1,123.2	\$114.57	4	0	No Change	108	0.43	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	Room & Bathroom with Shower	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.01	42.3	\$4.31	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910		2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.02	59.8	\$6.10	1	0	No Change	0	0.00	0	\$0.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00

23.221 Wat Cereidor S760 5 3 Steel Lating S20 VR S20
22221 428 Staff Restroom 2600 2 2 2 24, 2-Lamp, 32w TR, Elect. Ballast, Recessed, Mnt. Prismatic Lens 58 0.12 301.6 \$30.76 2 0 No Change 58 0.12 301.6 \$30.76 \$50.00 \$50.00 0.00 0 \$50.00
2221 428 Staff Restroom 2600 2 2 Elect. Ballast, Recessed 58 0.12 301.6 \$30.76 2 0 No Change 58 0.12 301.6 \$30.76 \$30.0 \$0.00 0.00 0 0 \$0.00 0 \$0.00
222.21 Clean Linen 2600 6 4 Elect. Ballast, Recessed, 108 0.65 1,684.8 \$171.85 6 0 No Change 108 0.65 1684.8 \$171.85 \$0.00 \$0.00 0.00 0.00 0.00 0.00 0.00 0
222.1 Clean Linen 2600 2 2 2 Elect. Ballast, Recessed Mnt., Prismatic Lens S 68 0.12 301.6 \$30.76 2 0 No Change S 8 0.12 301.6 \$30.76 2 0 No Change S 8 0.12 301.6 \$30.76 2 0 No Change S 8 0.23 603.2 \$61.53 \$0.00 \$0.0
222.21 455 Office 2600 4 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.23 603.2 \$61.53 4 0 No Change 58 0.23 603.2 \$61.53 \$0.00 \$0.
222.21 Laundry 2600 2 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 58 0.12 301.6 \$30.76 2 0 No Change 58 0.12 301.6 \$30.76 \$0.00 \$0.00 0 \$0.00 0 \$0.00 \$0
222.21 Laundry 2600 1 2 Elect. Ballast, Recessed Mnt., Prismatic Lens 5 0.06 150.8 \$15.38 1 0 No Change 5 0.06 150.8 \$15.38 \$0.06 150.8 \$15.38 \$0.00 \$0.00 0.00 0 \$0.0
307 Room 1300 8 1 Reflector, (1) 100w A19 100 0.80 1,040.0 \$106.08 8 1 23w CFL Lamp 23 0.18 239.2 \$24.40 \$20.00 \$160.00 0.62 800.8 \$81.68 \$10.00 \$10.0
308 Sth Floor Mechanical Room 1300 7 1 Reflector, (1) 46w CFL 46 0.32 418.6 \$42.70 7 0 No Change 0 0.00 0 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 0 \$0.00 0 \$0.0
121.11 1300 1 2 Mag. Ballast, Surface 75 0.08 97.5 \$9.95 1 2 2 Lamp, 32W 18, Elect. Ballast; 58 0.06 75.4 \$7.69 \$100.00 \$100.00 0.02 22.1 \$2.25
Elevator Mnt., Prismatic Lens Mnt., Prismatic Lens Mechanical Room
221.11 1300 1 2 1x4, 2-Lamp, 32w T8, Elect Ballast, Surface 58 0.06 75.4 \$7.69 1 0 No Change 58 0.06 75.4 \$7.69 \$0.00 \$0.00 0.00 0 \$0.00 \$
221.11 Stairwell #1 8760 9 2
221.11 Stairwell #2 8760 9 2
221.11 Stairwell #3 8760 10 2
500 3600 4 1 1 1x1,1-Lamp Metal Halide 94 0.38 1,353.6 \$138.07 4 0 No Change 94 0.38 1353.6 \$138.07 \$0.00 \$0.00 0.00 0 \$0.00
404 Exterior September 2 404 September 2 405 S
128.16 8760 2 2 8 Foot, 2-Lamp, 75w T12, Mag. Ballast, Surface Mnt, Clear Acrylic Gasketed Lens Acrylic Gasketed Lens Carylic Gasketed Carylic Gasketed Lens Carylic Gasketed Carylic Gasketed Carylic Gasketed Carylic Gasketed Carylic Gasketed
Totals 939 71.52 308,957 \$31,514 939 60.6 260949 \$26,617 \$3,779 \$13,596 8.1 41106 \$4,193 NOTES: 1. Simple Payback noted in this spreadsheet does not include Maintenance Savings and NJ Smart Start Incentives.

NOTES: 1. Simple Payback noted in this spreadsheet does not include Maintenance Savings and NJ Smart Start Incentives.

2. Lamp totals only include T-12 tube replacement calculations

CEG Job #: 9C09162

Project: HUDSON COUNTY IMPROVEMENT AUTHORITY ENERGY AUDIT Address: 595 County Ave.

