ENERGY SAVINGS PLAN

SUBMITTED BY:
DCO Energy Efficiency Division
100 Lenox Drive
Lawrenceville, NJ 08648
Final
3/1/2021

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ENERGY SAVINGS PLAN

SECTION 1 – PROJECT OVERVIEW

Project Overview

The Energy Savings Plan (ESP) is the core of the Energy Savings Improvement Program (ESIP) process. It describes Hillside Public Schools' preferred Energy Conservation Measures (ECMs), the budget cost for each ECM and the ECM energy savings calculations that self-fund the project via reduced operating costs. The ESP provides Hillside Public Schools the necessary information to decide which proposed ECMs to implement as part of your (ESIP) project. Working with the District's staff, your selected ESIP project would:

1. Self-fund $4,036,800 of building improvements
2. Generate $206,200 in annual energy savings – 32% of current utility spend
3. Qualify for $456,700 in energy efficiency rebates
4. Reduce annual CO2 emissions by 942 metric tons – a 41% reduction

NOTE: This submitted ESP doesn't constitute any contractual obligation between Hillside Public Schools and DCO Energy (DCO). Any contractual obligations will be performed under separate legal documents per mutual signed agreement of the parties involved and subject to the applicable laws and requirements of the ESIP legislation and State of New Jersey.

To ensure conformance with the requirements of Public Finance Notice LFN 2009-11, the ESP must address the following elements:

- *The results of the energy audit (APPENDIX G)*
- *A description of the energy conservation measures that will comprise the program; (Section 3)*
- *An estimate of greenhouse gas reductions resulting from those energy savings (Section 3);*
- *Identification of all design and compliance issues and identification of who will provide these services; (Section 5)*
- *An assessment of risks involved in the successful implementation of the plan; (Section 5)*
- *Identify the eligibility for, and costs and revenues associated with the PJM Independent System Operator for demand response and curtailable service activities; (Section 3)*
- *Schedules showing calculations of all costs of implementing the proposed energy conservation measures and the projected energy savings; (Section 3)*
- *Maintenance requirements necessary to ensure continued energy savings, and describe how they will be provided; and (Section 6)*
- *If developed by an ESCO, a description of, and cost estimates of a proposed energy savings guarantee. (Section 7)*

In addition, and per LFN 2009-11, the ESP requires several other important elements:

- *The calculations of energy savings must be made in accordance with protocols for their calculation adopted by the BPU. The calculation shall include all applicable State and federal rebates and tax credits, but shall not include the cost of an energy audit and the cost of verifying energy savings. (Section 3)*
- *An independent third party must review the plan and certify that the plan savings were properly calculated pursuant to the BPU protocols.*
- *If an ESCO is used to prepare the plan, the ESCO must provide an estimate of the cost of a guarantee of energy savings. When adopting the plan, the local unit must decide whether or not to accept the guarantee (covered below). (Section 7)*
- *The plan must be verified by an independent third party to ensure that the calculations were made in accordance with the BPU standards and that all required elements of the ESP are covered.*
- *After verification is completed, the governing body must formally adopt the plan. At that point, the plan must be submitted to the Board of Public Utilities where it will be posted on the BPU website. BPU approval is not required. If the contracting unit maintains its own website, the plan must also be posted on that site.*

DCO Energy looks forward to the third-party review of our energy calculations and Hillside Public Schools' approval of the Energy Savings Plan to implement via the requirements of the ESIP legislation. Your time, effort, and support is appreciated.

ENERGY SAVINGS PLAN

SECTION 2 – ENERGY BASELINE

Total Utility Consumption and Site EUI

The Hillside Public Schools Energy Savings Plan includes 8 buildings totaling 486,080 square feet. To develop the ESP, DCO Energy was provided with all available utility data (electric, solar panel production, natural gas and water/sewer). DCO Energy tracked and documented this utility data from January 2019 thru December 2019. A listing of the buildings, the total utility consumption, and Energy Usage Index for the 8 buildings is detailed below.

