

STATEMENT OF ENERGY PERFORMANCE

Monmouth Regional High School

Building ID: 1694317

For 12-month Period Ending: December 31, 2008¹

Date SEP becomes ineligible: N/A

Date SEP Generated: June 03, 2009

Facility	Facility Owner	Primary Contact for this Facility
Monmouth Regional High School One Norman J. Field Way Tinton Falls, NJ 07724	N/A	N/A

Year Built: 1960

Gross Floor Area (ft²): 202,441Energy Performance Rating² (1-100) 19**Site Energy Use Summary³**

Natural Gas (kBtu) ⁴	12,565,287
Electricity (kBtu)	6,391,138
Total Energy (kBtu)	18,956,425

Energy Intensity⁵

Site (kBtu/ft ² /yr)	94
Source (kBtu/ft ² /yr)	171

Emissions (based on site energy use)

Greenhouse Gas Emissions (MtCO ₂ e/year)	1,642
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Electric Distribution Utility

Jersey Central Power & Lt Co

National Average Comparison

National Average Site EUI	70
National Average Source EUI	128
% Difference from National Average Source EUI	34%
Building Type	K-12 School

Stamp of Certifying Professional

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

Meets Industry Standards⁶ for Indoor Environmental Conditions:

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

Certifying Professional

N/A

Notes:

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

ENERGY STAR® Data Checklist for Commercial Buildings

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

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

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

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	
Building Name	Monmouth Regional High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		<input type="checkbox"/>
Type	K-12 School	Is this an accurate description of the space in question?		<input type="checkbox"/>
Location	One Norman J. Field Way, Tinton Falls, NJ 07724	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		<input type="checkbox"/>
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of acute care or children's hospitals) nor can they be submitted as representing only a portion of a building		<input type="checkbox"/>
Monmouth Regional High School (K-12 School)				
CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	
Gross Floor Area	192,441 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		<input type="checkbox"/>
Open Weekends?	No	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		<input type="checkbox"/>
Number of PCs	40	Is this the number of personal computers in the K12 School?		<input type="checkbox"/>
Number of walk-in refrigeration/freezer units	2	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		<input type="checkbox"/>
Presence of cooking facilities	Yes	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		<input type="checkbox"/>
Percent Cooled	30 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		<input type="checkbox"/>
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		<input type="checkbox"/>

Months	12 (Optional)	Is this school in operation for at least 8 months of the year?		<input type="checkbox"/>
High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		<input type="checkbox"/>
Parking (Other)				
CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	
Gross Floor Area	10,000 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		<input type="checkbox"/>
Number of PCs	N/A(Optional)	Is this the number of personal computers in the space?		<input type="checkbox"/>
Weekly operating hours	N/A(Optional)	Is this the total number of hours per week that the space is 75% occupied? This number should exclude hours when the facility is occupied only by maintenance, security, or other support personnel. For facilities with a schedule that varies during the year, "operating hours/week" refers to the total weekly hours for the schedule most often followed.		<input type="checkbox"/>
Workers on Main Shift	N/A(Optional)	Is this the number of employees present during the main shift? Note this is not the total number of employees or visitors who are in a building during an entire 24 hour period. For example, if there are two daily 8 hour shifts of 100 workers each, the Workers on Main Shift value is 100.		<input type="checkbox"/>

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Jersey Central Power & Lt Co

Fuel Type: Electricity		
Meter: 100012465942 St.Lighting (kWh) Space(s): Parking		
Start Date	End Date	Energy Use (kWh)
11/19/2008	12/17/2008	1,286.00
10/21/2008	11/18/2008	1,286.00
09/19/2008	10/20/2008	1,286.00
08/19/2008	09/18/2008	1,286.00
07/20/2008	08/18/2008	1,286.00
06/19/2008	07/19/2008	1,286.00
05/20/2008	06/18/2008	1,286.00
04/18/2008	05/19/2008	1,286.00
03/18/2008	04/17/2008	1,286.00
02/19/2008	03/17/2008	1,286.00
01/18/2008	02/18/2008	1,286.00
100012465942 St.Lighting Consumption (kWh)		14,146.00
100012465942 St.Lighting Consumption (kBtu)		48,266.15
Meter: 200000056305 (kWh) Space(s): Monmouth Regional High School		
Start Date	End Date	Energy Use (kWh)
11/05/2008	12/04/2008	154,400.00
10/05/2008	11/04/2008	160,000.00
09/05/2008	10/04/2008	178,800.00
08/05/2008	09/04/2008	158,800.00
07/05/2008	08/04/2008	112,400.00
06/07/2008	07/04/2008	167,600.00
05/06/2008	06/06/2008	177,200.00
04/05/2008	05/05/2008	160,800.00
03/05/2008	04/04/2008	154,000.00
02/05/2008	03/04/2008	169,200.00
01/05/2008	02/04/2008	147,200.00
200000056305 Consumption (kWh)		1,740,400.00
200000056305 Consumption (kBtu)		5,938,244.80
Total Electricity Consumption (kBtu)		5,986,510.95

Is this the total Electricity consumption at this building including all Electricity meters?

☐

Fuel Type: Natural Gas

Meter: 2200005283396 (therms)
Space(s): Monmouth Regional High School

Start Date	End Date	Energy Use (therms)
11/12/2008	12/19/2008	19,392.17
10/14/2008	11/12/2008	7,646.02
09/15/2008	10/14/2008	3,308.00
08/19/2008	09/15/2008	4,609.00
07/16/2008	08/19/2008	4,096.00
06/17/2008	07/16/2008	2,556.00
05/13/2008	06/17/2008	4,315.00
04/16/2008	05/13/2008	4,178.00
03/13/2008	04/16/2008	15,898.00
02/21/2008	03/13/2008	4,811.00
01/15/2008	02/21/2008	36,928.00
2200005283396 Consumption (therms)		107,737.19
2200005283396 Consumption (kBtu)		10,773,719.00
Total Natural Gas Consumption (kBtu)		10,773,719.00
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		<input type="checkbox"/>

Additional Fuels

Do the fuel consumption totals shown above represent the total energy use of this building?
Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.

☐

Certifying Professional

(When applying for the ENERGY STAR, this must be the same PE that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

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

Facility

Monmouth Regional High School
One Norman J. Field Way
Tinton Falls, NJ 07724

Facility Owner

N/A

Primary Contact for this Facility

N/A

General Information

Monmouth Regional High School	
Gross Floor Area Excluding Parking: (ft ²)	202,441
Year Built	1960
For 12-month Evaluation Period Ending Date:	December 31, 2008

Facility Space Use Summary

Monmouth Regional High School		Parking	
Space Type	K-12 School	Space Type	Other - Other
Gross Floor Area(ft ²)	192,441	Gross Floor Area(ft ²)	10,000
Open Weekends?	No	Number of PCs ^o	N/A
Number of PCs	40	Weekly operating hours ^o	N/A
Number of walk-in refrigeration/freezer units	2	Workers on Main Shift ^o	N/A
Presence of cooking facilities	Yes		
Percent Cooled	30		
Percent Heated	100		
Months ^o	12		
High School?	Yes		
School District ^o	Monmouth		

Energy Performance Comparison

Performance Metrics	Evaluation Periods		Comparisons		
	Current (Ending Date 12/31/2008)	Baseline (Ending Date 12/31/2008)	Rating of 75	Target	National Average
Energy Performance Rating	19	19	75	N/A	50
Energy Intensity					
Site (kBtu/ft ²)	94	94	55	N/A	70
Source (kBtu/ft ²)	171	171	100	N/A	128
Energy Cost					
\$/year	\$ 542,652.82	\$ 542,652.82	\$ 317,038.70	N/A	\$ 405,400.38
\$/ft ² /year	\$ 2.68	\$ 2.68	\$ 1.57	N/A	\$ 2.00
Greenhouse Gas Emissions					
MtCO ₂ e/year	1,642	1,642	959	N/A	1,227
kgCO ₂ e/ft ² /year	8	8	5	N/A	6

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

Notes:

o - This attribute is optional.

d - A default value has been supplied by Portfolio Manager.

MONMOUTH HIGH SCHOOL UTILITY ENERGY USE DATA

Prepared by Dome-Tech, Inc.

Facility Name Monmouth Regional High School
 Company Jersey Central Power & Light
 Account# 10 00 12 4659-42
 Meter# 100012465942 St.Liç
 Tariff/Rate SWV-01S

Fuel Type	Units	Start Date	End Date	Demand KW / therm	Energy Use	Energy Cost	\$/kWh or therm
Electricity	kWh	12/19/2008	1/19/2009	NA	1,286	\$361.30	\$0.28
Electricity	kWh	11/19/2008	12/17/2008	NA	1,286	\$357.58	\$0.28
Electricity	kWh	10/21/2008	11/18/2008	NA	1,286	\$351.84	\$0.27
Electricity	kWh	9/19/2008	10/20/2008	NA	1,286	\$350.99	\$0.27
Electricity	kWh	8/19/2008	9/18/2008	NA	1,286	\$353.59	\$0.27
Electricity	kWh	7/20/2008	8/18/2008	NA	1,286	\$357.57	\$0.28
Electricity	kWh	6/19/2008	7/19/2008	NA	1,286	\$362.24	\$0.28
Electricity	kWh	5/20/2008	6/18/2008	NA	1,286	\$355.33	\$0.28
Electricity	kWh	4/18/2008	5/19/2008	NA	1,286	\$343.13	\$0.27
Electricity	kWh	3/18/2008	4/17/2008	NA	1,286	\$343.13	\$0.27
Electricity	kWh	2/19/2008	3/17/2008	NA	1,286	\$347.59	\$0.27
Electricity	kWh	1/18/2008	2/18/2008	NA	1,286	\$352.86	\$0.27
Electricity	kWh	12/18/2007	1/17/2008	NA	1,286	\$55.14	\$0.04
			TOTAL	NA	16,718	\$4,292.29	\$3.34
			AVERAGE	NA	1,286	330	\$0.26

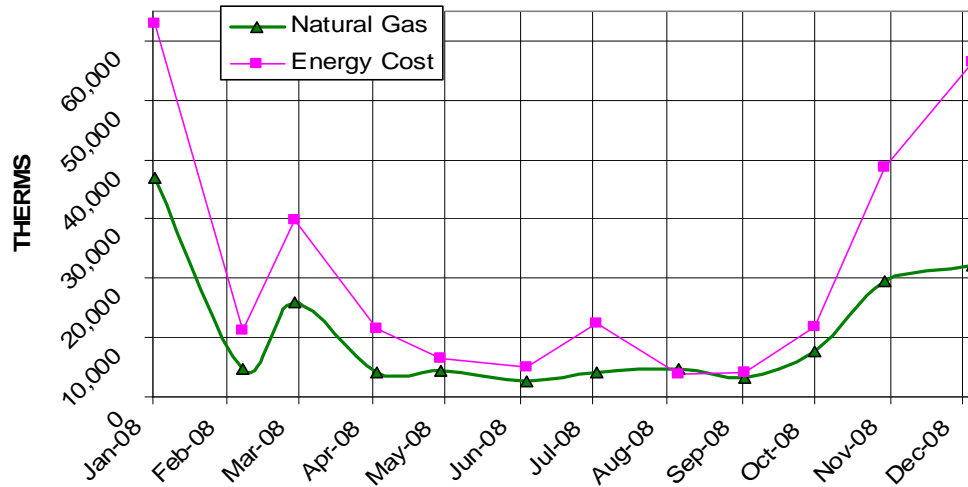
Facility Name Monmouth Regional High School
 Company Jersey Central Power & Light
 Account# 200000056305 - 1000154473-27
 Meter# 1200000056305
 Tariff/Rate GS1

Energy Type	Energy Unit	Start Date	End Date	Demand KW	KWH	Cost	\$/kWh or Therm m
Electricity	kWh	12/5/2008	1/4/2009	NA	152,400	\$24,834.94	\$0.16
Electricity	kWh	11/5/2008	12/4/2008	NA	154,400	\$24,119.46	\$0.16
Electricity	kWh	10/5/2008	11/4/2008	NA	160,000	\$25,153.71	\$0.16
Electricity	kWh	9/5/2008	10/4/2008	NA	178,800	\$28,080.49	\$0.16
Electricity	kWh	8/5/2008	9/4/2008	NA	158,800	\$29,005.68	\$0.18
Electricity	kWh	7/5/2008	8/4/2008	NA	112,400	\$20,685.07	\$0.18
Electricity	kWh	6/7/2008	7/4/2008	NA	167,600	\$30,756.79	\$0.18
Electricity	kWh	5/6/2008	6/6/2008	NA	177,200	\$29,975.21	\$0.17
Electricity	kWh	4/5/2008	5/5/2008	NA	160,800	\$23,347.35	\$0.15
Electricity	kWh	3/5/2008	4/4/2008	NA	154,000	\$22,277.36	\$0.14
Electricity	kWh	2/5/2008	3/4/2008	NA	169,200	\$25,575.10	\$0.15
Electricity	kWh	1/5/2008	2/4/2008	NA	147,200	\$22,661.60	\$0.15
			TOTAL	NA	1,740,400	\$281,637.82	\$1.95
			AVERAGE	NA	145,033	\$23,469.82	\$0.16

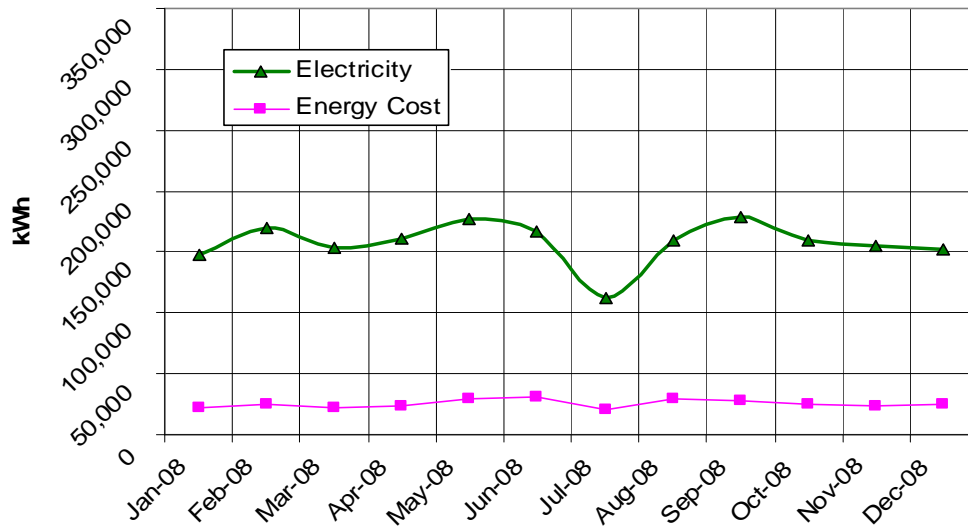
Facility Name Monmouth Regional High School
 Company South Jersey Energy & New Jersey Natural Gas
 Account# 2200005283396
 Meter# 2200005283396
 Tariff/Rate G02030