Secaucus, NJ. 07094

Building SF: 63775

Building - 10 Psychiatric Hospital

KWH COST: \$0.102

ECM #2: Lighting Controls

FYICT	ING LIGHTING	annanna		ananana		ananana				DDO	OCED	LIGHTING CONTROLS								SAVING	•		
CEG	Fixture	Yearly	No	No	Fixture	Fixt	Total	kWh/Yr	Vocale	No.		Controls	Watts	Total	Reduction	kWh/Yr	Yearly	Unit Cost	Total	kW	kWh/Yr	Voorly	Vasala Cimala
		Usage	No. Fixts	No.		Watts	kW	Fixtures	Yearly \$ Cost	Fixts	No. Lamps		Used	kW	1	Fixtures	\$ Cost	(INSTALLED)	Cost		Savings	Yearly \$ Savings	Yearly Simple
Type	Location		rol Roc	Lamps	Type	watts	KW	Fixtures	\$ Cost	Fixts	Lamps	Description	Usea	KW	(%)	rixtures	\$ Cost	(INSTALLED)	Cost	Savings	Savings	5 Savings	Payback
126.3	Main Equipment Area	8760	5	2	2' Channel, (2) 20w T12, Mag. Ballast, Pendant Mnt., No Lens	42	0.21	1839.6	187.6392	5	2		42	0.21	0%	1839.6	\$187.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
121.3	Main Equipment Area	8760	5	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.375	3285	335.07	5	2		75	0.38	0%	3285	\$335.07	\$0.00	\$0.00	0.00	0	\$0.00	0.00
128.3	Main Equipment Area	8760	2	2	8 Foot, 2-Lamp, 75w T12, Mag. Ballast, Pendant Mnt., Prismatic	142	0.284	2487.84	253.7597	2	4		142	0.28	0%	2487.84	\$253.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
305	Main Equipment Area	8760	5	1	1 Lamp Incandescent, 150 Watt Bulbs, Surface Mounted, Direct	150	0.75	6570	670.14	5	1		150	0.75	0%	6570	\$670.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
142.2	Staff Office	8760	2	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.344	3013.44	307.3709	2	3		172	0.34	0%	3013.44	\$307.37	\$0.00	\$0.00	0.00	0	\$0.00	0.00
113.1	Staff Office	8760	4	1	3 Foot, 1-Lamp, T12, Magnetic Ballast, Surface Mounted, Prismatic Lens	47	0.188	1646.88	167.9818	4	1		47	0.19	0%	1646.88	\$167.98	\$0.00	\$0.00	0.00	0	\$0.00	0.00
142.2	Staff Lounge	8760	4	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.688	6026.88	614.7418	4	3		172	0.69	0%	6026.88	\$614.74	\$0.00	\$0.00	0.00	0	\$0.00	0.00
127.2	Staff Lounge	8760	1	2	2x2, 2-Lamp, 34w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	66	0.066	578.16	58.97232	1	3		66	0.07	0%	578.16	\$58.97	\$0.00	\$0.00	0.00	0	\$0.00	0.00
122.2	Kitchen Machine Room	2600	2	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.15	390	39.78	2	2		75	0.15	0%	390	\$39.78	\$0.00	\$0.00	0.00	0	\$0.00	0.00
122.2	Bathroom in Staff Lounge	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.075	195	19.89	1	2		75	0.08	0%	195	\$19.89	\$0.00	\$0.00	0.00	0	\$0.00	0.00
121.2	Bathroom in Staff Lounge	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	75	0.075	195	19.89	1	2		75	0.08	0%	195	\$19.89	\$0.00	\$0.00	0.00	0	\$0.00	0.00
121.3	2nd Floor	8760	6	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., Prismatic Lens	75	0.45	3942	402.084	6	2		75	0.45	0%	3942	\$402.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00

305	2nd Floor	8760	8	1	1 Lamp Incandescent, 150 Watt Bulbs, Surface Mounted, Direct	150	1.2	10512	1072.224	8	1		150	1.20	0%	10512	\$1,072.22	\$0.00	\$0.00	0.00	0	\$0.00	0.00
	1	Fir	st Floor																				
116.1	Elevator Car 1	8760	6	1	2' Channel, (1) 20w T12, Mag. Ballast, Pendant Mnt., No Lens	22	0.132	1156.32	117.9446	6	1		22	0.13	0%	1156.32	\$117.94	\$0.00	\$0.00	0.00	0	\$0.00	0.00
116.1	Elevator Car 2	8760	6	1	2' Channel, (1) 20w T12, Mag. Ballast, Pendant Mnt., No Lens	22	0.132	1156.32	117.9446	6	1		22	0.13	0%	1156.32	\$117.94	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	107 Housekeeping	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	108 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	NW1 Corridor	8760	6	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.348	3048.48	310.945	6	0		58	0.35	0%	3048.48	\$310.94	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1		18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	110 Telephone Room	520	2	2	Recessed Down Light, (2) 14w PL Lamps	30	0.06	31.2	3.1824	2	0		30	0.06	0%	31.2	\$3.18	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	109 Confidential Aide	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	112/13 Pesonnel	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	112 Restroom	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	30.16	3.07632	1	0		58	0.06	0%	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	Closet	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	1.5912	1	0		30	0.03	0%	15.6	\$1.59	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	114 Personnel	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	115/117/118 Offices	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.648	1684.8	171.8496	6	0	Dual Technology Occupancy Sensor	108	0.65	10%	1516.32	\$154.66	\$160.00	\$160.00	0.00	168.48	\$17.18	9.31
221.2	115 Restroom	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	30.16	3.07632	1	0		58	0.06	0%	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Closet	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	30.16	3.07632	1	0		58	0.06	0%	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	125 Medical Director	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

242.2	126 Medical Director	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	119 Storage	520	1	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.058	30.16	3.07632	1	0		58	0.06	0%	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	0	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	1.5912	1	0		30	0.03	0%	15.6	\$1.59	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	120 Storage	520	1	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.058	30.16	3.07632	1	0		58	0.06	0%	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	0	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	1.5912	1	0		30	0.03	0%	15.6	\$1.59	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	123 Janitor's Closet	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	1.5912	1	0		30	0.03	0%	15.6	\$1.59	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.1	N1 Corridor	8760	32	2	2-Lamp, T8, Electronic Ballast, Surface Mounted, Prismatic Lens	58	1.856	16258.56	1658.373	32	0		58	1.86	0%	16258.56	\$1,658.37	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	11	2	Exit Sign - Flourescent	18	0.198	1734.48	176.917	11	1		18	0.20	0%	1734.48	\$176.92	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	130 Secretarial Office	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	2		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	130 Restrooms and Hall	2600	3	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.174	452.4	46.1448	3	0		58	0.17	0%	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	128 Administrator	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.648	1684.8	171.8496	6	0		108	0.65	0%	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	128 Restroom	2600	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	78	7.956	1	0		30	0.03	0%	78	\$7.96	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	134 Quality Assurance	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.232	603.2	61.5264	4	0		58	0.23	0%	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	134 Restroom	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	1.5912	1	0		30	0.03	0%	15.6	\$1.59	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	134 Closet	520	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	30.16	3.07632	1	0		58	0.06	0%	30.16	\$3.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	135 Storage	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	1.5912	1	0		30	0.03	0%	15.6	\$1.59	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	139 Clinical Director	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.232	603.2	61.5264	4	0		58	0.23	0%	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	140 Conference Room	2600	6	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.348	904.8	92.2896	6	0	Dual Technology Occupancy Sensor	58	0.35	10%	814.32	\$83.06	\$160.00	\$160.00	0.00	90.48	\$9.23	17.34
242.2	141 MIS	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00