BUILDINGS & FACILITIES		
BUILDING #	BUILDING/FACILITY NAME	SQFT
1	**Hillside High School**	**157,000**
2	**A.P. Morris Early Childhood Center**	**89,000**
3	**Walter O. Krumbiegel Middle School**	**81,000**
4	**Hurden Looker Elementary School**	**65,000**
5	**George Washington Elementary School**	**45,080**
6	**Calvin Coolidge Elementary School**	**26,000**
7	**Saybrook Annex**	**12,000**
8	**Administration Building**	**11,000**

HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		ELECTRIC				
BUILDING/FACILITY NAME	SQFT	USAGE kWh	DEMAND kW	USAGE BTU / SQFT	TOTAL COST $$	BLENDED COST $$ / kWh
Hillside High School	157,000	525,089	216	11,411	$76,708	$0.146
A.P. Morris Early Childhood Center	89,000	366,342	208	14,044	$61,713	$0.168
Walter O. Krumbiegel Middle School	81,000	297,074	156	12,514	$50,412	$0.170
Hurden Looker Elementary School	65,000	222,655	116	11,688	$42,907	$0.193
George Washington Elementary School	45,080	341,355	124	25,836	$48,413	$0.142
Calvin Coolidge Elementary School	26,000	104,724	46	13,743	$11,682	$0.112
Saybrook Annex	12,000	34,526	52	9,817	$8,364	$0.242
Administration Building	11,000	58,323	86	18,091	$11,685	$0.200
TOTALS	**486,080**	**1,950,088**	**1,004**	**13,688**	**$311,884**	**$0.160**

HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		NATURAL GAS			
BUILDING/FACILITY NAME	SQFT	USAGE THERMS	USAGE BTU / SQFT	TOTAL COST $$	BLENDED COST $$ / THERM
Hillside High School	157,000	100,336	63,908	$89,178	$0.89
A.P. Morris Early Childhood Center	89,000	34,612	38,890	$33,106	$0.96
Walter O. Krumbiegel Middle School	81,000	33,518	41,381	$32,086	$0.96
Hurden Looker Elementary School	65,000	26,026	40,040	24,024	$0.92
George Washington Elementary School	45,080	23,217	51,502	21,366	$0.92
Calvin Coolidge Elementary School	26,000	15,251	58,659	14,449	$0.95
Saybrook Annex	12,000	7,503	62,527	7,058	$0.94
Administration Building	11,000	7,179	65,264	6,845	$0.95
TOTALS	**486,080**	**247,643**	**50,947**	**$228,110**	**$0.92**

HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		Existing Solar PPA (kWh)			
BUILDING/FACILITY NAME	SQFT	USAGE Existing Solar PPA (kWh)	USAGE BTU / SQFT	TOTAL COST $$	UNIT COST $$ / Existing Solar PPA (kWh)
Hillside High School	157,000	169,140	3,676	$16,286	$0.0963
A.P. Morris Early Childhood Center	89,000	181,567	6,961	$17,548	$0.0966
Walter O. Krumbiegel Middle School	81,000	0	0	$0	$0.00
Hurden Looker Elementary School	65,000	0	0	$0	$0.00
George Washington Elementary School	45,080	0	0	$0	$0.00
Calvin Coolidge Elementary School	26,000	37,345	4,901	$3,611	$0.0967
Saybrook Annex	12,000	0	0	$0	$0.00
Administration Building	11,000	0	0	$0	$0.00
TOTALS	**486,080**	**388,052**	**4,868**	**$37,446**	**$0.0965**