Energy Type	Energy Unit	Start Date	End Date	Demand KW	KWH	Cost	\$/kWh or Therm
Natural Gas	therms	12/19/2008	1/19/2009	NA	22,085	\$56,544.35	\$2.56
Natural Gas	therms	11/12/2008	12/19/2008	NA	19,392	\$38,646.97	\$1.99
Natural Gas	therms	10/14/2008	11/12/2008	NA	7,646	\$11,932.53	\$1.56
Natural Gas	therms	9/15/2008	10/14/2008	NA	3,308	\$4,022.91	\$1.22
Natural Gas	therms	8/19/2008	9/15/2008	NA	4,609	\$3,773.97	\$0.82
Natural Gas	therms	7/16/2008	8/19/2008	NA	4,096	\$12,360.96	\$3.02
Natural Gas	therms	6/17/2008	7/16/2008	NA	2,556	\$5,113.20	\$2.00
Natural Gas	therms	5/13/2008	6/17/2008	NA	4,315	\$6,385.51	\$1.48
Natural Gas	therms	4/16/2008	5/13/2008	NA	4,178	\$11,619.08	\$2.78
Natural Gas	therms	3/13/2008	4/16/2008	NA	15,898	\$29,970.56	\$1.89
Natural Gas	therms	2/21/2008	3/13/2008	NA	4,811	\$11,087.13	\$2.30
Natural Gas	therms	1/15/2008	2/21/2008	NA	36,928	\$63,037.55	\$1.71
Natural Gas	therms	12/21/2007	1/15/2008	NA	15,502	\$28,335.06	\$1.83
Natural Gas	therms	11/20/2007	12/21/2007	NA	21,071	\$38,070.85	\$1.81
Natural Gas	therms	10/19/2007	11/20/2007	NA	11,345	\$22,841.60	\$2.01
Natural Gas	therms	9/24/2007	10/19/2007	NA	525	\$2,840.41	\$5.41
Natural Gas	therms	8/20/2007	9/24/2007	NA	420	\$5,808.87	\$13.83
			TOTAL	NA	117,549	\$225,109.82	\$37.05
			AVERAGE	NA	9,796	\$18,759.15	\$3.09

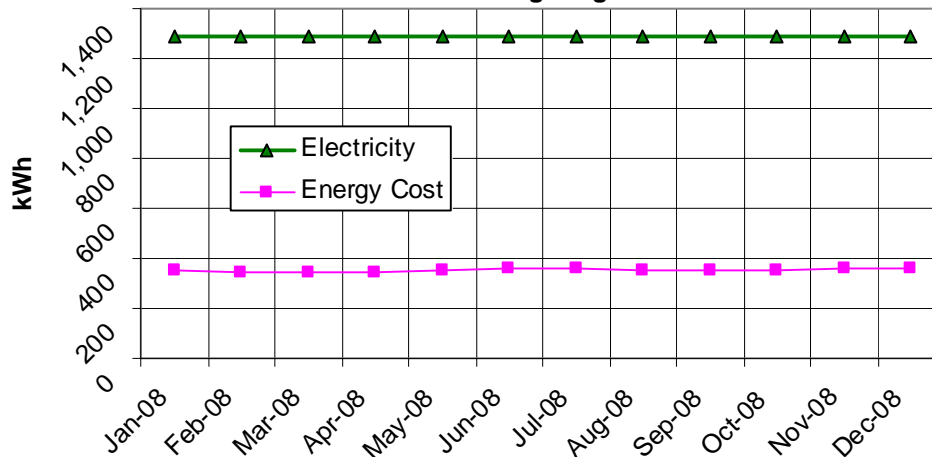
MONMOUTH REGIONAL HIGH SCHOOL NATURAL GAS USAGE



MONMOUTH REGIONAL HIGH SCHOOL ELECTRICAL USAGE



MONMOUTH REGIONAL HIGH SCHOOL ELECTRICAL USAGE Street Lighting



HVAC EQUIPMENT LIST - MONMOUTH HS

Prepared by Dome-Tech, Inc.

HVAC EQUIPMENT																					
DESIGNATION	TAG	LOCATION	AREA SERVING	QUANTITY	EQUIPMENT	MANUFACTURE R	MODEL #	AGE	ECONOMIZE R (Y/N)	EFFICIENCY	Cooling CAPACITY (Tons)	Heating CAPACITY (MBH)	TYPE (YAW/ CV)	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	SUPPLY FAN (HP)	CONDENSE R FAN (HP)	CONTROLS	HEAT RECOVERY	NOTES	
1 HVAC 17 - HVAC 24	UV-1 thru 8	Classrooms	Classrooms	8	Split System/Indoor	Tiame	VUVA-150	Nov-97	N	10.25 SEER	4	50	CV	1500	375	1/4	n/a	T, BMS	N	Uses Cond Units CU-1 thru 8	
2 HVAC 9 - HVAC 11	UV-9 thru 12	Roof	Science Classrooms	4	Split System/Indoor	Tiame	VUVA-150	Nov-97	N	10.25 SEER	4	50	CV	1500	375	1/4	n/a	T, BMS	N	Uses Cond Units CU-9 thru 12	
3 n/a	CU-1 thru CU-12	Roof	UV-1 thru UV-8	12	Split System/Cond Unit	Tiame	TTA46C400AA	98 Reno	-	10.25 SEER	4	-	-	-	-	-	n/a	T, BMS	-	Serves UV-1 thru UV-12	
4 n/a	UV-13 & 14	Corridor Ceiling	n/a	2	Unit Ventilator	Tiame	HUVA-975	98 Reno	N	N/A	-	35	CV	750	250	1/4	n/a	T, BMS	N		
5 n/a	UV-15 & 16	Toilets Ceiling	n/a	2	Unit Ventilator	Tiame	HUVA-976	98 Reno	100% OA	N/A	-	60	CV	750	750	1/4	n/a	T, BMS	N		
6 HVAC 13	RTU 1	Roof	Fitness Center	1	Packaged Rooftop	Tiame	TCDB15C400AA	Nov-97	Y (Reliab)	10 EER	13	150, Remote HW Coil HC-1	CV	5000	1250	3	5	ATC	N		
7 HVAC 14	RTU 3	Roof	Child Study	1	Packaged Rooftop	Tiame	TCDB15C400AA	98 Reno	Y (Reliab)	9.2 EER	9	151 total, Remote HW Coils HC-3,4,5	CV	3400	650	2	1	ATC	N		
8 HVAC 5	RTU-4	Roof	Conference	1	Packaged Rooftop	Tiame	TCDB15C400BC	Dec-97	Y (Reliab)	12 SEER	5	60, Remote HW Coil HC-5	CV	2000	500	3/4	n/a	ATC	N		
9 n/a	RTU-5	Roof	Faculty Lounge	1	Packaged Rooftop	Tiame	TCDB15C400BC	Jan-98	Y (Reliab)	12 SEER	5	60, Remote HW Coil HC-7	CV	2000	500	3/4	n/a	ATC	N		
10 HVAC 12	RTU-6	Roof	Prep	1	Packaged Rooftop	Tiame	TCDB37C400BC	Dec-97	Y (Reliab)	12 SEER	3	174W + 334/8W Remote HW Coils HC-8	CV	800	225	1/3	n/a	ATC	N	Electric Heat	
11 n/a	AHU-1	Aud. Fan Room	Auditorium	1	DX Air Handling Unit	Tiame	MCC-25	98 Reno	N	n/a	60	389	CV	12500	5880	15	10 ¹	ATC	N	Uses Cond Unit ACCU-1	
12 HVAC 8	AHU-2	Roof	n/a	1	DX Air Handling Unit	Tiame	PCC-18	Nov-97	Y (Reliab)	n/a	10	240	CV	6175	2085	5	n/a	ATC	N	Uses Cond Unit ACCU-2	
13 HVAC 6	AHU-3	Roof	n/a	1	DX Air Handling Unit	Tiame	PCC-37	98 Reno	Y (Reliab)	n/a	50	500	CV	13000	4330	10	n/a	ATC	N	Uses Cond Unit ACCU-3	
14 HVAC 15	AHU-4	Roof	n/a	1	DX Air Handling Unit	Tiame	PCC-7	98 Reno	n/a	n/a	10	162	CV	2000	2000	2	n/a	ATC	N	Uses Cond Unit ACCU-4	
15 n/a	HV-1	Roof	n/a	1	Heating Ventilator	Tiame	PCC-47	98 Reno	n/a	n/a	-	150	CV	3500	1200	3	n/a	ATC	N	Serves AHU-1	
16 n/a	ACCU-1	Roof	AHU-1	1	Condensing Unit	Tiame	RAUJCS604BP13BD	98 Reno	-	10.8	60	-	-	-	-	-	n/a	ATC	-	Serves AHU-1	
17 See HVAC 8	ACCU-2	Roof	AHU-2	1	Condensing Unit	Tiame	TTA120A400BC	98 Reno	-	10.1	10	-	-	-	-	-	n/a	ATC	-	Serves AHU-2	
18 See HVAC 6	ACCU-3	Roof	AHU-3	1	Condensing Unit	Tiame	RAUJCS604BP13BD	98 Reno	-	10.7	50	-	-	-	-	-	n/a	ATC	-	Serves AHU-3	
19 See HVAC 15	ACCU-4	Roof	AHU-4	1	Condensing Unit	Tiame	D3CE036A00C	98 Reno	-	9.9	10	-	-	-	-	-	n/a	ATC	-	Serves AHU-4	
20 HVAC 3	n/a	Roof	n/a	1	Packaged Rooftop	Tiame	D3CE036A00C	Jun-98	-	2.8 COP	3	40	CV	1200	n/a	1/3	1/2	n/a	N	Nat. Gas Heat	
21 HVAC 13	UAU-1	Roof	Kitchen	2	Heating Ventilator	Tiame	GRCA40P7NEDL	98 Reno	-	79%	-	315,000	CV	4400	4400	1 1/2	-	ATC	N		
22 n/a	n/a	n/a	n/a	1	Condensing Unit	York	H8BA060506A	n/a	-	10 SEER / 8.8 EER / 10.1 PLV	5	-	-	-	-	-	1/4	n/a	-		
23 n/a	n/a	n/a	n/a	1	Condensing Unit	York	H4CE180446A	n/a	-	n/a	15	-	-	-	-	-	-	1	n/a	-	
24 n/a	n/a	n/a	n/a	1	Heat Pump	York	DIEB036A063	Old	-	n/a	n/a	-	-	-	-	-	-	n/a	n/a	-	Pool Condition No I.D.
25 n/a	n/a	n/a	n/a	7	Split System	Sampo	CL1211	n/a	-	10 SEER	1	-	-	-	-	-	-	Fractional	n/a	-	
26 n/a	n/a	n/a	n/a	2	Split System	Sampo	CL1212	n/a	-	10 SEER	2.5	-	-	-	-	-	-	Fractional	n/a	-	
27 n/a	n/a	n/a	n/a	1	Split System	Sampo	CJ422	n/a	-	10 SEER	2	-	-	-	-	-	-	Fractional	n/a	-	
28 n/a	n/a	n/a	n/a	1	Split System	Sampo	CH1872	Nov-98	-	n/a	1.5	20	-	-	-	-	-	Fractional	n/a	-	
29 n/a	n/a	n/a	n/a	1	Split System	Sampo	CH1872	n/a	-	n/a	1.5	20	-	-	-	-	-	Fractional	n/a	-	
30 n/a	n/a	n/a	n/a	1	Split System	Sampo	CH1882	n/a	-	n/a	1.5	20	-	-	-	-	-	Fractional	n/a	-	
31 n/a	n/a	n/a	n/a	1	Split System	Midwest	PU126K	n/a	-	11.5	1	-	-	-	-	-	-	Fractional	n/a	-	
32 n/a	n/a	n/a	n/a	1	Split System	Friedrich	MR126C	n/a	-	11 SEER	1.5	-	-	-	-	-	-	Fractional	n/a	-	
33 n/a	n/a	n/a	n/a	1	Condensing Unit	York	H4DB036A	n/a	-	n/a	5	-	-	-	-	-	-	n/a	n/a	-	
34 n/a	n/a	n/a	n/a	1	Condensing Unit	York	n/a	n/a	-	n/a	n/a (17)	-	-	-	-	-	-	n/a	n/a	-	
35 n/a	n/a	n/a	n/a	1	Kitchen Hood	Captive Air	5424 NFR	98 Reno	-	-	-	-	CV	1900	-	-	-	ATC	N		
36 n/a	n/a	n/a	n/a	1	Kitchen Hood	Captive Air	5424 NFR	98 Reno	-	-	-	-	CV	1900	-	-	-	ATC	N		
37 n/a	n/a	n/a	n/a	1	Kitchen Hood	Captive Air	5424 NFR	98 Reno	-	-	-	-	CV	700	-	-	-	ATC	N		
38 n/a	n/a	n/a	n/a	1	Kitchen Hood	Captive Air	5424 NFR	98 Reno	-	-	-	-	CV	1000	-	-	-	ATC	N		

1. Return Fan HP

PLUMBING EQUIPMENT & HVAC PUMPS													
LOCATION	AREA SERVING	QUANTITY	EQUIPMENT	MANUFACTURE R	MODEL #	AGE	EFFICIENC Y	HEATING CAPACITY (MBH)	LEAVING TEMP (F)	HP (MOTOR)	CONTROLS	ESTIMATED SERVICE LIFE	NOTES
1 BOILER ROOM	DOMESTIC HOT WATER SYSTEM	1	DOMESTIC HOT WATER BOILER	A.O.SMITH	n/a	98 Reno	n/a	599	120	-	TIMER/CLOCK/ ELECTRONIC		
2 BOILER ROOM	DOMESTIC HOT WATER SYSTEM	2	DHW CIRC. PUMP	n/a	n/a	99 Reno	n/a	-	-	1/6	TIMECLOCK		
3 BOILER ROOM	DOMESTIC HOT WATER SYSTEM	2	DHW CIRC. PUMP	n/a	n/a	n/a	n/a	-	-	1/12	TIMECLOCK		
4 BOILER ROOM	HEATING HOT WATER SYSTEM (98 WING)	2	HHW CIRC. PUMP	n/a	n/a	n/a	85.5%	-	-	10	TIMECLOCK		
5 BOILER ROOM	HEATING HOT WATER SYSTEM	2	HHW CIRC. PUMP	n/a	n/a	n/a	86.5%	-	-	5	TIMECLOCK		
6 BOILER ROOM	HEATING HOT WATER SYSTEM	2	HHW CIRC. PUMP	n/a	n/a	n/a	88.5%	-	-	5	TIMECLOCK		
7 BOILER ROOM	HEATING HOT WATER SYSTEM	1	HHW CIRC. PUMP	n/a	n/a	n/a	n/a	-	-	3	TIMECLOCK		
8 BOILER ROOM	HEATING HOT WATER SYSTEM	1	HHW CIRC. PUMP	n/a	n/a	n/a	81.5%	-	-	1	TIMECLOCK		

KITCHEN EQUIPMENT LIST _ MONMOUTH HS

Prepared by Dome-Tech, Inc.