221.2	144 Restroom	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	143 On Call	8760	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	1892.16	193.0003	2	0		108	0.22	0%	1892.16	\$193.00	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Restroom/Shower	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	0	2600	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	78	7.956	1	0		30	0.03	0%	78	\$7.96	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	149 Medical Records	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	Dual Technology Occupancy Sensor	108	0.43	10%	1010.88	\$103.11	\$160.00	\$160.00	0.00	112.32	\$11.46	13.97
221.2	149 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	Lobby	8760	16	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.928	8129.28	829.1866	16	0		58	0.93	0%	8129.28	\$829.19	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	6	2	Exit Sign - Flourescent	18	0.108	946.08	96.50016	6	1		18	0.11	0%	946.08	\$96.50	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	150 Finance	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.232	603.2	61.5264	4	0	Dual Technology Occupancy Sensor	58	0.23	10%	542.88	\$55.37	\$160.00	\$160.00	0.00	60.32	\$6.15	26.01
222.2	152 Finance	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	151 Computer Training	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	Dual Technology Occupancy Sensor	108	0.43	10%	1010.88	\$103.11	\$160.00	\$160.00	0.00	112.32	\$11.46	13.97
221.2	S1 Corridor	8760	5	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.29	2540.4	259.1208	5	0		58	0.29	0%	2540.4	\$259.12	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1		18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	151 Transportation	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	151 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	153 Art Therapy	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	172 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00

242.2	156 Library	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	157 Gym	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.648	1684.8	171.8496	6	0	108	0.65	0%	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	161 Teaching Kitchen	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	0	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0	58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Storage	520	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	60.32	6.15264	2	0	58	0.12	0%	60.32	\$6.15	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	167 Locker Room	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0	58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	0	2600	5	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.29	754	76.908	5	0	58	0.29	0%	754	\$76.91	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0	58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	166 Server Room	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	280.8	28.6416	1	0	108	0.11	0%	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	170 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0	58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	W1 Corridor	8760	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	1016.16	103.6483	2	0	58	0.12	0%	1016.16	\$103.65	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	1	2	Exit Sign - Flourescent	18	0.018	157.68	16.08336	1	1	18	0.02	0%	157.68	\$16.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	165 Waiting Room	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.232	603.2	61.5264	4	0	58	0.23	0%	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	165 Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0	58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	165 Storage	520	1	2	Recessed Down Light, (2) 14w PL Lamps	30	0.03	15.6	1.5912	1	0	30	0.03	0%	15.6	\$1.59	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	162 Treatment Room	2600	10	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	1.08	2808	286.416	10	0	108	1.08	0%	2808	\$286.42	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	0	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0	58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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242.2	Library	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Restroom	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
		Ki	itchen		T													\$0.00					
142.2	Dining	2600	3	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.516	1341.6	136.8432	3	3		172	0.52	0%	1341.6	\$136.84	\$0.00	\$0.00	0.00	0	\$0.00	0.00
142.2	Break Room	2600	2	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.344	894.4	91.2288	2	3		172	0.34	0%	894.4	\$91.23	\$0.00	\$0.00	0.00	0	\$0.00	0.00
122.2	Restroom	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Pendant Mnt., No Lens	75	0.075	195	19.89	1	2		75	0.08	0%	195	\$19.89	\$0.00	\$0.00	0.00	0	\$0.00	0.00
142.2	Wash Area	2600	7	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	1.204	3130.4	319.3008	7	3		172	1.20	0%	3130.4	\$319.30	\$0.00	\$0.00	0.00	0	\$0.00	0.00
142.2	Office	2600	1	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.172	447.2	45.6144	1	3		172	0.17	0%	447.2	\$45.61	\$0.00	\$0.00	0.00	0	\$0.00	0.00
142.2	Kitchen	2600	22	4	2x4, 4-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	172	3.784	9838.4	1003.517	22	3		172	3.78	0%	9838.4	\$1,003.52	\$0.00	\$0.00	0.00	0	\$0.00	0.00
127.2	0	2600	2	2	2x2, 2-Lamp, 34w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	66	0.132	343.2	35.0064	2	3		66	0.13	0%	343.2	\$35.01	\$0.00	\$0.00	0.00	0	\$0.00	0.00
121.2	Exhaust Hoods	2600	4	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	75	0.3	780	79.56	4	2		75	0.30	0%	780	\$79.56	\$0.00	\$0.00	0.00	0	\$0.00	0.00
121.2	Chemical Storage Room	2600	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Recessed Mnt., Prismatic Lens	75	0.075	195	19.89	1	2		75	0.08	0%	195	\$19.89	\$0.00	\$0.00	0.00	0	\$0.00	0.00
141.2	Office	2600	2	4	1x4, 4-Lamp, 40w T12,Mag. Ballast, Recessed Mnt., Prismatic Lens	172	0.344	894.4	91.2288	2	3		172	0.34	0%	894.4	\$91.23	\$0.00	\$0.00	0.00	0	\$0.00	0.00
141.1	Storage #1	2600	5	4	1x4, 4-Lamp, 40w T12,Mag. Ballast, Surface Mnt., Prismatic Lens	172	0.86	2236	228.072	5	3	Dual Technology Occupancy Sensor	172	0.86	10%	2012.4	\$205.26	\$160.00	\$160.00	0.00	223.6	\$22.81	7.02
603	Kitchen	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1		18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00
600	Kitchen	8760	2	1	Exit Sign - LED	10	0.02	175.2	17.8704	2	0		10	0.02	0%	175.2	\$17.87	\$0.00	\$0.00	0.00	0	\$0.00	0.00
			nd Floo	r	Ų													\$0.00					
232.2	N2 Corridor	8760	7	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.574	5028.24	512.8805	7	0		82	0.57	0%	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1		18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00