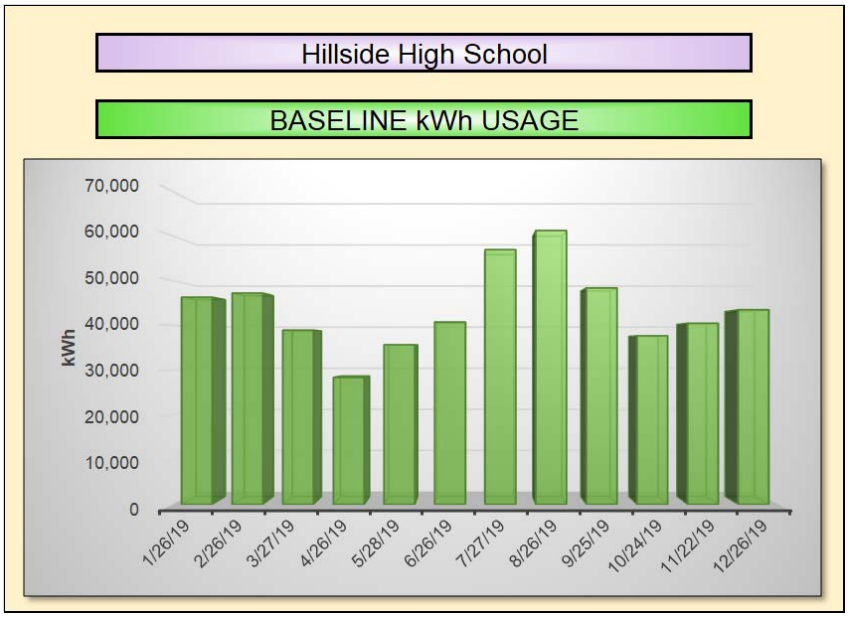
HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		Water & Sewer (Gal)			
BUILDING/FACILITY NAME	SQFT	USAGE Water & Sewer (Gal)	USAGE GAL / SQFT	TOTAL COST $$	UNIT COST $$ / Water & Sewer (Gal)
Hillside High School	157,000	2,680,000	17.07	$25,193	$0.0094
A.P. Morris Early Childhood Center	89,000	772,000	8.67	$8,878	$0.0115
Walter O. Krumbiegel Middle School	81,000	468,296	5.78	$7,953	$0.0170
Hurden Looker Elementary School	65,000	416,000	6.40	$7,631	$0.0183
George Washington Elementary School	45,080	348,000	7.72	$3,551	$0.0102
Calvin Coolidge Elementary School	26,000	205,000	7.88	$3,082	$0.0150
Saybrook Annex	12,000	391,000	32.58	$4,455	$0.0114
Administration Building	11,000	104,000	9.45	$2,259	$0.0217
TOTALS	**486,080**	**5,384,296**	**0.00**	**$63,002**	**$0.0117**

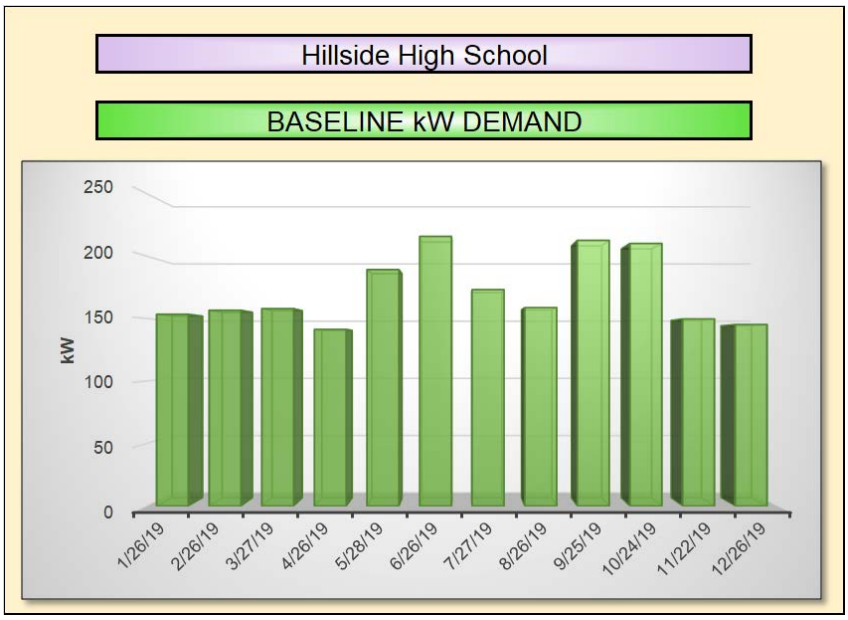
HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		SITE ENERGY	SOURCE ENERGY	TOTAL COST
BUILDING/FACILITY NAME	SQFT	USAGE BTUs	USAGE BTUs	$$
Hillside High School	157,000	12,402,299,348	16,128,865,450	$207,366
A.P. Morris Early Childhood Center	89,000	5,330,635,508	7,753,620,035	$121,245
Walter O. Krumbiegel Middle School	81,000	4,365,446,488	6,357,547,666	$90,451
Hurden Looker Elementary School	65,000	3,362,308,860	4,859,897,308	$74,562
George Washington Elementary School	45,080	3,486,433,260	5,698,985,628	$73,330
Calvin Coolidge Elementary School	26,000	2,009,879,428	2,729,309,346	$32,825
Saybrook Annex	12,000	868,122,712	1,117,683,594	$19,876
Administration Building	11,000	916,896,370	1,310,984,836	$20,788
TOTALS	**486,080**	**32,742,021,974**	**45,956,893,864**	**$640,442**

HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		SITE EUI			SITE ECI		
BUILDING/FACILITY NAME	SQFT	USAGE BTU / SQFT	NATIONAL MEDIAN BTU / SQFT	NATIONAL MEDIAN +/- %	COST $$ / SQFT	NATIONAL MEDIAN $$ / SQFT	NATIONAL MEDIAN +/- %
Hillside High School	157,000	78,996	68,800	-15%	$1.32	$1.38	4%
A.P. Morris Early Childhood Center	89,000	59,895	68,800	13%	$1.36	$1.38	1%
Walter O. Krumbiegel Middle School	81,000	53,894	68,800	22%	$1.12	$1.38	19%
Hurden Looker Elementary School	65,000	51,728	68,800	25%	$1.15	$1.38	17%
George Washington Elementary School	45,080	77,339	68,800	-12%	$1.63	$1.38	-18%
Calvin Coolidge Elementary School	26,000	77,303	68,800	-12%	$1.26	$1.38	8%
Saybrook Annex	12,000	72,344	68,800	-5%	$1.66	$1.38	-20%
Administration Building	11,000	83,354	68,800	-21%	$1.89	$1.38	-37%
TOTALS	**486,080**	**67,359**	**68,800**	**2%**	**$1.32**	**$1.38**	**4%**

On the following pages is a detailed account of each of the utility accounts and meters provided to DCO Energy.