KITCHEN EQUIPMENT										
	DESCRIPTION	QUANTITY	MANUFACTURER	MODEL#	BTU (Nat Gas)	HP	Kw	AMPS	VOLTS	PH
1	Milk Dispenser	3	Powers	569	-	1/5	-	4	115	1
2	Hot Food Service Counter	2	Serv-O-Lift	501-4	-	-	3.6	17.3	208	1
3	Cold Food Service Counter	2	Serv-O-Lift	502-1R	-	1/5	-	4.2	120	1
4	Ice Cream Dispenser	2	Serv-O-Lift	506-1	-	1/4	-	5.5	120	1
5	Refrigerated Salad Bar	1	Lakeside	604	-	1/5	-	4.2	120	1
6	Hot Food Cabinet	2	Traulsen	RHF 1-32 WP	-	-	1.54	7.5	208	1
7	Cold Food Cabinet	2	Traulsen	RHT 1-32 WP UT	-	1/4	0.58	7.3	115	1
8	2-Door Reach-In Freezer	1	Traulsen	RLT 2-32 WUT	-	3/4	1.48	13.11	115	1
9	2-Door Reach-In Refrigerator	1	Traulsen	RHT 2-32W UT	-	1/2	1.03	12.1	115	1
10	Convection Steamer	1	Cleveland	24-CGM-200	200,000	-	0.5	-	115	1
11	40 gal. Tilt Kettle	1	Cleveland	KGL-40-T	140,000	-	-	10	120	1
12	Tilting Skillet	1	Cleveland	SGL-40-T	130,000	-	-	3	120	1
13	Range	1	Garland	H283-RC2-CC	222,500	1/3	-	6.8	120	1
14	Convection Oven	1	Garland	MCO-GS-20	120,000	1/2 (x2)	-	8.5 (x2)	120	1
15	Walk-In Freezer	1	Kol Pac	PR 304L-OP	-	3	-	17.2	208	3
16	Walk In Refrigerator	1	Kol Pac	PR 200M-OP	-	2	-	8.6	208	3
17	Ice Cream Freezer	1	Master Built	AST-30	-	1/4	-	4.3	115	1
18	Milk Dispenser	1	Powers	681	-	1/5	-	4	115	1
19	Soft Serve Freezer	1	Sani Serv	468	-	1 (x2)	-	30	115	1
20	Hot Water Booster	1	Halco	C-24	-	-	24	-	208	3
21	Hood	1	Captive Air	5424 NFR	-	See HVAC Equipment List for Details				
22	Hood	1	Captive Air	5425 NFR	-	See HVAC Equipment List for Details				
23	Hood	1	Captive Air	5426 NFR	-	See HVAC Equipment List for Details				

MONMOUTH REGIONAL HIGH SCHOOL
1 NORMAN FIELD, J FIELD WAY
TIRTON FALLS, NJ 07724

LN	Item #	Room Description	Existing Fixture Description	FOOT CANDLE	Exist Qty	Exist Fixture	Total Fixture	Existing Amt. Cost	Replacement Fixture Description	N/L Replace Code	Repl Qty	Repl Fixture	Total Fixture	Proposed Amt. Cost	Hours	Fix Wks Saved	Wkly Saved	Annual Elec. Savings	Annual Spent Savings
1	1	BUSINESS OFFICE	2X4 2L F32T8 PRISM	40-45	8	55	440	\$213.84	2L F32T8 841 RELAMP	0	8	55	440	\$213.84	3000	0	0	\$	\$
2	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	20	1			\$0.00	0		360	\$	\$ 64.15
3	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		0	\$	\$ -
4	1	TRANSPORTATION	2X4 2L F32T8 PRISM	70-75	8	55	440	\$213.84	2L F32T8 841 RELAMP	0	8	55	440	\$213.84	3000	0	0	\$	\$ -
5	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		360	\$	\$ 64.15
6	1	BOARD SECRETARY	2X4 2L F32T8 PRISM	77-75.1	12	55	660	\$320.76	2L F32T8 841 RELAMP	0	12	55	660	\$320.76	3000	0	0	\$	\$ -
7	1	SENSOR SAVINGS				0	0	\$0.00	CS500	70	2			\$0.00	0		504	\$	\$ 60.23
8	1	GENERAL OFFICE	2X4 2L F32T8 PRISM	63-1-34	11	55	605	\$294.03	2L F32T8 841 RELAMP	0	11	55	605	\$294.03	3000	0	0	\$	\$ -
9	1	SENSOR SAVINGS				0	0	\$0.00	CS500	70	2			\$0.00	0		544.5	\$	\$ 88.21
10	1	MEET ROOM	1X4 2L F32T12 W84P2	12	1	84	84	\$45.68	2L F32T8 841 RELAMP	10	1	55	55	\$28.73	3000	30	117	\$	\$ 18.55
11	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		48.5	\$	\$ 8.02
12	1	SUPERINTENDENT	2X4 2L F32T8 PRISM	87-50.4	11	55	605	\$294.03	2L F32T8 841 RELAMP	0	11	55	605	\$294.03	3000	0	0	\$	\$ -
13	1	SENSOR SAVINGS				0	0	\$0.00	CS500	70	2			\$0.00	0		544.5	\$	\$ 88.21
14	1	PRINCIPAL OFFICE	2X4 2L F32T8 PRISM	55-45	8	55	330	\$160.38	2L F32T8 841 RELAMP	0	8	55	330	\$160.38	3000	0	0	\$	\$ -
15	1	SENSOR SAVINGS				0	0	\$0.00	CS500	70	2			\$0.00	0		207	\$	\$ 48.11
16	1	LADIES ROOM	2X4 2L F32T8 PRISM	ND	2	55	110	\$53.48	2L F32T8 841 RELAMP	0	2	55	110	\$53.48	3000	0	0	\$	\$ -
17	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		89	\$	\$ 10.04
18	1	HEALTH OFFICE				0	0	\$0.00		0	0			\$0.00	0		0	\$	\$ -
19	1	CLOSET	1L F32T12 STRIP	8.4	1	30	30	\$14.59	1L F32T8 841 RELAMP	0	1	30	30	\$14.59	3000	0	0	\$	\$ -
20	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1			\$0.00	0		27	\$	\$ 4.37
21	1	OFFICE	2X4 2L F32T8 PRISM	62.4	1	55	55	\$28.73	2L F32T8 841 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$ -
22	1	KITCHEN	2X4 2L F32T8 PRISM	70	4	55	220	\$108.82	2L F32T8 841 RELAMP	0	4	55	220	\$108.82	3000	0	0	\$	\$ -
23	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	20	1			\$0.00	0		164	\$	\$ 32.06
24	1	BATHROOM	2X4 2L F32T8 PRISM	41.0	1	55	55	\$28.73	2L F32T8 841 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$ -
25	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1			\$0.00	0		48.5	\$	\$ 8.02
26	1	EXAM ROOM	2X4 2L F32T8 PRISM	43.5	1	55	55	\$28.73	2L F32T8 841 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$ -
27	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1			\$0.00	0		48.5	\$	\$ 8.02
28	1	MAIN OFFICE	2X4 2L F32T8 PRISM	33	3	55	165	\$80.19	2L F32T8 841 RELAMP	0	3	55	165	\$80.19	3000	0	0	\$	\$ -
29	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		148.5	\$	\$ 24.09
30	1	FOYER	2X4 2L F32T8 PRISM	44.2	1	55	55	\$28.73	2L F32T8 841 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$ -
31	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		48.5	\$	\$ 8.02
32	1	ATTENDANCE	2X4 2L F32T8 PRISM	47.4	4	55	220	\$108.82	2L F32T8 841 RELAMP	0	4	55	220	\$108.82	3000	0	0	\$	\$ -
33	1	SIDE ENTRANCE	2X4 2L F32T8 PRISM	27	2	55	110	\$53.48	2L F32T8 841 RELAMP	0	2	55	110	\$53.48	3000	0	0	\$	\$ -
34	1	GUIDANCE				0	0	\$0.00		0	0			\$0.00	0		0	\$	\$ -
35	1	OPEN OFFICE	2X4 2L F32T8 PRISM	52	8	55	440	\$213.84	2L F32T8 841 RELAMP	0	8	55	440	\$213.84	3000	0	0	\$	\$ -
36	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		360	\$	\$ 64.15
37	1	CALL AHEAD OFFICE	2X4 2L F32T8 PRISM	38	2	55	110	\$53.48	2L F32T8 841 RELAMP	0	2	55	110	\$53.48	3000	0	0	\$	\$ -
38	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1			\$0.00	0		99	\$	\$ 10.04
39	1	CHILDREN OFFICE	2X4 2L F32T8 PRISM	44	2	55	110	\$53.48	2L F32T8 841 RELAMP	0	2	55	110	\$53.48	3000	0	0	\$	\$ -
40	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		99	\$	\$ 10.04
41	1	JANITUSZ OFFICE	2X4 2L F32T8 PRISM	48	2	55	110	\$53.48	2L F32T8 841 RELAMP	0	2	55	110	\$53.48	3000	0	0	\$	\$ -
42	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	20	1			\$0.00	0		89	\$	\$ 10.04
43	1	BACK HALLWAY	2X4 2L F32T8 PRISM	43	2	55	110	\$53.48	2L F32T8 841 RELAMP	0	2	55	110	\$53.48	3000	0	0	\$	\$ -
44	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		99	\$	\$ 10.04
45	1	GAYLE FITZMAIER	2X4 2L F32T8 PRISM	74	3	55	165	\$80.19	2L F32T8 841 RELAMP	0	3	55	165	\$80.19	3000	0	0	\$	\$ -
46	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		148.5	\$	\$ 24.09

LN	FL	Room Description	Existing Fixture Description	FOOT CANDLE	Est. Qty	Est. Fix Wts	Total Fix Wts	Existing Amt. Cost	Replacement Fixture Description	N/A Rebuilt Core	Repl. Qty.	Repl. Fix Wts	Total Fix Wts	Proposed Amt. Cost	Hours	Fix Wts Saved	KWH Saved	Annual Elec. Savings	Annual Maint. Savings
47	1	KITCHEN	2X4 2L F32T8 PRISM	50	3	55	165	\$80.10	2L F32T8 B41 RELAMP	0	3	55	165	\$80.10	3000	0	0	\$	\$
48	1	SENSOR SWINGS						\$0.00	WALL SENSOR	20	1	55	110	\$53.46	3000	0	148.5	\$	\$ 24.00
49	1	KELLY OFFICE	2X4 2L F32T8 PRISM	57	2	55	110	\$53.46	2L F32T8 B41 RELAMP	0	2	55	110	\$53.46	3000	0	0	\$	\$
50	1	SENSOR SWINGS						\$0.00	WALL SENSOR	20	1	55	110	\$53.46	3000	0	99	\$	\$ 10.04
51	1	MODDON OFFICE	2X4 2L F32T8 PRISM	55	2	55	110	\$53.46	2L F32T8 B41 RELAMP	0	2	55	110	\$53.46	3000	0	0	\$	\$
52	1	SENSOR SWINGS						\$0.00	WALL SENSOR	20	1	55	110	\$53.46	3000	0	99	\$	\$ 10.04
53	1	A408	2X4 2L F32T8 PRISM	40	3	55	165	\$80.10	2L F32T8 B41 RELAMP	0	3	55	165	\$80.10	3000	0	0	\$	\$
54	1	SENSOR SWINGS						\$0.00	WALL SENSOR	20	1	55	110	\$53.46	3000	0	148.5	\$	\$ 24.00
55	1	A402	2L F32T8 WRAP	60.1	28	55	1540	\$748.44	2L F32T8 B41 RELAMP	0	28	55	1540	\$748.44	3000	0	0	\$	\$
56	1	A410	2L F32T8 WRAP	105	28	55	1540	\$748.44	2L F32T8 B41 RELAMP	0	28	55	1540	\$748.44	3000	0	0	\$	\$
57	1	LODE'S ROOM FACULTY	2X4 2L F32T8 PRISM	55	1	55	55	\$28.73	2L F32T8 B41 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$
58	1	SENSOR SWINGS						\$0.00	C5500	0	1	55	55	\$0.00	3000	0	49.5	\$	\$ 6.02
59	1	LODE'S ROOM FACULTY	2X4 2L F32T8 PRISM	40	0	55	495	\$240.57	2L F32T8 B41 RELAMP	0	0	55	495	\$240.57	3000	0	0	\$	\$
60	1	SENSOR SWINGS						\$0.00	C5500	35	1	55	55	\$0.00	0	0	445.5	\$	\$ 72.17
61	1	MEN'S ROOM FACULTY	2X2 2L F32T8 ULAMP PRISM	70	4	50	200	\$114.70	2L F1778 B41 REFL KIT	0	4	33	132	\$64.15	3000	104	312	\$	\$ 50.54
62	1	SENSOR SWINGS						\$0.00	C5500	0	1	55	55	\$0.00	0	0	118.8	\$	\$ 19.25
63	1	MEN'S ROOM FACULTY	2X4 2L F32T8 PRISM	28	1	55	55	\$28.73	2L F32T8 B41 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$
64	1	SENSOR SWINGS						\$0.00	WALL SENSOR	0	1	55	55	\$0.00	0	0	49.5	\$	\$ 6.02
65	1	A403	2L F32T8 WRAP	103.52	28	55	1540	\$748.44	2L F32T8 B41 RELAMP	0	28	55	1540	\$748.44	3000	0	0	\$	\$
66	1	A404	2L F32T8 WRAP	102.53	28	55	1540	\$748.44	2L F32T8 B41 RELAMP	0	28	55	1540	\$748.44	3000	0	0	\$	\$
67	1	A412	DOOR LOCKED					\$0.00		0	0	0	0	\$0.00	0	0	0	\$	\$
68	1	A405	2L F32T8 WRAP	73.40	15	55	825	\$400.85	2L F32T8 B41 RELAMP	0	15	55	825	\$400.85	3000	0	0	\$	\$
69	1	A406	2L F32T8 WRAP	78.34	15	55	825	\$400.85	2L F32T8 B41 RELAMP	0	15	55	825	\$400.85	3000	0	0	\$	\$
70	1	A407	2L F32T8 WRAP	85.64	15	55	825	\$400.85	2L F32T8 B41 RELAMP	0	15	55	825	\$400.85	3000	0	0	\$	\$
71	1	A413	2L F32T8 WRAP	104.54	30	55	1650	\$801.90	2L F32T8 B41 RELAMP	0	30	55	1650	\$801.90	3000	0	0	\$	\$
72	1	STORAGE A413	2X4 2L F32T8 PRISM	50	1	55	55	\$28.73	2L F32T8 B41 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$
73	1	SENSOR SWINGS						\$0.00	C5500	0	1	55	55	\$0.00	0	0	49.5	\$	\$ 6.02
74	1	A414	2L F32T8 WRAP	60.270	13	55	715	\$347.49	2L F32T8 B41 RELAMP	0	13	55	715	\$347.49	3000	0	0	\$	\$
75	1	A408	DOOR LOCKED					\$0.00		0	0	0	0	\$0.00	0	0	0	\$	\$
76	1	A415	2X4 2L F32T8 PRISM	65	8	55	440	\$213.84	2L F32T8 B41 RELAMP	0	8	55	440	\$213.84	3000	0	0	\$	\$
77	1	SENSOR SWINGS						\$0.00	C5500	35	1	55	55	\$0.00	0	0	368	\$	\$ 64.15
78	1	A401	2L F32T8 WRAP	65.50 0	18	55	990	\$481.14	2L F32T8 B41 RELAMP	0	18	55	990	\$481.14	3000	0	0	\$	\$
79	1	A401 OFFICE	2X4 2L F32T8 PRISM	36	1	55	55	\$28.73	2L F32T8 B41 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$
80	1	SENSOR SWINGS						\$0.00	WALL SENSOR	0	1	55	55	\$0.00	0	0	49.5	\$	\$ 6.02
81	1	A401 STORAGE#1	2X4 2L F32T8 PRISM	40	1	55	55	\$28.73	2L F32T8 B41 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$
82	1	SENSOR SWINGS						\$0.00	WALL SENSOR	0	1	55	55	\$0.00	0	0	49.5	\$	\$ 6.02
83	1	A401 STORAGE#2	2L F32T8 WRAP	51	1	55	55	\$28.73	2L F32T8 B41 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$
84	1	SENSOR SWINGS						\$0.00	C5500	0	1	55	55	\$0.00	0	0	49.5	\$	\$ 6.02
85	1	A401 STORAGE#3	2L F32T8 WRAP	32	1	55	55	\$28.73	2L F32T8 B41 RELAMP	0	1	55	55	\$28.73	3000	0	0	\$	\$
86	1	SENSOR SWINGS						\$0.00	WALL SENSOR	0	1	55	55	\$0.00	0	0	49.5	\$	\$ 6.02
87	1	A403	DOOR LOCKED					\$0.00		0	0	0	0	\$0.00	0	0	0	\$	\$
88	1	A408	2X4 4L F32T8 PRISM	80.54	12	112	1344	\$653.18	4L F32T8 B41 RELAMP	0	12	112	1344	\$653.18	3000	0	0	\$	\$
89	1	A407	DOOR LOCKED					\$0.00		0	0	0	0	\$0.00	0	0	0	\$	\$
90	1	A404 COMP. ROOM	2X4 3L F32T8 PRISM	63	16	89	1424	\$692.08	3L F32T8 B41 RELAMP	0	16	89	1424	\$692.08	3000	0	0	\$	\$
91	1	A404 COMP. ROOM	2X4 3L F32T8 PRISM	78.51	12	89	1088	\$519.05	3L F32T8 B41 RELAMP	0	12	89	1088	\$519.05	3000	0	0	\$	\$
92	1	A404 CLASSROOM	2X4 3L F32T8 PRISM	70.3	12	89	1088	\$519.05	3L F32T8 B41 RELAMP	0	12	89	1088	\$519.05	3000	0	0	\$	\$
93	1	A404 PHOTO LAB.	2X4 3L F32T8 PRISM	63	4	89	356	\$173.02	3L F32T8 B41 RELAMP	0	4	89	356	\$173.02	3000	0	0	\$	\$
94	1	A408	2X4 4L F32T8 PRISM	78.71	12	112	1344	\$653.18	4L F32T8 B41 RELAMP	0	12	112	1344	\$653.18	3000	0	0	\$	\$