242.2	204 Social Services	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed,	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	205/206 Patient Room & Bathroom	2600	2	4	Prismatic Lens 2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	207/208 Patient Room & Bathroom	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	211 Consultation Room	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	842.4	85.9248	3	0	Dual Technology Occupancy Sensor	108	0.32	10%	758.16	\$77.33	\$160.00	\$160.00	0.00	84.24	\$8.59	18.62
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	210 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	209/212 Patient Room & Bathroom	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	213 Phychiatry Office	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	842.4	85.9248	3	0	Dual Technology Occupancy Sensor	108	0.32	10%	758.16	\$77.33	\$160.00	\$160.00	0.00	84.24	\$8.59	18.62
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	214 Bathtub	8760	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	508.08	51.82416	1	0	Dual Technology Occupancy Sensor	58	0.06	10%	457.272	\$46.64	\$160.00	\$160.00	0.00	50.808	\$5.18	30.87
242.2	217/218 Patient Room & Bathroom with Shower	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0		23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	216/215 Patient Room & Bathroom with Shower	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0		23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	Custodial Closet	520	2	2	Recessed Down Light, (2) 14w PL Lamps	30	0.06	31.2	3.1824	2	0		30	0.06	0%	31.2	\$3.18	\$0.00	\$0.00	0.00	0	\$0.00	0.00
900	221 Custodial Closet	520	2	2	Recessed Down Light, (2) 14w PL Lamps	30	0.06	31.2	3.1824	2	0		30	0.06	0%	31.2	\$3.18	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	220/219 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	222 Dining Room	2600	9	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.522	1357.2	138.4344	9	0		58	0.52	0%	1357.2	\$138.43	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	224 Day Room	2600	8	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.864	2246.4	229.1328	8	0	Dual Technology Occupancy Sensor	108	0.86	10%	2021.76	\$206.22	\$160.00	\$160.00	0.00	224.64	\$22.91	6.98
603	0	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1		18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232	Lobby	8760	11	3	1x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.902	7901.52	805.955	11	0		82	0.90	0%	7901.52	\$805.96	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	1	2	Exit Sign - Flourescent	18	0.018	157.68	16.08336	1	1		18	0.02	0%	157.68	\$16.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	Nurse's Station	8760	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	2838.24	289.5005	3	0		108	0.32	0%	2838.24	\$289.50	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Valuables	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	Medication Room	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	280.8	28.6416	1	0		108	0.11	0%	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Quiet Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Quiet Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	Restroom	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	Quiet Room Hall	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0		23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.2	S2 Corridor	8760	7	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.574	5028.24	512.8805	7	0		82	0.57	0%	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00

603	0	8760	3	2	Exit Sign - Flourescent	18	0.054	473.04	48.25008	3	1	18	0.05	0%	473.04	\$48.25	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	236/231 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	235/238 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	237 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	241/243 Patient Room & Bathroom	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	240/239 Patient Room & Bathroom	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	246/245 Patient Room & Bathroom with Shower	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0	23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	247/242 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	248 Therapeutic Services	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	244 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00

242.2	225 Staff Restroom	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	280.8	28.6416	1	0		108	0.11	0%	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	227	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.648	1684.8	171.8496	6	0	Dual Technology Occupancy Sensor	108	0.65	10%	1516.32	\$154.66	\$160.00	\$160.00	0.00	168.48	\$17.18	9.31
221.2	Restrooms	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
231.2	W2 Corridor	8760	15	3	1x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	1.23	10774.8	1099.03	15	0		82	1.23	0%	10774.8	\$1,099.03	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	6	2	Exit Sign - Flourescent	18	0.108	946.08	96.50016	6	1		18	0.11	0%	946.08	\$96.50	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	276 Dining Room	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.232	603.2	61.5264	4	0		58	0.23	0%	603.2	\$61.53	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	0	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	Clean Linen	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	273/274 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	272 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	271 Activity Room	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.648	1684.8	171.8496	6	0		108	0.65	0%	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	270/269 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	267 Soiled Linen	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	280.8	28.6416	1	0		108	0.11	0%	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	266/265 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0	23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	259/260 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0	23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	258/263 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	256 Director	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	257 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	254 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	255 Office	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	Restroom	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	Storage	650	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	75.4	7.6908	2	0	58	0.12	0%	75.4	\$7.69	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	Pantry	650	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	70.2	7.1604	1	0	108	0.11	0%	70.2	\$7.16	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	250 Mop Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	301.6	30.7632	2	0	58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	249 Laundry	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.3	West Stairway	8760	6	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.348	3048.48	310.945	6	0	58	0.35	0%	3048.48	\$310.94	\$0.00	\$0.00	0.00	0	\$0.00	0.00
		Thi	rd Floor	•													\$0.00			************************		