Hillside High School Baseline Energy Use



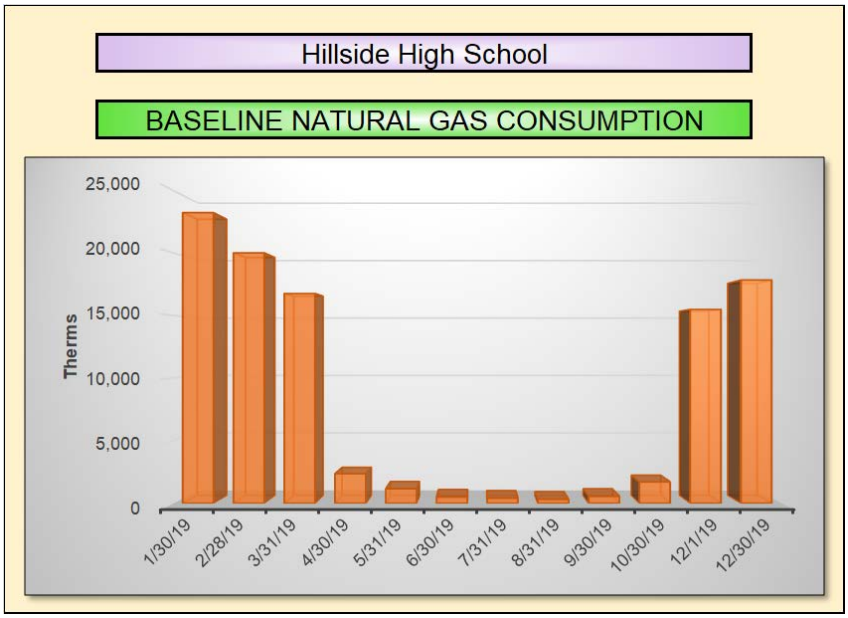


Hillside High School							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	42 496 504 05				Meter #:	9211798		
Commodity:	PSE&G Basic Generation Service			Description:	1085 Liberty Ave High School				Rate Tariff:	Large Power & Lighting Secondary		
Billing Period Start Date	Actual Reading	Usage kWh In	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/27/18	1/26/19	42,282	139	$371	$348	$4,123	$521	$5,364	$0.107	31	41%	144,266,184
1/27/19	2/26/19	41,760	140	$371	$340	$4,373	$526	$5,610	$0.116	31	40%	142,485,120
2/27/19	3/27/19	35,721	142	$371	$280	$3,957	$531	$5,139	$0.127	29	36%	121,880,052
3/28/19	4/26/19	27,089	126	$371	$214	$3,260	$473	$4,318	$0.149	30	30%	92,427,668
4/27/19	5/28/19	34,843	182	$371	$399	$3,948	$683	$5,401	$0.139	32	25%	118,884,316
5/29/19	6/26/19	38,711	205	$371	$459	$4,203	$2,592	$7,624	$0.129	29	27%	132,081,932
6/27/19	7/27/19	54,386	161	$371	$680	$4,748	$2,002	$7,800	$0.103	31	45%	185,565,032
7/28/19	8/26/19	58,836	148	$371	$759	$4,655	$1,871	$7,655	$0.093	30	55%	200,748,432
8/27/19	9/25/19	46,670	201	$371	$584	$3,927	$2,540	$7,421	$0.101	30	32%	159,238,040
9/26/19	10/24/19	35,642	196	$371	$442	$3,509	$736	$5,058	$0.117	29	26%	121,610,504
10/25/19	11/22/19	36,523	138	$371	$462	$3,521	$519	$4,872	$0.113	29	38%	124,616,476
11/23/19	12/26/19	43,471	145	$371	$555	$3,971	$546	$5,443	$0.107	34	37%	148,323,052
TOTALS		495,934	205	$4,450	$5,520	$48,195	$13,540	$71,705	$0.113	365	28%	1,692,126,808

Hillside High School							ELECTRIC METER #2					
Provider:	PSE&G			Account #:	73 974 258 01				Meter #:	626044968		
Commodity:	PSE&G Basic Generation Service			Description:	Liberty Ave & Plymouth Boys Gym				Rate Tariff:	General Lighting & Power		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charges	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/26/18	1/26/19	4,001	14	$5	$64	$397	$56	$522	$0.115	32	36%	13,651,412
1/27/19	2/26/19	5,435	16	$5	$87	$545	$64	$700	$0.116	31	45%	18,544,220
2/27/19	3/27/19	3,205	16	$5	$51	$368	$64	$488	$0.131	29	28%	10,935,460
3/28/19	5/28/19	1,256	15	$9	$24	$404	$60	$497	$0.340	62	6%	4,285,472
5/29/19	6/26/19	820	7	$5	$13	$207	$94	$318	$0.268	29	17%	2,797,840
6/27/19	7/26/19	2,019	11	$5	$31	$260	$153	$449	$0.144	30	25%	6,888,828
7/27/19	8/26/19	2,488	12	$5	$39	$268	$161	$473	$0.123	31	29%	8,489,056
8/27/19	9/25/19	2,323	11	$5	$37	$250	$152	$443	$0.123	30	29%	7,926,076
9/26/19	10/24/19	1,650	12	$5	$34	$223	$47	$309	$0.156	29	20%	5,629,800
10/25/19	11/22/19	2,024	14	$5	$42	$237	$56	$339	$0.138	29	21%	6,905,888
11/23/19	12/26/19	3,934	12	$5	$82	$334	$46	$466	$0.106	34	41%	13,422,808
TOTALS		29,155	16	$57	$503	$3,492	$951	$5,003	$0.137	366	20%	99,476,860

Hillside High School												
TOTAL ELECTRIC												
Usage kWh	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	Cost / kW Checksum	Cost / kWh Checksum	Total Cost / kWh Checksum	Days	Load Factor	BTU
46,283	153	$376	$412	$4,521	$578	$5,886	$3.77	$0.107	$0.127	31	41%	157,917,596
47,195	157	$376	$427	$4,918	$590	$6,310	$3.77	$0.113	$0.134	31	41%	161,029,340
38,926	158	$376	$331	$4,325	$595	$5,626	$3.77	$0.120	$0.145	29	35%	132,815,512
28,345	141	$380	$238	$3,664	$532	$4,815	$3.77	$0.138	$0.170	30	28%	96,713,140
35,663	189	$376	$411	$4,155	$777	$5,719	$4.11	$0.128	$0.160	32	25%	121,682,156
40,730	216	$376	$490	$4,463	$2,744	$8,073	$12.72	$0.122	$0.198	29	27%	138,970,760
56,874	173	$376	$718	$5,016	$2,163	$8,273	$12.49	$0.101	$0.145	31	44%	194,054,088
61,159	159	$376	$795	$4,904	$2,022	$8,098	$12.74	$0.093	$0.132	30	54%	208,674,508
48,320	213	$376	$618	$4,150	$2,587	$7,730	$12.17	$0.099	$0.160	30	32%	164,867,840
37,666	210	$376	$484	$3,746	$792	$5,397	$3.77	$0.112	$0.143	29	26%	128,516,392
40,457	150	$376	$543	$3,855	$565	$5,339	$3.78	$0.109	$0.132	29	39%	138,039,284
43,471	145	$371	$555	$3,971	$546	$5,443	$3.76	$0.104	$0.125	34	37%	148,323,052
525,089	216	$4,507	$6,023	$51,687	$14,491	$76,708	$7.02	$0.110	$0.146	365	28%	1,791,603,668