LN	FL	Room Description	Existing Fixture Description	FOOT CANDLE	Exst. Qty	Exst. Fix Wts	Total	Exsting Am. Cost	Replacement Fixture Description	N/L Replace Code	Repl. Qty	Repl. Fix Wts	Total	Proposed Am. Cost	Hours	Fix Wts Saved	KWH Saved	Annual Elec. Savings	Annual Status Savings
65	1	A100	2X4 4L F3278 PRISM	87.85	12	112	1344	\$683.18	4L F3278 841 RELAMP	0	12	112	1344	\$683.18	3000	0	0	\$	-
66	1	A110 ENTRANCE	2X4 2L F3278 PRISM	32	1	55	55	\$26.73	2L F3278 841 RELAMP	0	1	55	55	\$26.73	3000	0	0	\$	-
67	1	A110 OFFICE#1	2X4 4L F3278 PRISM	36	3	112	336	\$163.30	4L F3278 841 RELAMP	0	3	112	336	\$163.30	3000	0	0	\$	-
68	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		302.4	\$	48.00
69	1	A110 OFFICE#2	2X4 4L F3278 PRISM	77.4	3	112	336	\$163.30	4L F3278 841 RELAMP	0	3	112	336	\$163.30	3000	0	0	\$	-
100	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		302.4	\$	48.00
101	1	A112	DOOR LOCKED			0	0	\$0.00		0	0			\$0.00	0				
102	1	OPEN AREA	2X4 4L F3278 PRISM	63	3	112	336	\$163.30	4L F3278 841 RELAMP	0	3	112	336	\$163.30	3000	0	0	\$	-
103	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		302.4	\$	48.00
104	1	DONNAVE OFFICE	2X4 4L F3278 PRISM	54	2	112	224	\$108.66	4L F3278 841 RELAMP	0	2	112	224	\$108.66	3000	0	0	\$	-
105	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		201.6	\$	32.00
106	1	SPENCE OFFICE	2X4 4L F3278 PRISM	65	2	112	224	\$108.66	4L F3278 841 RELAMP	0	2	112	224	\$108.66	3000	0	0	\$	-
107	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		201.6	\$	32.00
108	1	SPEACH THERAPIST	2X4 4L F3278 PRISM	86	2	112	224	\$108.66	4L F3278 841 RELAMP	0	2	112	224	\$108.66	3000	0	0	\$	-
109	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		201.6	\$	32.00
110	1	COPY ROOM	2X2 2L F3278 ULAMP PRISM	34	1	59	59	\$28.67	2L F3278 841 REFL KIT	0	1	33	33	\$16.04	3000	28	78	\$	12.64
111	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1			\$0.00	0		28.7	\$	4.51
112	1	OSTIC OFFICE	2X4 4L F3278 PRISM	50.6	2	112	224	\$108.66	4L F3278 841 RELAMP	0	2	112	224	\$108.66	3000	0	0	\$	-
113	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		201.6	\$	32.00
114	1	SOCIAL WORKER	2X4 4L F3278 PRISM	67	2	112	224	\$108.66	4L F3278 841 RELAMP	0	2	112	224	\$108.66	3000	0	0	\$	-
116	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		201.6	\$	32.00
119	1	PSYCHOLOGIST	2X4 4L F3278 PRISM	81	2	112	224	\$108.66	4L F3278 841 RELAMP	0	2	112	224	\$108.66	3000	0	0	\$	-
117	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		201.6	\$	32.00
118	1	OFFICE	2X4 4L F3278 PRISM	55	2	112	224	\$108.66	4L F3278 841 RELAMP	0	2	112	224	\$108.66	3000	0	0	\$	-
119	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		201.6	\$	32.00
120	1	DIRECTOR	2X4 4L F3278 PRISM	100	4	112	448	\$217.73	4L F3278 841 RELAMP	0	4	112	448	\$217.73	3000	0	0	\$	-
121	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		403.2	\$	65.32
122	1	KITCHEN	2X4 4L F3278 PRISM	34	4	112	448	\$217.73	4L F3278 841 RELAMP	0	4	112	448	\$217.73	3000	0	0	\$	-
123	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1			\$0.00	0		403.2	\$	65.32
124	1	LADIE S. ROOM4	2X4 4L F3278 PRISM	31	3	112	336	\$163.30	4L F3278 841 RELAMP	0	3	112	336	\$163.30	3000	0	0	\$	-
125	1	LADIE S. ROOM	2X2 2L F3278 ULAMP PRISM		1	59	59	\$28.67	2L F3278 841 REFL KIT	0	1	33	33	\$16.04	3000	28	78	\$	12.64
126	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		28.7	\$	4.51
127	1	MEN'S ROOM	2X4 4L F3278 PRISM	36	3	112	336	\$163.30	4L F3278 841 RELAMP	0	3	112	336	\$163.30	3000	0	0	\$	-
128	1	MEN'S ROOM	2X2 2L F3278 ULAMP PRISM		1	59	59	\$28.67	2L F3278 841 REFL KIT	0	1	33	33	\$16.04	3000	20	78	\$	12.64
129	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		29.7	\$	4.81
130	1	FITNESS CENTER	DOOR LOCKED			0	0	\$0.00		0	0			\$0.00	0				
131	1	OPEN AREA	250W MH	20	18	205	3690	\$2,680.06	NEW 4L F3278 GYMNAV	000	18	108	1944	\$644.78	3000	3366	12008	\$	1,055.88
132	1	COACH OFFICE	2X4 2L F3278 PRISM	68	3	55	165	\$80.19	2L F3278 841 RELAMP	0	3	55	165	\$80.19	3000	0	0	\$	-
133	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		146.5	\$	24.09
134	1	MEN'S ROOM	2X4 2L F3278 PRISM	33	1	55	55	\$26.73	2L F3278 841 RELAMP	0	1	55	55	\$26.73	3000	0	0	\$	-
135	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		48.5	\$	8.02
136	1	LADIE S. ROOM	2X4 2L F3278 PRISM	35	1	55	55	\$26.73	2L F3278 841 RELAMP	0	1	55	55	\$26.73	3000	0	0	\$	-
137	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		40.5	\$	8.02
138	1	ENTRANCE	2X4 2L F3278 PRISM	42	1	55	55	\$26.73	2L F3278 841 RELAMP	0	1	55	55	\$26.73	3000	0	0	\$	-
139	1	GYM C865	250W MH	30	36	205	10820	\$5,181.32	NEW 4L F3278 GYMNAV	1800	36	108	3888	\$1,880.67	3000	6732	20168	\$	3,271.75
140	1	COACH OFFICE	2L F4017 12 SHIP	28	3	64	192	\$197.05	2L F3278 841 RLARB	30	3	55	165	\$80.19	3000	117	351	\$	58.66
141	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1			\$0.00	0		148.5	\$	24.00
142	1	GYM C862	250W MH	18	16	285	4720	\$2,293.92	NEW 4L F3278 GYMNAV	800	16	108	1728	\$839.81	3000	2892	8876	\$	1,454.11

LN #	Room Description	Existing Fixture Description	FOOT CANDLE	Eqty	Exst. Fix/Wb	Total Fix/Wb	Am Cost	Replacement Fixture Description	NJ Rebid Code	Repl. Qty	Total Fix/Wb	Proposed Am Cost	Hours	Fix/Wb Saved	Am. Saved	Annual Elec. Savings	Annual Maint. Savings	
143	1 DIRECT ATHLETICS	2X4 2L F3278 PRISM	44.3	4	55	220	\$108.02	2L F3278 841 RELAMP	0	4	55	\$108.02	3000	0	0	\$	-	
144	1 DIRECT ATHLETICS	2X2 2L F3278 UL AMP PRISM	37.2	3	59	177	\$68.02	2L F3278 841 RELAMP	0	3	33	\$48.11	3000	78	234	\$	37.01	
145	1 SENSOR SAVINGS					0	\$0.00	CS500	0	2		\$0.00	0		89.1		\$	14.43
146	1 207	2L F3278 WRAP	50	6	55	330	\$190.38	2L F3278 841 RELAMP	0	6	55	\$190.38	3000	0	0	\$	-	
147	1 200	2L F3278 WRAP	49	0	55	330	\$190.38	2L F3278 841 RELAMP	0	6	55	\$190.38	3000	0	0	\$	-	
148	1 213	2L F3278 WRAP	52.34	18	65	990	\$481.14	2L F3278 841 RELAMP	0	18	55	\$481.14	3000	0	0	\$	-	
149	1 SCIENCE OFFICE	2X4 2L F3278 PRISM	73	10	55	550	\$297.30	2L F3278 841 RELAMP	0	10	55	\$297.30	3000	0	0	\$	-	
150	1 SENSOR SAVINGS					0	\$0.00	CS500	35	1		\$0.00	0		495		\$	80.10
151	1 204	2L F3278 WRAP	73.40	28	55	1540	\$748.44	2L F3278 841 RELAMP	0	28	55	\$748.44	3000	0	0	\$	-	
152	1 203	2L F3278 WRAP	79.59	32	55	1760	\$855.30	2L F3278 841 RELAMP	0	32	55	\$855.30	3000	0	0	\$	-	
153	1 212	2L F3278 WRAP	85.37	21	55	1155	\$581.33	2L F3278 841 RELAMP	0	21	55	\$581.33	3000	0	0	\$	-	
154	1 202	2L F3278 WRAP	82.5.34	15	55	825	\$400.65	2L F3278 841 RELAMP	0	15	55	\$400.65	3000	0	0	\$	-	
155	1 211	2L F3278 WRAP	56.38	18	55	990	\$481.14	2L F3278 841 RELAMP	0	18	55	\$481.14	3000	0	0	\$	-	
156	1 201	2L F3278 WRAP	77.50	15	55	825	\$400.65	2L F3278 841 RELAMP	0	15	55	\$400.65	3000	0	0	\$	-	
157	1 MATH OFFICE	2X4 2L F3278 PRISM	61.7	14	55	770	\$374.22	2L F3278 841 RELAMP	0	14	55	\$374.22	3000	0	0	\$	-	
158	1 SENSOR SAVINGS					0	\$0.00	CS500	35	1		\$0.00	0		693		\$	112.27
159	1 210	2X4 2L F3278 PRISM	58	14	55	770	\$374.22	2L F3278 841 RELAMP	0	14	55	\$374.22	3000	0	0	\$	-	
160	1 SENSOR SAVINGS					0	\$0.00	CS500	35	1		\$0.00	0		693		\$	112.27
161	1 ELECT. CLOSET 200	2L F3278 STRIP	27	3	55	165	\$80.18	2L F3278 841 RELAMP	0	3	55	\$80.18	3000	0	0	\$	-	
162	1 SENSOR SAVINGS					0	\$0.00	WALL SENSOR	20	1		\$0.00	0		148.5		\$	24.08
163	1 MAINTENANCE ROOM	2L F3278 STRIP	24	2	55	110	\$53.40	2L F3278 841 RELAMP	0	2	55	\$53.40	3000	0	0	\$	-	
164	1 MAINTENANCE ROOM	60W INCANDESCENT		1	60	60	\$29.18	13W A10 CFL	0	1	13	\$8.32	3000	47	141	\$	22.84	
165	1 SENSOR SAVINGS					0	\$0.00	WALL SENSOR	0	2		\$0.00	0		11.7		\$	1.90
166	1 OPEN AREA	2L F3278 WRAP	50.41	14	55	770	\$374.22	2L F3278 841 RELAMP	0	14	55	\$374.22	3000	0	0	\$	-	
167	1 SENSOR SAVINGS					0	\$0.00	CS500	70	2		\$0.00	0		693		\$	112.27
168	1 REST.	60W INCANDESCENT	24	1	60	60	\$29.18	13W A10 CFL	0	1	13	\$8.32	3000	47	141	\$	22.84	
169	1 SENSOR SAVINGS					0	\$0.00	WALL SENSOR	0	1		\$0.00	0		11.7		\$	1.90
170	1 MAINTENANCE OFFICE	2X4 2L F3278 PRISM	75	6	55	330	\$190.38	2L F3278 841 RELAMP	0	6	55	\$190.38	3000	0	0	\$	-	
171	1 SENSOR SAVINGS					0	\$0.00	WALL SENSOR	20	1		\$0.00	0		207		\$	48.11
172	1 B700	2L F3278 WRAP	75.48	15	55	825	\$400.65	2L F3278 841 RELAMP	0	15	55	\$400.65	3000	0	0	\$	-	
173	1 B710	2L F3278 WRAP	77.42	21	55	1155	\$581.33	2L F3278 841 RELAMP	0	21	55	\$581.33	3000	0	0	\$	-	
174	1 B705	2L F3278 WRAP	47.20	21	55	1155	\$581.33	2L F3278 841 RELAMP	0	21	55	\$581.33	3000	0	0	\$	-	
175	1 B700	2L F3278 WRAP	71.37	28	55	1540	\$748.44	2L F3278 841 RELAMP	0	28	55	\$748.44	3000	0	0	\$	-	
176	1 B704	2L F3278 WRAP	51.31	21	55	1155	\$581.33	2L F3278 841 RELAMP	0	21	55	\$581.33	3000	0	0	\$	-	
177	1 MEN'S ROOM 700	2X2 2L F3278 UL AMP PRISM	66	9	59	531	\$258.97	2L F3278 841 RELAMP	0	0	33	\$141.34	3000	231	702	\$	113.72	
178	1 SENSOR SAVINGS					0	\$0.00	CS500	35	1		\$0.00	0		287.3		\$	43.30
179	1 LADIES ROOM 700	2X2 2L F3278 UL AMP PRISM	66	7	59	413	\$200.72	2L F3278 841 RELAMP	0	7	33	\$112.27	3000	182	548	\$	88.45	
180	1 SENSOR SAVINGS					0	\$0.00	CS500	35	1		\$0.00	0		287.8		\$	33.88
181	1 B702	2L F3278 WRAP	74.38	24	55	1320	\$641.52	2L F3278 841 RELAMP	0	24	55	\$641.52	3000	0	0	\$	-	
182	1 TECH OFFICE	2L F3278 WRAP	88.2.70	9	55	495	\$240.57	2L F3278 841 RELAMP	0	9	55	\$240.57	3000	0	0	\$	-	
183	1 TECH OFFICE	2X4 2L F3278 PRISM		5	60	445	\$210.27	2L F3278 841 RELAMP	0	5	60	\$210.27	3000	0	0	\$	-	
184	1 SENSOR SAVINGS					0	\$0.00	CS500	70	2		\$0.00	0		400.5		\$	64.88
185	1 411	2L F3278 WRAP	87.42	48	55	2640	\$1283.04	2L F3278 841 RELAMP	0	48	55	\$1283.04	3000	0	0	\$	-	
186	1 407	2X4 2L F3278 PRISM	78	39	55	1660	\$882.28	2L F3278 841 RELAMP	0	39	55	\$882.28	3000	0	0	\$	-	
187	1 408	2L F3278 WRAP	67	40	55	2200	\$1080.20	2L F3278 841 RELAMP	0	40	55	\$1080.20	3000	0	0	\$	-	
188	1 412	2L F3278 WRAP	65	62	55	3410	\$1657.28	2L F3278 841 RELAMP	0	62	55	\$1657.28	3000	0	0	\$	-	
189	1 LIBRARY					0	\$0.00		0	0		\$0.00	0					
190	1 LOWER LEVEL OFFICE	2X4 2L F3278 PRISM	78	2	55	110	\$53.48	2L F3278 841 RELAMP	0	2	55	\$53.48	3000	0	0	\$	-	