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232.2	N3 Corridor	8760	7	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.574	5028.24	512.8805	7	0		82	0.57	0%	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1		18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	305 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	306/308 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	307/311 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	309 Consultation Room	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	842.4	85.9248	3	0	Dual Technology Occupancy Sensor	108	0.32	10%	758.16	\$77.33	\$160.00	\$160.00	0.00	84.24	\$8.59	18.62
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	310 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	313/312 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	314 Bathtub	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	317/315 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	318/319 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	359 Dining Room	2600	9	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.522	1357.2	138.4344	9	0		58	0.52	0%	1357.2	\$138.43	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	321/320 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	323 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	Dual Technology Occupancy Sensor	108	0.43	10%	1010.88	\$103.11	\$160.00	\$160.00	0.00	112.32	\$11.46	13.97
242.2	324 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	Dual Technology Occupancy Sensor	108	0.43	10%	1010.88	\$103.11	\$160.00	\$160.00	0.00	112.32	\$11.46	13.97
232.2	Lobby	8760	10	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.82	7183.2	732.6864	10	0		82	0.82	0%	7183.2	\$732.69	\$0.00	\$0.00	0.00	0	\$0.00	0.00
603	0	8760	3	2	Exit Sign - Flourescent	18	0.054	473.04	48.25008	3	1		18	0.05	0%	473.04	\$48.25	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	Nurse's Station	8760	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	2838.24	289.5005	3	0		108	0.32	0%	2838.24	\$289.50	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Valuables	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	Medication Room	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	280.8	28.6416	1	0		108	0.11	0%	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	329 Seclusion Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	329 Hall & Restroom	2600	3	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.069	179.4	18.2988	3	0		23	0.07	0%	179.4	\$18.30	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	336/331 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	335/338 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	337 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	340/339 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	341/343 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	344 Shower	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0	23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	346/345 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	347/342 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0	9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0	23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	348 Therapy	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.2	S3 Corridor	8760	6	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.492	4309.92	439.6118	6	0	82	0.49	0%	4309.92	\$439.61	\$0.00	\$0.00	0.00	0	\$0.00	0.00
602	0	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1	18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.2	W3 Corridor	8760	6	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.492	4309.92	439.6118	6	0	82	0.49	0%	4309.92	\$439.61	\$0.00	\$0.00	0.00	0	\$0.00	0.00
602	0	8760	4	2	Exit Sign - Flourescent	18	0.072	630.72	64.33344	4	1	18	0.07	0%	630.72	\$64.33	\$0.00	\$0.00	0.00	0	\$0.00	0.00

242.2	325 Staff Restroom	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	280.8	28.6416	1	0		108	0.11	0%	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	353 Activity Room	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.648	1684.8	171.8496	6	0		108	0.65	0%	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	358 Office	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	354 MICA	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.232	603.2	61.5264	4	0	Dual Technology Occupancy Sensor	58	0.23	10%	542.88	\$55.37	\$160.00	\$160.00	0.00	60.32	\$6.15	26.01
221.1	350 Clean Linen	2600	3	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Surface Mnt, Prismatic Lens	58	0.174	452.4	46.1448	3	0		58	0.17	0%	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	Laundry	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	349 Staff Lounge	2600	3	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.174	452.4	46.1448	3	0		58	0.17	0%	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	351 Soiled Linen	2600	3	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.174	452.4	46.1448	3	0		58	0.17	0%	452.4	\$46.14	\$0.00	\$0.00	0.00	0	\$0.00	0.00
		Four	th Floo	r														\$0.00					
232.2	N4 Corridor	8760	7	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.574	5028.24	512.8805	7	0		82	0.57	0%	5028.24	\$512.88	\$0.00	\$0.00	0.00	0	\$0.00	0.00
602	0	8760	2	2	Exit Sign - Flourescent	18	0.036	315.36	32.16672	2	1		18	0.04	0%	315.36	\$32.17	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	405 Linen Storage	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22		561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	406/407 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	408/411 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	409 Consultation Room	2600	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	842.4	85.9248	3	0	Dual Technology Occupancy Sensor	108	0.32	10%	758.16	\$77.33	\$160.00	\$160.00	0.00	84.24	\$8.59	18.62

910	0	2600	1	1	1x1 Recessed Down	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	410	2600	1	1	Light, (1) 23w CFL 1x1 Recessed Down	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	415 Consultation Room	2600	3	4	Light, (1) 23w CFL 2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	842.4	85.9248	3	0	Dual Technology Occupancy Sensor	108	0.32	10%	758.16	\$77.33	\$160.00	\$160.00	0.00	84.24	\$8.59	18.62
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	413/412 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	414 Bathroom	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	417/416 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	418/420 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	422/419 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	Storage	520	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	11.96	1.21992	1	0		23	0.02	0%	11.96	\$1.22	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	421 Janitor's Closet	520	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	11.96	1.21992	1	0		23	0.02	0%	11.96	\$1.22	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	423 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	Dual Technology Occupancy Sensor	108	0.43	10%	1010.88	\$103.11	\$160.00	\$160.00	0.00	112.32	\$11.46	13.97
242.2	456 Dining Room	2600	9	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.972	2527.2	257.7744	9	0		108	0.97	0%	2527.2	\$257.77	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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232.2	Lobby	8760	10	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.82	7183.2	732.6864	10	0		82	0.82	0%	7183.2	\$732.69	\$0.00	\$0.00	0.00	0	\$0.00	0.00
602	0	8760	3	2	Exit Sign - Flourescent	18	0.054	473.04	48.25008	3	1		18	0.05	0%	473.04	\$48.25	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	Nurse's Station	8760	3	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.324	2838.24	289.5005	3	0		108	0.32	0%	2838.24	\$289.50	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.2	Valuables	2600	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	Medication Room	2600	1	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.108	280.8	28.6416	1	0		108	0.11	0%	280.8	\$28.64	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	424 Day Room	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0	Dual Technology Occupancy Sensor	108	0.43	10%	1010.88	\$103.11	\$160.00	\$160.00	0.00	112.32	\$11.46	13.97
221.2	429 Seclusion Room	2600	2	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Recessed Mnt, Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	429 Hall & Restroom	2600	3	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.069	179.4	18.2988	3	0		23	0.07	0%	179.4	\$18.30	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	436/431 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	435/438 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	437 Shower	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	440/439 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	441/443 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00