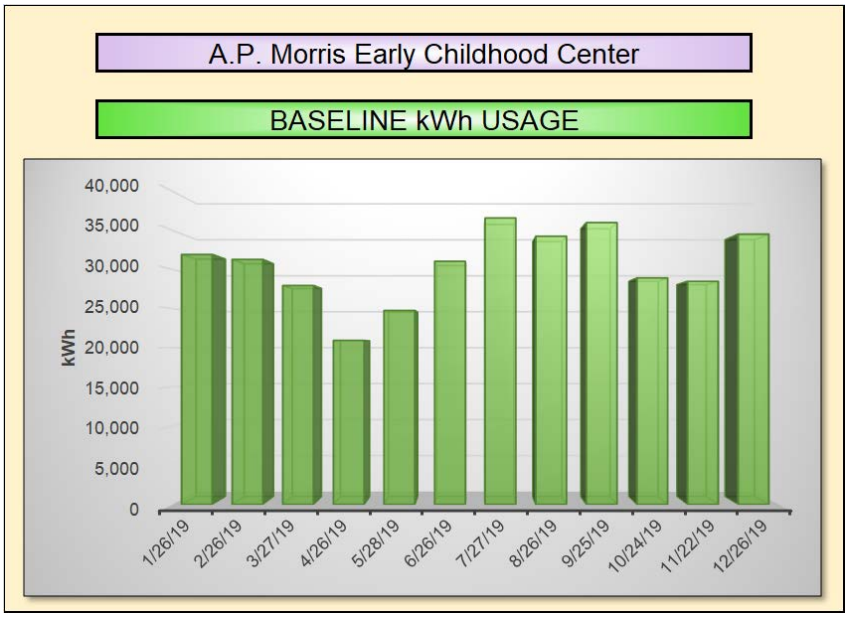
Hillside High School					
Provider	Tioga Solar Union County 1, LLC	**Existing Solar PPA (kWh)**			
Meter/Acct #	Y1379-157				
Billing Period Start Date	Actual Reading	Existing Solar PPA (kWh)	$$	Cost / Unit Checksum	BTU
1/1/19	1/31/19	9,595	$1,055	$0.110	32,738,140
2/1/19	2/28/19	7,997	$748	$0.094	27,285,764
3/1/19	3/31/19	15,547	$1,454	$0.093	53,046,364
4/1/19	4/30/19	17,002	$1,590	$0.094	58,010,824
5/1/19	5/31/19	16,443	$1,581	$0.096	56,103,516
6/1/19	6/30/19	18,087	$1,739	$0.096	61,712,844
7/1/19	7/31/19	22,467	$2,160	$0.096	76,657,404
8/1/19	8/31/19	19,305	$1,856	$0.096	65,868,660
9/1/19	9/30/19	15,931	$1,531	$0.096	54,356,572
10/1/19	10/31/19	10,304	$991	$0.096	35,157,248
11/1/19	11/30/19	10,077	$969	$0.096	34,382,724
12/1/19	12/31/19	6,385	$614	$0.096	21,785,620
TOTALS		169,140	$16,286	$0.096	577,105,680