LN	FL #	Room Description	Existing Fixture Description	FOOT CANDLE	Exst. Qty.	Exst. Fix Wts	Total Fix Wts	Existing Ap Cost	Replacement Fixture Description	N/L Replst Code	Repl. Qty.	Total Fix Wts	Proposed Ap Cost	Hours	Fix Wts Saved	kWh Saved	Annual Elec. Savings	Annual Sens. Savings	
101	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	20	1		\$0.00	0	0	0	\$	\$ 10.04	
102	1	OFFICE#2	2X4 2LFC2T8 PRISM	74	2	55	110	\$53.46	2LFC2T8 841 RE/LAMP	0	2	55		3000	0	0	\$	-	
103	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	20	1		\$0.00	0	0	0	\$	\$ 10.04	
104	1	OFFICE#3	2X4 2LFC2T8 PRISM	81	6	55	330	\$160.38	2LFC2T8 841 RE/LAMP	0	6	55	\$160.38	3000	0	0	\$	-	
105	1	OFFICE#4	2X2 2LFC2T8 ULAMP PRISM		1	50	69	\$28.97	2LFC2T8 841 REFL KIT	0	1	33	\$10.04	3000	26	78	\$	\$ 12.64	
106	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	1		\$0.00	0	0	0	\$	\$ 4.81	
107	1	OPEN AREA	2X4 4LFC2T8 PRISM	62	10	112	1120	\$544.32	4LFC2T8 841 RE/LAMP	0	10	112	\$544.32	3000	0	0	\$	-	
108	1	OPEN AREA	2X4 4LFC2T8 PRISM	49	18	112	1792	\$870.81	4LFC2T8 841 RE/LAMP	0	18	112	\$870.81	3000	0	0	\$	-	
109	1	UPPER LEVEL	2X4 4LFC2T8 PRISM	75	32	112	3584	\$1,741.82	4LFC2T8 841 RE/LAMP	0	32	112	\$1,741.82	3000	0	0	\$	-	
200	1	405	2X4 2LFC2T8 PRISM	79	6	55	330	\$160.38	2LFC2T8 841 RE/LAMP	0	6	55	\$160.38	3000	0	0	\$	-	
201	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1		\$0.00	0	0	0	\$	\$ 48.11	
202	1	404	2X4 2LFC2T8 PRISM	57	6	55	330	\$160.38	2LFC2T8 841 RE/LAMP	0	6	55	\$160.38	3000	0	0	\$	-	
203	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1		\$0.00	0	0	0	\$	\$ 48.11	
204	1	403	2X4 2LFC2T8 PRISM	58	6	55	330	\$160.38	2LFC2T8 841 RE/LAMP	0	6	55	\$160.38	3000	0	0	\$	-	
205	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1		\$0.00	0	0	0	\$	\$ 48.11	
206	1	SCOTT LARKIN	2X4 2LFC2T8 PRISM	52	6	55	330	\$160.38	2LFC2T8 841 RE/LAMP	0	6	55	\$160.38	3000	0	0	\$	-	
207	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1		\$0.00	0	0	0	\$	\$ 48.11	
208	1	OFFICE	2X4 2LFC2T8 PRISM	46	4	55	220	\$108.82	2LFC2T8 841 RE/LAMP	0	4	55	\$108.82	3000	0	0	\$	-	
209	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1		\$0.00	0	0	0	\$	\$ 32.08	
210	1	305 ENTRANCE	2X2 2LFC2T8 ULAMP PRISM	49	1	50	59	\$28.97	2LFC2T8 841 REFL KIT	0	1	33	\$10.04	3000	26	78	\$	\$ 12.64	
211	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1		\$0.00	0	0	0	\$	\$ 4.81	
212	1	OFFICE	2X4 2LFC2T8 PRISM	47.5	7	55	385	\$197.11	2LFC2T8 841 RE/LAMP	0	7	55	\$197.11	3000	0	0	\$	-	
213	1	SENSOR SAVINGS				0	0	\$0.00	CS500	70	2		\$0.00	0	0	0	\$	\$ 59.13	
214	1	OFFICE	2X4 2LFC2T8 PRISM	45.5	4	55	220	\$108.82	2LFC2T8 841 RE/LAMP	0	4	55	\$108.82	3000	0	0	\$	-	
215	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1		\$0.00	0	0	0	\$	\$ 32.08	
216	1	315	2L F32T8 WRAP	81-45	15	55	825	\$400.95	2LFC2T8 841 RE/LAMP	0	15	55	\$400.95	3000	0	0	\$	-	
217	1	316	2L F32T8 WRAP	84-48	15	55	825	\$400.95	2LFC2T8 841 RE/LAMP	0	15	55	\$400.95	3000	0	0	\$	-	
218	1	306	2L F32T8 WRAP	78-45	15	55	825	\$400.95	2LFC2T8 841 RE/LAMP	0	15	55	\$400.95	3000	0	0	\$	-	
219	1	317	2L F32T8 WRAP	85-54	15	55	825	\$400.95	2LFC2T8 841 RE/LAMP	0	15	55	\$400.95	3000	0	0	\$	-	
220	1	307	2L F32T8 WRAP	58-30	15	55	825	\$400.95	2LFC2T8 841 RE/LAMP	0	15	55	\$400.95	3000	0	0	\$	-	
221	1	LANGUAGE OFFICE	2X4 2LFC2T8 PRISM	60.5	8	55	440	\$213.84	2LFC2T8 841 RE/LAMP	0	8	55	\$213.84	3000	0	0	\$	-	
222	1	SENSOR SAVINGS				0	0	\$0.00	CS500	35	1		\$0.00	0	0	0	\$	\$ 64.15	
223	1	CAFETERIA	2X2 2LFC2T8 ULAMP PRISM	24	26	59	2124	\$1032.28	2LFC2T8 841 REFL KIT	0	26	33	\$1188	\$577.37	3000	628	2808	\$	\$ 454.00
224	1	CAFETERIA	2X2 2LFC2T8 ULAMP PRISM	75-51	25	69	1475	\$718.85	2LFC2T8 841 REFL KIT	0	25	33	\$825	\$400.95	3000	650	1850	\$	\$ 315.00
225	1	CAFETERIA	2L F32T8 WRAP	87-40	4	55	220	\$108.92	2LFC2T8 841 RE/LAMP	0	4	55	\$220	\$108.92	3000	0	0	\$	-
226	1	CAFETERIA	2X4 3LFC2T8 PRISM	31.6	2	89	178	\$89.51	3LFC2T8 841 RE/LAMP	0	2	89	178	\$89.51	3000	0	0	\$	-
227	1	KITCHEN	2X4 4LFC2T8 PRISM	65-48	29	112	3248	\$1,578.53	4LFC2T8 841 RE/LAMP	0	29	112	\$2448	\$1,578.53	3000	0	0	\$	-
228	1	KITCHEN	2X4 2LFC2T8 PRISM	10-8	3	55	165	\$80.19	2LFC2T8 841 RE/LAMP	0	3	55	\$165	\$80.19	3000	0	0	\$	-
229	1	SENSOR SAVINGS				0	0	\$0.00	CS500	0	2		\$0.00	0	0	0	\$	\$ 24.06	
230	1	LOCKER ROOM	2X4 2LFC2T8 PRISM	41	1	55	55	\$28.73	2LFC2T8 841 RE/LAMP	0	1	55	\$55	\$28.73	3000	0	0	\$	-
231	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1		\$0.00	0	0	0	\$	\$ 8.02	
232	1	RESTROOM	2X4 2LFC2T8 PRISM	33	1	55	55	\$28.73	2LFC2T8 841 RE/LAMP	0	1	55	\$55	\$28.73	3000	0	0	\$	-
233	1	SENSOR SAVINGS				0	0	\$0.00	WALL SENSOR	0	1		\$0.00	0	0	0	\$	\$ 8.02	
234	1	FREEZER	2L F48T12 VT	18	2	55	110	\$53.46	LEAVE AS IS	0	2	55	\$110	\$53.46	3000	0	0	\$	-
235	1	FREEZER	40W INC.		1	40	40	\$19.44	13W A-19 CFL	0	1	13	\$13	\$8.32	3000	27	81	\$	\$ 13.12
236	1	COOLER	2L F48T12 VT	29	2	55	110	\$53.46	LEAVE AS IS	0	2	55	\$110	\$53.46	3000	0	0	\$	-
237	1	COOLER	40W INC.		1	40	40	\$19.44	13W A-19 CFL	0	1	13	\$13	\$8.32	3000	27	81	\$	\$ 13.12
238	1	OFFICE	2X4 3LFC2T8 PRISM	70	2	89	178	\$89.51	3LFC2T8 841 RE/LAMP	0	2	89	\$178	\$89.51	3000	0	0	\$	-