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910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	444 Shower	2600	2	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.046	119.6	12.1992	2	0		23	0.05	0%	119.6	\$12.20	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	446/445 Patient Room & Bathroom	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0		108	0.22	0%	561.6	\$57.28	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	448 Office	2600	2	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.216	561.6	57.2832	2	0	Dual Technology Occupancy Sensor	108	0.22	10%	505.44	\$51.55	\$160.00	\$160.00	0.00	56.16	\$5.73	27.93
242.2	447/442 Patient Room & Bathroom with Shower	2600	4	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.432	1123.2	114.5664	4	0		108	0.43	0%	1123.2	\$114.57	\$0.00	\$0.00	0.00	0	\$0.00	0.00
920	0	4700	1	1	Recessed Wall Mnt. Night Light, (1) 9w CFL	9	0.009	42.3	4.3146	1	0		9	0.01	0%	42.3	\$4.31	\$0.00	\$0.00	0.00	0	\$0.00	0.00
910	0	2600	1	1	1x1 Recessed Down Light, (1) 23w CFL	23	0.023	59.8	6.0996	1	0		23	0.02	0%	59.8	\$6.10	\$0.00	\$0.00	0.00	0	\$0.00	0.00
232.2	W4 Corridor	8760	5	3	2x4, 3-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	82	0.41	3591.6	366.3432	5	0		82	0.41	0%	3591.6	\$366.34	\$0.00	\$0.00	0.00	0	\$0.00	0.00
602	0	8760	4	2	Exit Sign - Flourescent	18	0.072	630.72	64.33344	4	1		18	0.07	0%	630.72	\$64.33	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	428 Staff Restroom	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
242.2	452 Activity Room	2600	6	4	2x4, 4-Lamp, 32w T8, Elect. Ballast, Recessed, Prismatic Lens	108	0.648	1684.8	171.8496	6	0		108	0.65	0%	1684.8	\$171.85	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	Clean Linen	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	455 Office	2600	4	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.232	603.2	61.5264	4	0	Dual Technology Occupancy Sensor	58	0.23	10%	542.88	\$55.37	\$160.00	\$160.00	0.00	60.32	\$6.15	26.01
222.2	450 Soiled Linen	2600	2	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.116	301.6	30.7632	2	0		58	0.12	0%	301.6	\$30.76	\$0.00	\$0.00	0.00	0	\$0.00	0.00
222.2	Laundry	2600	1	2	2x4, 2-Lamp, 32wT8, Elect. Ballast, Recessed Mnt., Prismatic Lens	58	0.058	150.8	15.3816	1	0		58	0.06	0%	150.8	\$15.38	\$0.00	\$0.00	0.00	0	\$0.00	0.00
307	449 Mechanical Room	1300	8	1	Pendant Mnt. Industrial Reflector, (1) 100w A19	100	0.8	1040	106.08	8	1		100	0.80	0%	1040	\$106.08	\$0.00	\$0.00	0.00	0	\$0.00	0.00
308	5th Floor Mechanical Room	1300	7	1	Pendant Mnt. Industrial Reflector, (1) 46w CFL Lamp	46	0.322	418.6	42.6972	7	0		46	0.32	0%	418.6	\$42.70	\$0.00	\$0.00	0.00	0	\$0.00	0.00

121.1	Elevator Mechanical Room	1300	1	2	1x4, 2-Lamp, 40w T12, Mag. Ballast, Surface Mnt., Prismatic Lens	75	0.075	97.5	9.945	1	2	75	0.08	0%	97.5	\$9.95	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.1	0	1300	1	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Surface Mnt, Prismatic Lens	58	0.058	75.4	7.6908	1	0	58	0.06	0%	75.4	\$7.69	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.1	Stairwell #1	8760	9	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Surface Mnt, Prismatic Lens	58	0.522	4572.72	466.4174	9	0	58	0.52	0%	4572.72	\$466.42	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.1	Stairwell #2	8760	9	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Surface Mnt, Prismatic Lens	58	0.522	4572.72	466.4174	9	0	58	0.52	0%	4572.72	\$466.42	\$0.00	\$0.00	0.00	0	\$0.00	0.00
221.1	Stairwell #3	8760	10	2	1x4, 2-Lamp, 32w T8, Elect Ballast, Surface Mnt, Prismatic Lens	58	0.58	5080.8	518.2416	10	0	58	0.58	0%	5080.8	\$518.24	\$0.00	\$0.00	0.00	0	\$0.00	0.00
0	Totals	0	195	0			70.6	304305	31039	930	0	0	70.6		302046	\$30,808.74		\$3,360.0	0.00	2258.728	\$230.39	14.58

 $Project\ Name:\ LGEA\ Solar\ PV\ Project\ -\ Hudson\ County\ -\ Meadowview\ Psychiatric\ Hospital$

Location: Secaucus, NJ

Description: Photovoltaic System - Direct Purchase

Simple Payback Analysis

First Cost Premium \$344,080

Simple Payback: 15.32 Years

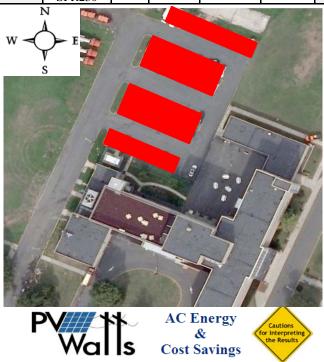
Life Cycle Cost Analysis

Analysis Period (years): 25
Financing Term (mths): 0
Average Energy Cost (\$/kWh) \$0.102
Financing Rate: 0.00%