LN #	LN #	Room Description	Existing Fixture Description	FOOT CANDLE	Exst. QTY	Exst. Fix Wts	Total Fix Wts	Existing Fix Wts	Replacement Fixture Description	N/L Replace Code	Repl. QTY	Repl. Fix Wts	Total Fix Wts	Proposed Fix Wts	Hours	Fix Wts Saved	W/W Saved	Annual Elec. Savings	Annual Gen. Savings
229	1	SENSOR SWINGS																	
230	2	STRANS#3	2L F32T8 WRAP	41	3	55	165	\$50.10	CS500	0	1	55	165	\$50.10	3000	0	0	\$	\$
241	2	STRANS#4	2L F32T8 WRAP	44	3	55	165	\$50.10	2L F32T8 B41 RE LAMP	0	3	55	165	\$50.10	3000	0	0	\$	\$
242	2	STRANS#2	2L F32T8 WRAP	44	3	55	165	\$50.10	2L F32T8 B41 RE LAMP	0	3	55	165	\$50.10	3000	0	0	\$	\$
243	2	STRANS#1	2L F32T8 WRAP	43	3	55	165	\$50.10	2L F32T8 B41 RE LAMP	0	3	55	165	\$50.10	3000	0	0	\$	\$
244	2	921	2L F32T8 WRAP	23.5	12	55	660	\$320.78	2L F32T8 B41 RE LAMP	0	12	55	660	\$320.78	3000	0	0	\$	\$
245	2	928	2M 2L F32T8 PRISM	48-40	8	55	445	\$240.57	2L F32T8 B41 RE LAMP	0	0	55	495	\$240.57	3000	0	0	\$	\$
246	2	SOCAL STUDIOS	2M 2L F32T8 PRISM	60-61	12	55	660	\$320.78	2L F32T8 B41 RE LAMP	0	12	55	660	\$320.78	3000	0	0	\$	\$
247	2	SENSOR SWINGS							CS500	35	1	55	660	\$0.00	0	594		\$	\$
248	2	920	2L F32T8 WRAP	28-15	12	55	660	\$320.78	2L F32T8 B41 RE LAMP	0	12	55	660	\$320.78	3000	0	0	\$	\$
249	2	928	2L F32T8 WRAP	30-28	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
250	2	910	2L F32T8 WRAP	37-18	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
251	2	925	2L F32T8 WRAP	41-20	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
252	2	916	2L F32T8 WRAP	47-28	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
253	2	924	2L F32T8 WRAP	78-38	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
254	2	917	2L F32T8 WRAP	42-21	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
255	2	923	2L F32T8 WRAP	24-15	8	55	330	\$160.28	2L F32T8 B41 RE LAMP	0	8	55	330	\$160.28	3000	0	0	\$	\$
256	2	GIRLS ROOM	4L F32T8 WRAP	103-35	3	112	336	\$163.30	4L F32T8 B41 RE LAMP	0	3	112	336	\$163.30	3000	0	0	\$	\$
257	2	GIRLS ROOM	2L F32T8 WRAP		2	55	110	\$53.46	2L F32T8 B41 RE LAMP	0	2	55	110	\$53.46	2000	0	0	\$	\$
258	2	SENSOR SWINGS							CS500	0	2			\$0.00	0	90		\$	\$
259	2	BOYS ROOM	4L F32T8 WRAP	101-28	3	112	336	\$163.30	4L F32T8 B41 RE LAMP	0	3	112	336	\$163.30	3000	0	0	\$	\$
260	2	BOYS ROOM	2L F32T8 WRAP		2	55	110	\$53.46	2L F32T8 B41 RE LAMP	0	2	55	110	\$53.46	3000	0	0	\$	\$
261	2	SENSOR SWINGS							CS500	0	2			\$0.00	0	90		\$	\$
262	2	916	2L F32T8 WRAP	42-28	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
263	2	910	2L F32T8 WRAP	45-28	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
264	2	915	2L F32T8 WRAP	45-27	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
265	2	900	2L F32T8 WRAP	42-20	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
266	2	914	2L F32T8 WRAP	43-28	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
267	2	ENGLISH OFFICE	2M 2L F32T8 PRISM	36-16	12	55	660	\$320.78	2L F32T8 B41 RE LAMP	0	12	55	660	\$320.78	3000	0	0	\$	\$
268	2	SENSOR SWINGS							CS500	70	2			\$0.00	0	594		\$	\$
269	2	913	2L F32T8 WRAP	30-25	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
270	2	907	2L F32T8 WRAP	34-35	9	55	495	\$240.57	2L F32T8 B41 RE LAMP	0	9	55	495	\$240.57	3000	0	0	\$	\$
271	2	912	2M 2L F32T8 PRISM		8	55	330	\$160.28	2L F32T8 B41 RE LAMP	0	8	55	330	\$160.28	3000	0	0	\$	\$
272	2	908	2L F32T8 WRAP	32-25	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
273	2	905	2L F32T8 WRAP	37-24	12	55	660	\$320.78	2L F32T8 B41 RE LAMP	0	12	55	660	\$320.78	3000	0	0	\$	\$
274	2	904	2L F32T8 WRAP	40-18	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
275	2	903	2L F32T8 WRAP	37-22	15	55	825	\$400.05	2L F32T8 B41 RE LAMP	0	15	55	825	\$400.05	3000	0	0	\$	\$
276	2	911	2M 2L F32T8 PRISM	41	8	55	330	\$160.28	2L F32T8 B41 RE LAMP	0	8	55	330	\$160.28	3000	0	0	\$	\$
277	2	FACULTY	2M 2L F32T8 PRISM	68	8	80	712	\$340.03	2L F32T8 B41 RE LAMP	0	8	80	712	\$340.03	3000	0	0	\$	\$
278	2	SENSOR SWINGS							CS500	70	2			\$0.00	0	640.8		\$	\$
279	2	HALLOWAY 900	2M 4L F32T8 PRISM	104	21	112	2352	\$1,143.07	4L F32T8 B41 RE LAMP	0	21	112	2352	\$1,143.07	3000	0	0	\$	\$
280	2	HALLOWAY 900	2L F32T8 IND	44	23	55	1265	\$614.79	2L F32T8 B41 RE LAMP	0	23	55	1265	\$614.79	3000	0	0	\$	\$
281	2	HALLOWAY 900	1L F32T8 IND	38	18	30	540	\$282.44	1L F32T8 B41 RE LAMP	0	18	30	540	\$282.44	3000	0	0	\$	\$
282	1	HALLOWAY 400	2M 2L F32T8 UL AMP PRISM	38	22	50	1208	\$600.83	2L F17T8 B41 REFL KIT	0	22	33	728	\$352.84	3000	572	1716	\$	\$
283	1	HALLOWAY 400	2M 2L F32T8 UL AMP PRISM	47	33	50	1647	\$840.54	2L F17T8 B41 REFL KIT	0	33	33	1088	\$550.25	3000	658	2574	\$	\$
284	1	HALLOWAY 300	2M 2L F32T8 PRISM	41	21	55	1155	\$593.33	2L F32T8 B41 RE LAMP	0	21	55	1155	\$593.33	3000	0	0	\$	\$
285	1	HALLOWAY 300	1M 2L F32T8	33	3	55	165	\$80.19	2L F32T8 B41 RE LAMP	0	3	55	165	\$80.19	3000	0	0	\$	\$
286	1	HALLOWAY 200	2M 2L F32T8 PRISM	45	19	55	1045	\$507.87	2L F32T8 B41 RE LAMP	0	19	55	1045	\$507.87	3000	0	0	\$	\$

MONMOUTH HIGH SCHOOL ECM MEASURE SUMMARY TABLE

Prepared by Dome-Tech, Inc.

ECO/ECM Summary

Energy Conservation Measures (ECM)	Areas	Energy Savings		Gross Installation Costs*	Rebate / Incentives	Net Implementation Costs	Annual Energy Cost Savings*	Annual Operating Cost Savings*	Total Annual Cost Savings*	Simple Pay Back*	CO2	Return on Investment (ROI)	Lifetime*
		kWh	Therms										
1 VendingMisers		10,400	0	\$1,800		\$1,800	1,700		\$1,700	1.1	3	94%	NA
2 Replace Domestic Hot Water Heater		0	3,800	\$14,200		\$14,200	7,500		\$7,500	1.9	22	53%	\$112,500
3 Theatre Demand Control Vent (DCV)	Theater	4,700	7,300	\$29,900		\$29,900	15,000		\$15,000	2.0	44	50%	NA
4 Dishwasher Heater Fuel Conversion	Kitchen	19,500	-700	\$12,000		\$12,000	1,700		\$1,700	7.2	2	14%	NA
5 Automatic Boiler Temperature Reset		0	940	\$21,000		\$21,000	1,800		\$1,800	11.4	6	9%	NA
6 Gymnasium Demand Control Vent (DCV)	Gym	0	3,500	\$26,900		\$26,900	2,200		\$2,200	12.1	21	8%	NA
7 Photography Lab Heat Recovery	Photo lab	880	0	\$28,000		\$28,000	1,700		\$1,700	16.7	0	6%	NA
LIGHTING	ALL	73,120		\$114,600	\$5,440	\$109,160	11,860	\$14,800	\$26,660	4.1	24	24%	NA
TOTALS		123,465	14,840	\$248,400	\$5,440	\$242,960	\$43,460	\$14,800	\$58,260	7.1	123	32%	\$112,500

Cars 212.54

Trees 33.51

Cost Estimates
Monmouth Regional HS
Monmouth County
Energy Audit - May 2009
Performed by Dome-Tech Energy Advisors

1	Demand Controlled Ventilation - Gymnasium							
	N/N	DESCRIPTION OF WORK	UNIT	QTY	MATERIAL		LABOR	
					PER UNIT	TOTAL	PER UNIT	TOTAL
	1	CO2 Sensors & Control Wiring	EA	5	375	1,875	625	3,125
	2	RA / OA Dampers & Actuators	EA (avg)	4	1,250	5,000	750	3,000
	3	Controllers	EA	2	1,500	3,000	600.0	1,200
	4	Electrical Work	EA	2	250	500	500.0	1,000
	Other Estimated Implementation Costs							8,200
	TOTAL							\$ 26,900

2	Demand Controlled Ventilation - Theatre							
	N/N	DESCRIPTION OF WORK	UNIT	QTY	MATERIAL		LABOR	
					PER UNIT	TOTAL	PER UNIT	TOTAL
	1	CO2 Sensors & Control Wiring	EA	9	375	3,375	1,000	9,000
	2	RA / OA Damper Actuators	EA	2	900	1,800	750	1,500
	3	Controllers	EA	1	3,000	3,000	1,250.0	1,250
	4	Electrical Work	EA	1	450	450	500.0	500
	Other Estimated Implementation Costs							9,000
	TOTAL							\$ 29,900

3	Photography Lab Heat Recovery							
	N/N	DESCRIPTION OF WORK	UNIT	QTY	MATERIAL		LABOR	
					PER UNIT	TOTAL	PER UNIT	TOTAL
	1	Heat Recovery Coils	EA	2	850	1,700	100	200
	2	Piping	LF	20	37	730	27	540
	3	Fan	EA	1	4,500	4,500	275	275
	4	Pump	EA	1	980	980	165	165
	5	Ductwork (Internally Insulated)	LB	55	4	205	13	732
	6	Controls	LS	1	1,750	1,750	2,250	2,250
	7	Electrical Work	LS	1	1,700	1,700	2,200	2,200
	8	Demolition	LS	1			2,000	2,000
	Other Estimated Implementation Costs							8,100
	TOTAL							\$ 28,000

4	Automatic Boiler Temperature Reset							
	N/N	DESCRIPTION OF WORK	UNIT	QTY	MATERIAL		LABOR	
					PER UNIT	TOTAL	PER UNIT	TOTAL
	1	Pneumatic to DDC Transducer	EA	2	1,200	2,400	400	800
	2	Controller	EA	1	2,500	2,500	500	500
	3	Programming	LS	1	2,500	2,500	2,500	2,500
	4	Electrical Work	LS	1	1,250	1,250	1,500	1,500
	Other Estimated Implementation Costs							7,000
	TOTAL							\$ 21,000

5	Replace Domestic Hot Water Heater							
	N/N	DESCRIPTION OF WORK	UNIT	QTY	MATERIAL		LABOR	
					PER UNIT	TOTAL	PER UNIT	TOTAL
	1	Boiler	EA	1	10,000	10,000	1,250	1,200
	2	Electrical Work & Controls	EA	1	250	250	350	350
	Other Estimated Implementation Costs							2,400
	TOTAL							\$ 14,200

6	Dishwasher Fuel Conversion							
	N/N	DESCRIPTION OF WORK	UNIT	QTY	MATERIAL		LABOR	
					PER UNIT	TOTAL	PER UNIT	TOTAL
	1	Gas fired Booster Heater	LS	1	5,500	5,500	350	350
	2	Gas Piping	LF	50	12	600	16	800
	3	Gas Vent	LF	50	8	400	16	800
	4	Electrical Work & Controls	LS	1	275	275	400	400
	Other Estimated Implementation Costs							2,900
	TOTAL							\$ 12,000

7	Vending Machine Power Management							
	N/N	DESCRIPTION OF WORK	UNIT	QTY	MATERIAL		LABOR	
					PER UNIT	TOTAL	PER UNIT	TOTAL
	1	VendingMiser	EA	9	200	1,800		
	Other Estimated Implementation Costs							-
	TOTAL							\$ 1,800

Legend & Notes	
EA	Each
LS	Lump Sum
SF	Square Foot
CLF	One Hundred Linear Feet
LF	Linear Foot
• For LS & SF items, all-in cost is indicated in "LABOR" column	

UTILITY PRICES

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kWh (blended rate)	\$0.160
4. Price of the Demand of Electricity, \$/kW/month	\$0.000
5. Price of Natural Gas, \$/therm	\$1.960

EMISSION DATA

1. Emissions lb/gal oil	22.38
2. Emissions lb/therm	11.708
3. Emissions lb/kWh	0.78111

Site Information

CFM	1
Hrs/Day (m-f)	12
Hrs/Day (sat)	0
Hrs/Day (sun)	0
Holidays	0
Hours/year	3120

CFM	1
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Energy Costs		
Cost of Gas	\$ 1.960	per Therm
Cost of CHW	\$ -	per ton-hour
Cost of Electric	\$ 0.160	per kWh

Boiler Plant Efficiency	0.75
Heat Wheel Effectiveness	0.4
Air Cooled DX (kw/ton)	1.290323
Central CHW (kw/ton)	1

Recirc AHU

% Cooling Energy	57%
% Heating Energy	43%
100% OA Units	
% Cooling Energy	40%
% Heating Energy	60%

Recirc. Cost / CFM / Year		
Cost / AHU CFM	\$ -	per CFM

H&V Unit with optional return air

Not in Operation		Altered from formula											
Temp Range	Bin Hours	OAT dry bulb (deg F)	Estimated RAT dry bulb (deg F)	% OA	MAT dry bulb (deg F)	HCV Leak-By Measured Δ T (deg F)	Target dry bulb (deg F)	SAT (deg F)	CFM (Always 1)	Heating Load (Therms)	Heating Cost (\$)	Load Factor (TOD)	TOTAL COST (\$)
95 to 100	37	97.5	78	75%	92.6	0	85	85	1	0.0000	\$ -	0.00	\$ -
90 to 95	95	92.5	78	75%	88.9	0	85	85	1	0.0000	\$ -	0.00	\$ -
85 to 90	243	87.5	78	75%	85.1	0	85	85	1	0.0000	\$ -	0.00	\$ -
80 to 85	454	82.5	78	75%	81.4	0	85	85	1	0.0178	\$ 0.05	0.00	\$ -
75 to 80	657	77.5	78	75%	77.6	0	85	85	1	0.0523	\$ 0.14	0.00	\$ -
70 to 75	840	72.5	78	75%	73.9	0	85	85	1	0.1009	\$ 0.26	0.00	\$ -
65 to 70	767	67.5	78	75%	70.1	0	85	85	1	0.1232	\$ 0.32	0.15	\$ 0.048
60 to 65	709	62.5	78	75%	66.4	0	85	85	1	0.1426	\$ 0.37	0.15	\$ 0.056
55 to 60	728	57.5	78	75%	62.6	0	85	85	1	0.1759	\$ 0.46	0.25	\$ 0.115
50 to 55	760	52.5	78	75%	58.9	0	85	85	1	0.2144	\$ 0.56	0.25	\$ 0.140
45 to 50	763	47.5	78	75%	55.1	0	85	85	1	0.2462	\$ 0.64	0.25	\$ 0.161
40 to 45	796	42.5	78	75%	51.4	0	85	85	1	0.2891	\$ 0.76	0.25	\$ 0.189
35 to 40	688	37.5	78	75%	47.6	0	85	85	1	0.2777	\$ 0.73	0.25	\$ 0.181
30 to 35	559	32.5	78	75%	43.9	0	85	85	1	0.2483	\$ 0.65	0.25	\$ 0.162
25 to 30	315	27.5	78	75%	40.1	0	85	85	1	0.1527	\$ 0.40	0.25	\$ 0.100
20 to 25	193	22.5	78	75%	36.4	0	85	85	1	0.1014	\$ 0.26	0.25	\$ 0.066
15 to 20	102	17.5	78	75%	32.6	0	85	85	1	0.0577	\$ 0.15	0.25	\$ 0.038
10 to 15	54	12.5	78	75%	28.9	0	85	85	1	0.0327	\$ 0.09	0.25	\$ 0.021
										2.2329	Total \$ 1.278		
Running Hours (NOT RUN HOURS)													
1461													

Recirc. AHU Opera

Temp Range	Bin Hours	OAT (db)	OAT (wb)	OA Enthalpy	Estimated RAT (db)	Estimated RA %RH	RA Enthalpy	dH	% OA	MAT Setpoint = SAT Setpoint - 1	MAT Enthalpy	PHT Setpoint = SAT Setpoint - 1	Heating Load (BTUH Annually)	Heating Load (Therms Annually)	Heating Load (\$ / Annually)
95 to 100	37	97.5	76	39.4	74	50	27.6	-11.8	20%	54.0	78.7	54	-1,322.1	-0.013	\$ -
90 to 95	95	92.5	75	38.5	74	50	27.6	-10.9	20%	54.0	77.7	54	-3,257.2	-0.033	\$ -
85 to 90	243	87.5	72	35.8	74	50	27.6	-8.2	20%	54.0	76.7	54	-7,980.0	-0.080	\$ -
80 to 85	454	82.5	70	34.1	74	50	27.6	-6.4	20%	54.0	75.7	54	-14,252.3	-0.143	\$ -
75 to 80	657	77.5	68	32.4	74	50	27.6	-4.8	20%	54.0	74.7	54	-19,674.5	-0.197	\$ -
70 to 75	840	72.5	65	30.1	74	50	27.6	-2.4	20%	54.0	73.7	54	-23,939.4	-0.239	\$ -
65 to 70	767	67.5	61	27.1	74	50	27.6	0.5	100%	54.0	67.5	54	-14,979.5	-0.150	\$ -
60 to 65	709	62.5	56	23.8	74	50	27.6	3.8	100%	54.0	62.5	54	-8,718.3	-0.087	\$ -
55 to 60	728	57.5	51	20.8	74	50	27.6	6.8	100%	54.0	57.5	54	-3,686.1	-0.037	\$ -
50 to 55	760	52.5	47	18.7	74	50	27.6	8.9	93%	54.0	54.0	54	0.0	0.000	\$ -
45 to 50	763	47.5	42	16.2	74	50	27.6	11.4	75%	54.0	54.0	54	0.0	0.000	\$ -
40 to 45	796	42.5	38	14.4	74	50	27.6	13.3	63%	54.0	54.0	54	0.0	0.000	\$ -
35 to 40	688	37.5	33	12.2	74	50	27.6	15.4	55%	54.0	54.0	54	0.0	0.000	\$ -
30 to 35	559	32.5	28	10.1	74	50	27.6	17.5	48%	54.0	54.0	54	0.0	0.000	\$ -
25 to 30	315	27.5	24	8.6	74	50	27.6	19.0	43%	54.0	54.0	54	0.0	0.000	\$ -
20 to 25	193	22.5	19	6.8	74	50	27.6	20.8	39%	54.0	54.0	54	0.0	0.000	\$ -
15 to 20	102	17.5	14	5.1	74	50	27.6	22.5	35%	54.0	54.0	54	0.0	0.000	\$ -
10 to 15	54	12.5	10	3.8	74	50	27.6	23.8	33%	54.0	54.0	54	0.0	0.000	\$ -

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Temp Range	Bin Hours	OAT dry bulb (deg F)	OAT wet bulb (deg F)	OA %RH	OA Enthalpy (BTU/LB of Dry Air)	Estimated RAT dry bulb (deg F)	Estimated RA %RH	RA Enthalpy (BTU/LB of Dry Air)	OA / RA ΔH	% OA	MAT SP (deg F)	MAT dry bulb (deg F)	MA Enthalpy (BTU/LB of Dry Air)	MA Grains	HCV Leak-By Measured ΔT (deg F)	HRC Diff. Temp. (deg F)
95 to 100	37	97.5	69.8	24.72	33.8	74	19.72	21.6	-12.2	100%	54.0	97.5	33.8	65.7	0	-23.5
90 to 95	95	92.5	74.3	43.25	37.9	74	38.25	25.3	-12.6	100%	54.0	92.5	37.9	99.4	0	-18.5
85 to 90	243	87.5	72.8	50.15	36.5	74	45.15	26.7	-9.9	100%	54.0	87.5	36.5	98.7	0	-13.5
80 to 85	454	82.5	70	54.27	34.1	74	49.27	27.5	-6.6	100%	54.0	82.5	34.1	91.0	0	-8.5
75 to 80	657	77.5	68.7	64.58	33.0	74	59.58	29.5	-3.5	100%	54.0	77.5	33.0	92.1	0	-3.5
70 to 75	840	72.5	66.1	71.85	30.9	74	66.85	31.0	0.1	100%	54.0	72.5	30.9	86.6	0	1.5
65 to 70	767	67.5	62.2	74.70	28.0	74	69.70	31.6	3.6	100%	54.0	67.5	28.0	75.7	0	6.5
60 to 65	709	62.5	57.3	73.14	24.6	73	68.14	30.6	5.9	100%	54.0	62.5	24.6	62.0	0	10.5
55 to 60	728	57.5	52	69.17	21.4	73	64.17	29.8	8.4	100%	54.0	57.5	21.4	48.8	0	15.5
50 to 55	760	52.5	46.7	65.87	18.6	73	60.87	29.1	10.6	100%	54.0	52.5	18.6	38.6	0	20.5
45 to 50	763	47.5	41.8	62.20	16.1	73	57.20	28.4	12.3	100%	54.0	47.5	16.1	30.5	0	25.5
40 to 45	796	42.5	37.8	65.09	14.3	72	60.09	28.4	14.1	100%	54.0	42.5	14.3	26.4	0	29.5
35 to 40	688	37.5	33.8	68.95	12.5	72	63.95	29.1	16.6	100%	54.0	37.5	12.5	22.9	0	34.5
30 to 35	559	32.5	29.1	66.13	10.6	72	61.13	28.6	18.0	100%	54.0	32.5	10.6	18.0	0	39.5
25 to 30	315	27.5	23.9	58.53	8.5	71	53.53	26.6	18.0	100%	54.0	27.5	8.5	12.7	0	43.5
20 to 25	193	22.5	19.3	56.67	6.9	71	51.67	26.2	19.3	100%	54.0	22.5	6.9	9.7	0	48.5
15 to 20	102	17.5	14.7	54.85	5.3	71	49.85	25.9	20.6	100%	54.0	17.5	5.3	7.3	0	53.5
10 to 15	54	12.5	10	51.40	3.8	71	46.40	25.3	21.5	100%	54.0	12.5	3.8	5.4	0	58.5

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CCT / SAT Setpoint	Cooling SA %RH	Cooling Enthalpy	CC Load (Ton- Hrs/year)	CC Load (Chiller Plant kwh)	CC Load (\$ / Annually)	Space Temp / Reheat Setpoint	Heating Load (BTUH Annually)	Heating Load (Therms Annually)	Heating Load (\$ / Annually)	Load Factor (TOD)	TOTAL COST
55	85	21.7	0.1152	0.1487	\$ 0.0238	72	273.0	0.003	\$ 0.01	1.00	\$ 0.029
55	85	21.7	0.2893	0.3733	\$ 0.0597	72	700.9	0.007	\$ 0.01	1.00	\$ 0.073
55	85	21.7	0.6899	0.8902	\$ 0.1424	72	1,792.9	0.018	\$ 0.04	1.00	\$ 0.178
55	85	21.7	1.2306	1.5878	\$ 0.2641	72	3,349.6	0.033	\$ 0.07	1.00	\$ 0.320
55	85	21.7	1.6999	2.1934	\$ 0.3509	72	4,847.3	0.048	\$ 0.10	1.00	\$ 0.446
55	85	21.7	2.0250	2.6129	\$ 0.4181	72	6,197.5	0.062	\$ 0.12	1.00	\$ 0.540
55	85	21.7	1.5700	2.0259	\$ 0.3241	72	5,658.9	0.057	\$ 0.11	1.00	\$ 0.435
55	85	21.7	0.5640	0.7277	\$ 0.1164	72	5,231.0	0.052	\$ 0.10	1.00	\$ 0.219
55	85	21.7	-0.2430	-0.3135	\$ -	72	5,371.2	0.054	\$ 0.11	1.00	\$ 0.105
55	85	21.7	-0.6669	-0.8605	\$ -	72	5,607.3	0.056	\$ 0.11	1.00	\$ 0.110
55	85	21.7	-0.7655	-0.9878	\$ -	72	5,629.4	0.056	\$ 0.11	1.00	\$ 0.110
55	85	21.7	-0.7420	-0.9574	\$ -	72	5,872.9	0.059	\$ 0.12	1.00	\$ 0.115
55	85	21.7	-0.6481	-0.8362	\$ -	72	5,076.1	0.051	\$ 0.10	1.00	\$ 0.099
55	85	21.7	-0.5227	-0.6745	\$ -	72	4,124.3	0.041	\$ 0.08	1.00	\$ 0.081
55	85	21.7	-0.2661	-0.3433	\$ -	72	2,324.1	0.023	\$ 0.05	1.00	\$ 0.046
55	85	21.7	-0.1561	-0.2014	\$ -	72	1,424.0	0.014	\$ 0.03	1.00	\$ 0.028
55	85	21.7	-0.0778	-0.1004	\$ -	72	752.6	0.008	\$ 0.01	1.00	\$ 0.015
55	85	21.7	-0.0365	-0.0471	\$ -	72	398.4	0.004	\$ 0.01	1.00	\$ 0.008
										\$ 1.27	\$ 2.956 Total Cost

100% OA AHUS

HRC / Preheat Temp. (deg F)	HRC / Preheat Temp. Setpoint (deg F)	PH Enthalpy (BTU / LB of Dry Air)	Preheat Load (Therms)	Preheat Cost (\$)	CCV Leak-By Measured Δ T (deg F)	Target SAT dry bulb (deg F)	Existing SAT dry bulb (deg F)	SA %RH	SA Enthalpy (BTU / LB of Dry Air)	SA Grains	PH / SA Δ H	CC Total Load (Ton-Hrs/year)	CC Total Load (Chiller Plant kWh)	CC Total Load (\$ / year)	Space Temp / Reheat Setpoint (deg F)	Total Internal Heating Load (BTUH / year)	Internal Reheat Loads baseboard (therms)	Internal Reheat Loads Cost (\$)	Load Factor (TOD)	TOTAL COST (\$)
97.5	55	33.8	0.0000	\$ -	0	55	55	100	23.2	64.6	10.6	0.1465	0.1890	\$ 0.030	74	762.8	0.003	\$ 0.01	1.00	\$ 0.037
92.5	55	37.9	0.0000	\$ -	0	55	55	100	23.2	64.6	14.6	0.5216	0.6731	\$ 0.108	74	1,958.4	0.007	\$ 0.02	1.00	\$ 0.125
87.5	55	36.5	0.0000	\$ -	0	55	55	100	23.2	64.6	13.3	1.2110	1.5626	\$ 0.250	74	5,009.4	0.017	\$ 0.04	1.00	\$ 0.294
82.5	55	34.1	0.0000	\$ -	0	55	55	100	23.2	64.6	10.9	1.8479	2.3843	\$ 0.381	74	9,359.2	0.031	\$ 0.08	1.00	\$ 0.463
77.5	55	33.0	0.0000	\$ -	0	55	55	100	23.2	64.6	9.8	2.4150	3.1162	\$ 0.499	74	13,544.1	0.045	\$ 0.12	1.00	\$ 0.617
72.5	55	30.9	0.0000	\$ -	0	55	55	100	23.2	64.6	7.7	2.4293	3.1346	\$ 0.502	74	17,316.6	0.058	\$ 0.15	1.00	\$ 0.652
67.5	55	28.0	0.0000	\$ -	0	55	55	100	23.2	64.6	4.8	1.3759	1.7754	\$ 0.284	74	15,811.7	0.053	\$ 0.14	1.00	\$ 0.422
62.5	55	24.6	0.0000	\$ -	0	55	55	96	22.8	62.0	1.8	0.4860	0.6271	\$ 0.100	73	13,846.8	0.046	\$ 0.12	1.00	\$ 0.221
57.5	55	21.4	0.0000	\$ -	0	55	55	76	20.8	48.8	0.6	0.1646	0.2124	\$ 0.034	73	14,217.8	0.047	\$ 0.12	1.00	\$ 0.158
52.5	55	18.6	0.0206	\$ 0.06	0	55	55	60	19.2	38.6	-0.6	-0.1755	0.0000	\$ -	73	14,842.8	0.049	\$ 0.13	1.00	\$ 0.183
47.5	55	16.1	0.0621	\$ 0.16	0	55	55	47	17.9	30.4	-1.8	-0.5165	0.0000	\$ -	73	14,901.4	0.050	\$ 0.13	1.00	\$ 0.292
42.5	55	14.3	0.1080	\$ 0.28	0	55	55	41	17.3	26.3	-3.0	-0.8991	0.0000	\$ -	72	14,682.2	0.049	\$ 0.13	1.00	\$ 0.410
37.5	55	12.5	0.1306	\$ 0.34	0	55	55	36	16.7	22.8	-4.2	0.0000	0.0000	\$ -	72	12,690.2	0.042	\$ 0.11	1.00	\$ 0.452
32.5	55	10.6	0.1365	\$ 0.36	0	55	55	28	16.0	17.9	-5.4	0.0000	0.0000	\$ -	72	10,310.8	0.034	\$ 0.09	1.00	\$ 0.446
27.5	55	8.5	0.0940	\$ 0.25	0	55	55	20	15.2	12.7	-6.6	0.0000	0.0000	\$ -	71	5,468.4	0.018	\$ 0.05	1.00	\$ 0.293
22.5	55	6.9	0.0681	\$ 0.18	0	55	55	15	14.7	9.7	-7.8	0.0000	0.0000	\$ -	71	3,350.5	0.011	\$ 0.03	1.00	\$ 0.207
17.5	55	5.3	0.0415	\$ 0.11	0	55	55	11	14.3	7.2	-9.0	0.0000	0.0000	\$ -	71	1,770.7	0.006	\$ 0.02	1.00	\$ 0.124
12.5	55	3.8	0.0249	\$ 0.07	0	55	55	9	14.0	5.4	-10.2	0.0000	0.0000	\$ -	71	937.4	0.003	\$ 0.01	1.00	\$ 0.073
\$ 1.79																937.4	0.003	\$ 0.01	Total	\$ 5.469
\$ 2.188																937.4	0.003	\$ 0.01	Total	\$ 0.073

Demand Control Ventilation (Large Gymnasium)

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kWh (blended rate)	\$0.160
5. Price of Natural Gas, \$/therm	\$1.960

	Existing Condition	Proposed System	Savings
Total (CFM)	4,500	4,500	
Cost Per CFM	\$ 1.28	\$ 0.78	
Run Hours	-	-	
Estimated Electric Use (kWh)	-	-	-
Estimated Natural Gas Use (therms)	10,048	6,498	3,550
			-
Annual Cost and Savings, \$	\$ 5,749	\$ 3,524	\$ 2,225

1. Assumes 75% OA using "H&V Unit..." cost per cfm data on "# Constants"
2. Assumes 38% Overall Average OA (60% of current) using calculation shown in this appendix section
3. Run hours based on bin data and time of day factor.