Financing %: 0%
Maintenance Escalation Rate: 3.0%
Energy Cost Escalation Rate: 3.0%
SREC Value (\$/kWh) \$0.350

Period	Additional	Energy kWh	Energy Cost	Additional	SREC	Net Cash	Cumulative
	Cash Outlay	Production	Savings	Maint Costs	Revenue	Flow	Cash Flow
0	\$344,080	0	0	0	\$0	(344,080)	0
1	\$0	49,700	\$5,069	\$0	\$17,395	\$22,464	(\$321,616)
2	\$0	49,452	\$5,221	\$0	\$17,308	\$22,530	(\$299,086)
3	\$0	49,204	\$5,378	\$0	\$17,221	\$22,600	(\$276,486)
4	\$0	48,958	\$5,539	\$0	\$17,135	\$22,675	(\$253,812)
5	\$0	48,713	\$5,706	\$502	\$17,050	\$22,254	(\$231,558)
6	\$0	48,470	\$5,877	\$499	\$16,964	\$22,342	(\$209,216)
7	\$0	48,228	\$6,053	\$497	\$16,880	\$22,436	(\$186,780)
8	\$0	47,986	\$6,235	\$494	\$16,795	\$22,536	(\$164,244)
9	\$0	47,746	\$6,422	\$492	\$16,711	\$22,641	(\$141,603)
10	\$0	47,508	\$6,614	\$489	\$16,628	\$22,753	(\$118,850)
11	\$0	47,270	\$6,813	\$487	\$16,545	\$22,871	(\$95,980)
12	\$0	47,034	\$7,017	\$484	\$16,462	\$22,995	(\$72,985)
13	\$0	46,799	\$7,228	\$482	\$16,380	\$23,125	(\$49,860)
14	\$0	46,565	\$7,445	\$480	\$16,298	\$23,263	(\$26,597)
15	\$0	46,332	\$7,668	\$477	\$16,216	\$23,407	(\$3,190)
16	\$0	46,100	\$7,898	\$475	\$16,135	\$23,558	\$20,368
17	\$0	45,870	\$8,135	\$472	\$16,054	\$23,717	\$44,085
18	\$0	45,640	\$8,379	\$470	\$15,974	\$23,883	\$67,968
19	\$0	45,412	\$8,630	\$468	\$15,894	\$24,057	\$92,024
20	\$0	45,185	\$8,889	\$465	\$15,815	\$24,239	\$116,263
21	\$1	44,959	\$9,156	\$463	\$15,736	\$24,429	\$140,692
22	\$2	44,734	\$9,431	\$461	\$15,657	\$24,627	\$165,318
23	\$3	44,511	\$9,713	\$458	\$15,579	\$24,834	\$190,152
24	\$4	44,288	\$10,005	\$456	\$15,501	\$25,050	\$215,202
25	\$5	44,067	\$10,305	\$454	\$15,423	\$25,274	\$240,476
	Totals:	1,170,731	\$184,827	\$10,026	\$409,756	\$584,556	(\$1,159,317)
			Net	Present Value (NPV)		\$240,5	01
			Internal	Rate of Return (IRR)		4.5%	6

Building	PV Area (sq ft)	Panel	Qty	Panel Sq Ft	Panel Total Sq Ft	Total KW _{DC}	Total Annual kWh	Panel Weight (33 lbs)	W/SQFT
Meadowview Campus	3750	Sunpower SPR230	187	20.0	3,740	43.01	49,700	6,171	11.50



Station Ident	ification
City:	Newark
State:	New_Jersey
Latitude:	40.70° N
Longitude:	74.17° W
Elevation:	9 m
PV System Specificatio	ns
DC Rating:	43.0 kW
DC to AC Derate Factor:	0.810
AC Rating:	34.8 kW
Array Type:	Fixed Tilt
Array Tilt:	10.0°
Array Azimuth:	180.0°
Energy Specifications	
Cost of Electricity:	11.2 ¢/kWh

	Re	sults	
Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)	Energy Value (\$)
1	2.39	2581	289.07
2	3.17	3128	350.34
3	4.07	4378	490.34
4	4.83	4851	543.31
5	5.70	5771	646.35
6	5.94	5640	631.68
7	5.77	5596	626.75
8	5.38	5183	580.50
9	4.65	4459	499.41
10	3.61	3671	411.15
11	2.35	2341	262.19
12	2.01	2101	235.31
Year	4.16	49700	5566.40

.= Proposed PV Layout

Notes:

1. Estimated kWH based on the National Renewable Energy Laboratory PVWatts Version 1 Calculator Program.

MELINK CORPORATION

INTELLI-HOOD VARIABLE EXHAUST CONTROLLER

ENERGY SAVINGS REPORT

COMPANY: CEG

RETROFIT

ADDRESS: Hudson County Psychiatric Hospital

Secaucus, NJ Mar-18-09

APPLICATION: Main Kitchen

- MOTOR OPERATING SAVINGS: \$2,024 /YEAR

- HEATING SAVINGS: \$2,006 /YEAR

- COOLING SAVINGS: \$825 /YEAR

- TOTAL SAVINGS: \$4,855 /YEAR

- INSTALLED COST: \$46,044

- PAYBACK PERIOD: 9.5 YEARS

- RATE OF RETURN - 5 YEARS: -16.4 %

10 YEARS: 3.4 %

The projected savings shown above are based on the above store's operating hours, HVAC system, cooking load, and geographic location.

	I. MOTOR (OPERATING	G SAVING	<u>s</u>	
INPUT DATA:					
A Operating Hours Pe	r Day			14	HRS/DAY
B Operating Days Per	Week			7	DAYS/WK
C Operating Weeks P	er Year			52	WKS/YR
D Horsepower of Fan	Motor(s)			10	HP
E Load Factor of Fan	Motor(s)			0.88	
F Cost Per Kilowatt H	our			0.102	\$/KWHR
CONSTANT EXHAUST	VOLUME ANA	ALYSIS:			
G Total Time (A x B x	C)			5096	HRS/YR
H Total KWHR/HP/YF	(0.746/0.9 x	G)		4224.0	KWHR/HP/YR
VARIABLE EXHAUST	OLUME ANA	LYSIS:			
% Rated % Run RPM Time H	Time HRS/YR <u>J=Fxl</u>	Output KW/HP <u>K</u>	System Effic. L	Input KW/HP <u>M=K/L</u>	KWHR/ HP/YR <u>N=JxM</u>
100 18.75	955.5	0.746	0.9	0.829	792.0
90 12.5	637	0.544	0.9	0.604	385.0
80 25	1274	0.382	0.9	0.424	540.7
70 0	0	0.256	0.9	0.284	0.0
60 18.75	955.5	0.161	0.9	0.179	170.9
50 12.5	637	0.093	0.9	0.103	65.8
40 0	0	0.048	0.9	0.053	0.0
30 12.5	637	0.020	0.9	0.022	14.2
20 0	0	0.015	0.9	0.017	0.0
10 0	0	0.010	0.90	0.011	0.0
O Total KWH/HP/YR	(Total of Colur	mn N)			1968.7

 $SAVINGS = (H - O) \times D \times E \times F =$

\$2,024 /YEAR

II. CONDITIONED MAKE-UP AIR - HEATING

INPUT DATA:

A Previous Net Exhaust Volume	24925	CFM
B New Net Exhaust Volume (1)	17759	CFM
C Winter Building Temperature	68	F
D Previous Net Heat Load (2)	1130598	kBTU
E New Net Heat Load (2)	805551	kBTU
F Operating Hours Per Day	14	HRS/DAY
G Operating Days Per Week	7	DAYS/WK
- Heating Fuel Type	Steam	
H Cost Per Fuel Unit (3)	7.2	\$/UNIT
J BTU Per Fuel Unit (4)	1,000	kBTU/UNIT
K System Efficiency (4)	0.7	

CALCULATION:

 $SAVINGS = (D - E) \times 0.6 \times H / (J \times K)$

= \$2,006 /YEAR =======

NOTES:

- (1) Determine the New Exhaust Volume by completing TABLE 1. The New Exhaust Volume equals the AVG % RPM x the Previous Exhaust Volume.
- (2) Using design weather data via the Outdoor Airload Calculator and multiplied by days/year ratio.
- (3) Using local energy costs.
- (4) Using typical system efficiency.

	TABLE 1	
% Rated RPM (F)	% Run <u>Time (I)</u>	<u>F x I</u>
100	19	19
90	13	11
80	25	20
70	0	0
60	19	11
50	13	6
40	0	0
30	13	4
20	0	0
10	0 _	0

III. CONDITIONED MAKE-UP AIR SAVINGS - COOLING

INPUT DATA:

A Previous Net Exhaust Volume

B New Net Exhaust Volume (1)

C Previous Net Cooling Load (2)

D New Net Cooling Load (2)

E AC Correction Factor (3)

T Cost Per Fuel Unit (5)

C Previous Net Exhaust Volume (1)

A80000 kBTU

342000 kBTU

1

C OOP (6)

3

CALCULATION:

SAVINGS = $(C - D) \times 0.6 \times E \times F / (3.413 \times G)$

\$825 /YEAR

========

NOTES:

- (1) Using New Exhaust Volume from CONDITIONED MAKE-UP AIR SAVINGS HEATING on page 2. See Note 1.
- (2) Obtained from Outdoor Airload Calculator
- (3) Using design weather data.
- (4) The multiplier corrects for actual % outside air.
- (5) Using local energy costs.
- (6) Using typical system efficiency.

AFTER-TAX CASH FLOW ANALYSIS

INPUT DATA:

FIRST YEAR SAVINGS \$4,855 /YEAR
INITIAL COST PLUS INSTALLATION \$46,044

MARGINAL TAX RATE 0%

ESTIMATED ANNUAL INCREASE IN ENERGY COSTS 3%

					NET
			DEPREC.	DEPREC.	AFTER-TAX
YEAR	SAVINGS	COST	<u>%</u>	\$	CASH FLOW
0		-46,044			-46,044
1	4855	-	29	13353	4855
2	5001	-	20	9209	5001
3	5151	-	13	5986	5151
4	5305	-	10	4604	5305
5	5465	-	9	4144	5465
6	5629	-	9	4144	5629
7	5797	-	9	4144	5797
8	5971	-			5971
9	6150	-			6150
10	6335	-			6335

CALCULATIONS:

NET PRESENT VALUE = -\$25,133 ; INTERNAL RATE

5 YEARS @ 15% OF RETURN (IRR) = -16.4 %

NET PRESENT VALUE = -\$16,543; INTERNAL RATE

10 YEARS @ 15% OF RETURN (IRR) = 3.4 %

NOTE:

Net After-tax Cash Flow is calculated as follows:

NATCF = SAVINGS - COSTS - TAX RATE(SAVINGS - COSTS - DEPRECIATION)

Net Present Value is calculated as follows:

 $NPV = C(0) + C(1)/(1 + r) + C(2)/(1 + r)^2 + ... + C(n)/(1 + r)^n$

(where C(n) is the net cash flow for the nth year and r is the opportunity cost of capital)

IRR is calculated by trial and error using the formula:

 $NPV = C(0) + C(1)/(1 + IRR) + C(2)/(1 + IRR)^2 + ... + C(n)/(1 + IRR)^n$