Demand Control Ventilation (Theatre)

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kWh (blended rate)	\$0.160
4. Price of Natural Gas, \$/therm	\$1.960

	Existing Condition	Proposed System	Savings
Total (CFM)	5,880	5,880	
Run Hours	8,760	3,393	5,367
Estimated Electric Use (kWh per CFM)	1.846	1.053	0.793
Estimated Natural Gas Use (therms per CFM)	2.350	1.110	1.240
Annual Cost and Savings, \$	\$ 28,822	\$ 13,783	\$ 15,039

4664.2
7292.2

1. Assumes 75% OA using "H&V Unit..." cost per cfm data on "# Constants"
2. Assumes 38% Overall Average OA (60% of current) using calculation shown in this appendix section
3. Run hours based on bin data and time of day factor.

SAVINGS FROM REDUCING EXCESSIVE VENTILATION

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kW h (blended rate)	\$0.160
5. Price of Natural Gas, \$/therm	\$1.960

	Existing Condition	Proposed System	Savings
Total (CFM)	2,000	2,000	
Run Hours	2,349	2,349	0
Estimated Electric Use (kW h per CFM)	0.401	0.526	(0.126)
Estimated Natural Gas Use (therms per CFM)	0.616	0.178	0.438
			875.9
Annual Cost and Savings, \$	\$ 2,542	\$ 865	\$ 1,677

1. The zone was found to have a ventilation rate of 2000 cfm served by AHU-4, exhausted by EF-21
2. Assume the existing heating plant has an efficiency of 75% and the cooling efficiency of 8 EER
3. Assume the Photography Lab is ventilated between 6am and 3pm

Automatic HHW Supply Water Temperature Setpoint reset program based on outside air temperature.

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kW h (blended rate)	\$0.160
4. Price of the Demand of Electricity, \$/kW/month	\$0.000
5. Price of Natural Gas, \$/therm	\$1.960

	Existing Condition (Manual)	Proposed System (Automatic)	Savings
HHW Supply Setpoint at OAT = 0 degrees, degrees F	180	180	
HHW Supply Setpoint at OAT = 40 degrees, degrees F	180	160	
Annual Btu losses	457,135,500	363,003,000	94,132,500
Annual Cost and Savings, \$	\$ 8,960	\$ 7,115	\$ 1,845

1. Assumes HHW distribution is primarily made up of 6"
2. Assumes 1" cellular glass fiber insulation with AP-T casing
3. Assumes 75 degree ambient temperature
4. Assumes 2,500 ft of HWS Piping
5. Assumes Boiler Operator Adjusts HWS Setpoint to 160 DegF above 55 DegF OAT and 180 DegF below 55 De

Tankless DHW Heaters

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kWh (blended rate)	\$0.160
4. Price of the Demand of Electricity, \$/kW/month	\$0.000
5. Price of Natural Gas, \$/therm	\$1.960

	Existing Condition	Proposed System	Savings
Gallons Hot Water / Person / Year	1,458	1,458	
Number of People	1,200	1,200	
Annual Energy Consumption (Therms)	27,338	23,516	3,821
Annual Cost and Savings, \$	\$ 53,582	\$ 46,092	\$ 7,490

Dishwasher Fuel Conversion

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kWh (blended rate)	\$0.160
4. Price of the Demand of Electricity, \$/kW/month	\$0.000
5. Price of Natural Gas, \$/therm	\$1.960

	Existing Condition	Proposed System	Savings
Operating hours per day (kWh)	3	3	
Annual Electric Consumption (kWh)	19,500	0	
Annual Gas Consumption (Therms)	0	739	
Annual Cost and Savings, \$	\$ 3,120	\$ 1,449	\$ 1,671

1- Assumes no weekend operation

2- Assumes efficiency of 0.90

VENDING MACHINE POWER MANAGEMENT SYSTEM

1. Price of #2 Fuel Oil, \$/gal	x
2. Price of City Water, \$/1000 gallons	x
3. Price of Electricity, \$/kWh (blended rate)	\$0.160
4. Price of the Demand of Electricity, \$/kW/month	\$0.000
5. Price of Natural Gas, \$/therm	\$1.960

	Existing Condition	Proposed System	Savings
Soda Machine Power Consumption	100%	56%	
Annual Op Cost	\$ 3,784	\$ 2,119	
Run Hours	8,760	8,760	
Annual Energy Consumption (kWh)	23,652	13,245	10,407
Annual Cost and Savings, \$	\$ 3,784	\$ 2,119	\$ 1,665

1. Run hours based on fan motors being run 8760 hrs

Solar PV System

Performed By Dome-Tech Energy Advisors

	Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	
	N/S	N/S	N/S	N/S	N/S	N/S	
Gross Length, feet	140	70	50	300	100	90	—————>
Panel Count (calculated)	40.8	20.4	14.6	87.4	29.1	26.2	
Panel Count (actual)	40	20	14	87	29	26	

	E/W	E/W	E/W	E/W	E/W	E/W	
Gross Length, feet	130	230	280	180	180	120	—————>
Panel Count (calculated)	25.4	45.0	54.7	35.2	35.2	23.5	
Panel Count (actual)	25	44	54	35	35	23	

Gross Panel Qty	1000	880	756	3045	1015	598	—————>
Panel Reduction %	75%	75%	75%	75%	75%	75%	—————>
Net Panel Qty	750	660	567	2284	761	449	5,471
							<u>Total</u>

System Capacity, kw	173	152	130	525	175	103	1,258
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Choose Closest City	Newark	Newark	Newark	Newark	Newark	Newark	—————>
Capacity Factor (kwh/kw)	1,054	1,054	1,054	1,054	1,054	1,054	
First Year Expected Production (kWh)	181,815	159,997	137,452	553,627	184,542	108,725	1,326,159

Geothermal Analysis

Performed By Dome-Tech Energy Advisors

Facility:	Monmouth County Regional High School
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Annual HVAC Energy Use

Annual Electric Use, kwh	1,892,800
Electric Cost	\$0.16/kWh

Natural Gas Use, therms	129,822
Natural Gas Cost	\$1.57/therm

Electric*	%	kWh	Cost
Lighting	17%	321,776	
HVAC	53%	1,003,184	\$160,509
Office Equipment	20%	378,560	
Miscellaneous	10%	189,280	

*Distribution as per EPA typical office building ([http://www.facilitiesnet.com/energyefficiency/article/Managers-Need-to-Address-Buildin%](http://www.facilitiesnet.com/energyefficiency/article/Managers-Need-to-Address-Buildin%20))

Natural Gas**	%	Therms	Cost
Lighting	0%	0	
HVAC	90%	116,840	\$182,854
Office Equipment	0%	0	
Miscellaneous	0%	0	

**HVAC estimate by Dome-Tech

Total HVAC Cost	\$343,364
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Geothermal Savings

Cooling	Existing	GSHP	
Energy Efficiency Ratio, EER	10.3	14.1	
Cooling Mode, Electric Use, kWh	1,003,184	732,822	
Annual Electric Costs	\$160,509	\$117,252	Cooling Savings \$43,258

Heating	Existing	GSHP	
Gas Fired Heating Efficiency	77%	-	
Coefficient of Performance, COP	-	3.3	
Heating Mode, Natural Gas Use, therms	116,840	-	
Annual Heat Load, therms	89,967	-	
Annual Heat Load, kWh	-	2,636,772	
Heating Mode, Electric Use, kWh	-	799,022	Heating Savings \$55,011
Annual Energy Costs	\$182,854	\$127,843	

Annual Heating Savings	\$43,258
Annual Cooling Savings	\$55,011
Total Annual Savings	\$98,269

Installation Cost Estimate

Total Square Feet	193,000
Air Flow (CFM) Per Square Foot	1
Air Flow (CFM) Per Ton Refrigeration	400
Connected Cooling Load	483

Cost Per Ton	\$5,000	\$7,000
Gross Installation Cost Estimate	\$2,415,000	\$3,381,000
Investment Tax Credit	\$0	\$0
NJ SSB Equipment Incentives	\$178,710	\$178,710
Net Installation Cost Estimate	\$2,236,290	\$3,202,290

(10% if facility pays federal taxes)
(\$370 per ton)

Return on Investment

Annual Savings	\$98,269	
Installation Cost	\$2,236,290	\$3,202,290
Payback	23	33

Well Field Dimension

System Size, Tons	483
Well Capacity, ft/ton	250

	250 ft wells	500 ft wells
Well Spacing, feet on center	15	15
Number of wells	483	242
Dimension Well Field Foot Print, Sq. Ft	118,790	61,556
Dimension Well Field Foot Print, Acres. Ft	2.7	1.4

Wind Analysis

Performed By Dome-Tech Energy Advisors

Average Wind Speed	4.5	4.5	5.7
Annual Electric Use, kwh	1,892,800	1,892,800	1,892,800
Electric Cost	\$0.16/kWh	\$0.16/kWh	\$0.16/kWh

Name	Monmouth County Regional HS
Annual Electric Use, kwh	1,892,800
Electric Cost, kwh	\$ 0.160

	Micro	Traditional 5.2 kw	Traditional 50 kw
Number of Units	20	2	1
kW Capacity, per Unit	1 Kw	5.2 Kw	50.0 Kw
kW Capacity, Total	20 Kw	10 Kw	50 Kw
Annual Production Per Unit	707 Kwh	5,624 Kwh	105,041 Kwh
Annual Production Total	14,149 Kwh	11,248 Kwh	105,041 Kwh
Annual Savings	\$2,264	\$1,800	\$16,806
Installed Cost per Unit	\$6,500		
Installed Cost per Kw		\$6,000	\$5,000
Gross Installed Cost	\$130,000	\$62,400	\$250,000
NJ Incentive	\$45,278	\$35,994	\$95,720
Net Installed Cost	\$84,722	\$26,406	\$154,280
Simple PayBack	37.4	14.7	9.2
% Energy Use	0.7%	0.6%	5.5%

Monthly Averaged Wind Speed At 10 m Above The Surface Of The Earth For Terrain Similar To Airports (m/s)

Latitude	Longitude	January	February	March	April	May	June	July	August	September	October	November	December
40.18	-74.5	5.1	5.14	5.21	4.96	4.31	3.97	3.63	3.53	3.8	4.18	4.81	5.04

avg
4.47

Monthly Averaged Wind Speed At 50 m Above The Surface Of The Earth (m/s)

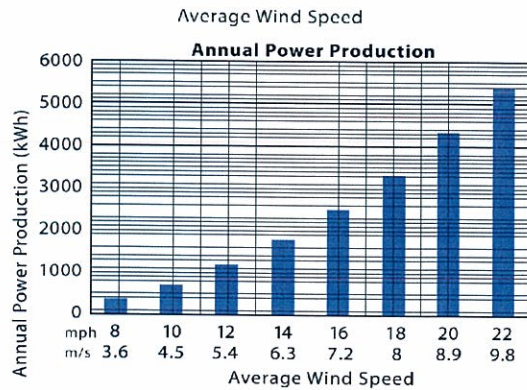
Latitude	Longitude	January	February	March	April	May	June	July	August	September	October	November	December
40.18	-74.5	6.45	6.51	6.59	6.28	5.45	5.03	4.6	4.47	4.81	5.29	6.09	6.38

avg
5.66

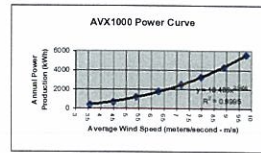
Latitude 40.34 N
Longitude 74.27 W
NASA Surface meteorology and Solar Energy: Data Subset
http://eosweb.larc.nasa.gov/cgi-bin/sse/subset.cgi?email=k_mccarthy@dome-tech.com
UN
PW dometech

http://www.awea.org/smallwind/toolbox/TOOLS/fs_safety.asp

AVX1000 Power Curve



m/s	annual kwh
3.6	390
4.5	710
5.4	1200
6.3	1800
7.2	2500
8	3300
8.9	4300
9.8	5550



$$y = 13.436x^{2.6458}$$

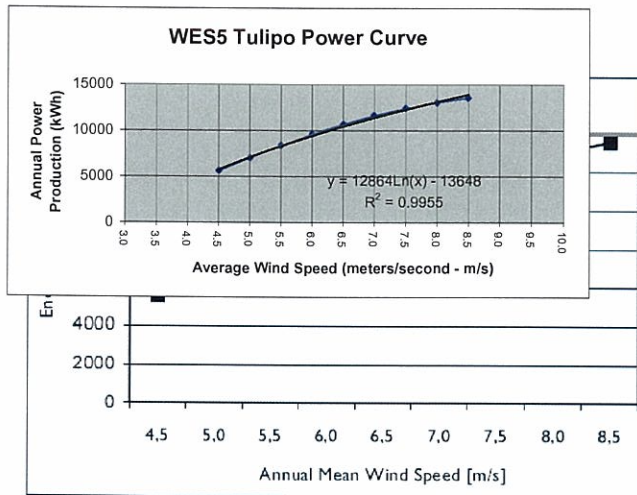
$$R^2 = 0.9995$$

Average Wind Speed **4.5** Has to be greater than 2.2 m/s
Annual Power Production: 707.474

<http://www.prevailingwindpower.com/1000AVX.pdf>

WES5 Tulipo

Wind speed [m/s]	Energy [kWh]
4,5	5541
5,0	6947
5,5	8294
6,0	9534
6,5	10638
7,0	11593
7,5	12391
8,0	13036
8,5	13534



annual kwh
5541
6947
8294
9534
10638
11593
12391
13036
13534

$$y = 12864\ln(x) - 13648$$

$$R^2 = 0.9955$$

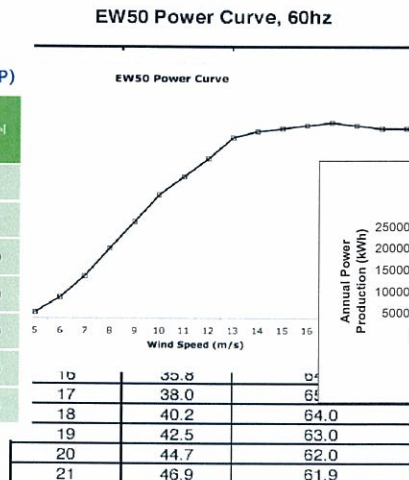
Average Wind Speed **4.5**
Annual Power Production: ###

http://www.windenergysolutions.nl/fileadmin/user_upload/Technical_Specifications_WES5_Tulipo.pdf

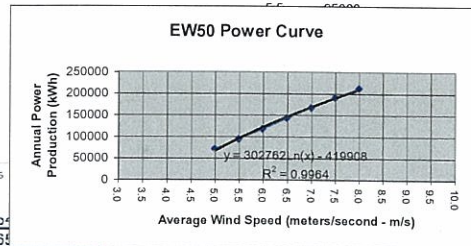
EW50

Expected Annual Net Energy Production (AEP)

Average Annual Wind Speed (m/s)	Average Annual Wind Speed (mph)	AEP Sea Level (kWh)
5	11.2	72,000
5.5	12.3	95,000
6	13.4	119,000
6.5	14.5	144,000
7	15.6	168,000
7.5	16.8	191,000
8	17.9	213,000



m/s	annual kwh
5.0	72000
5.5	95000



Wind Speed (m/s)	Annual Power Production (kWh)
15	33.8
17	38.0
18	40.2
19	42.5
20	44.7
21	46.9

<http://www.entegriwind.com/pdfs/EW50-Specs.pdf>