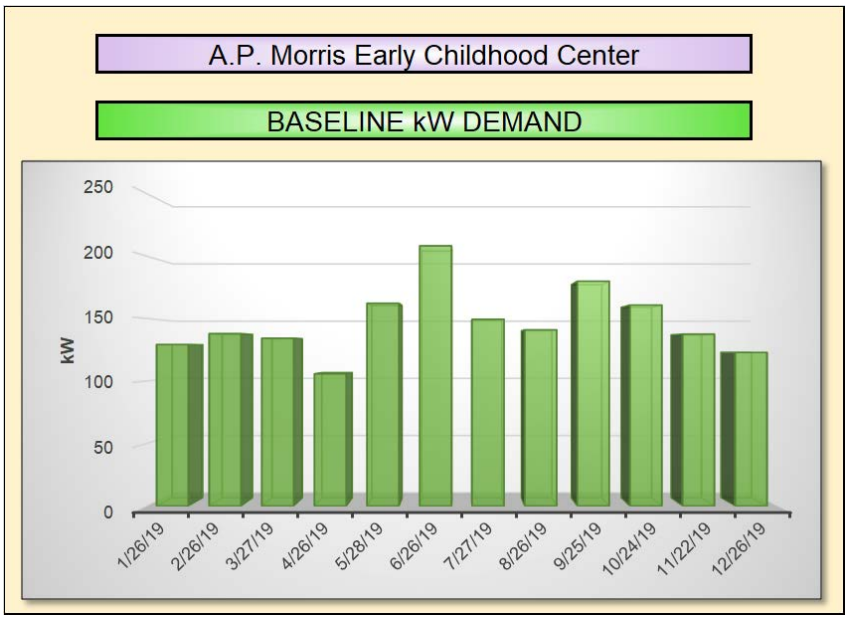


Hillside High School								Natural Gas Meter #1	
Provider	E-Town		Account #	6895765390				Meter #	2204153
Commodity	E-Town (Basic Gas Service)		Description	1085 Liberty Ave, Hillside				Rate Tariff:	ET-GDS Utility Commerical Heat
Billing Period Start Date	Actual Reading	Therms	Gas Delivery Charges	Gas Customer Charge	Gas Demand Charge	Gas Commodity Charges	Gas Total Charges	$/Therm Marginal Rate	BTU
1/2/19	1/30/19	23,213	$5,316	$29	$1,158	$13,090	$19,593	$0.79	2,321,280,000
1/31/19	2/28/19	19,997	$4,579	$29	$1,158	$9,815	$15,581	$0.72	1,999,700,000
3/1/19	3/31/19	16,750	$3,836	$29	$1,158	$8,003	$13,026	$0.71	1,675,020,000
4/1/19	4/30/19	2,365	$542	$29	$1,158	$1,093	$2,822	$0.69	236,510,000
5/1/19	5/31/19	1,174	$273	$29	$1,158	$524	$1,983	$0.68	117,410,000
6/1/19	6/30/19	506	$115	$29	$1,158	$229	$1,532	$0.68	50,620,000
7/1/19	7/31/19	413	$94	$29	$1,158	$172	$1,453	$0.64	41,280,000
8/1/19	8/31/19	330	$75	$29	$1,158	$132	$1,394	$0.63	32,990,000
9/1/19	9/30/19	568	$129	$29	$1,158	$234	$1,550	$0.64	56,760,000
10/1/19	10/30/19	1,712	$392	$29	$1,158	$836	$2,415	$0.72	171,150,000
10/31/19	12/1/19	15,483	$3,788	$33	$1,272	$7,824	$12,918	$0.75	1,548,270,000
12/2/19	12/30/19	17,826	$4,708	$38	$1,380	$8,786	$14,911	$0.76	1,782,600,000
TOTALS		100,336	$23,847	$360	$14,234	$50,738	$89,178	$0.74	10,033,590,000

Hillside High School						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210019267703					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
				$0	$0.00	0
2/12/19	3/13/19	58,000	$803	$803	$0.0138	0
3/14/19	4/10/19	184,000	$1,635	$1,635	$0.0089	0
4/11/19	5/10/19	176,000	$1,586	$1,586	$0.0090	0
5/11/19	6/11/19	200,000	$1,744	$1,744	$0.0087	0
6/12/19	7/11/19	201,000	$1,787	$1,787	$0.0089	0
7/12/19	8/13/19	276,000	$2,283	$2,283	$0.0083	0
8/14/19	9/11/19	280,000	$2,310	$2,310	$0.0082	0
9/12/19	10/10/19	324,000	$2,601	$2,601	$0.0080	0
10/11/19	11/8/19	318,000	$2,561	$2,561	$0.0081	0
11/9/19	12/11/19	279,000	$4,864	$4,864	$0.0174	0
12/12/19	1/13/20	384,000	$3,020	$3,020	$0.0079	0
TOTALS		2,680,000	$25,193	$25,193	$0.0094	0

A.P. Morris Early Childhood Center Baseline Energy Use



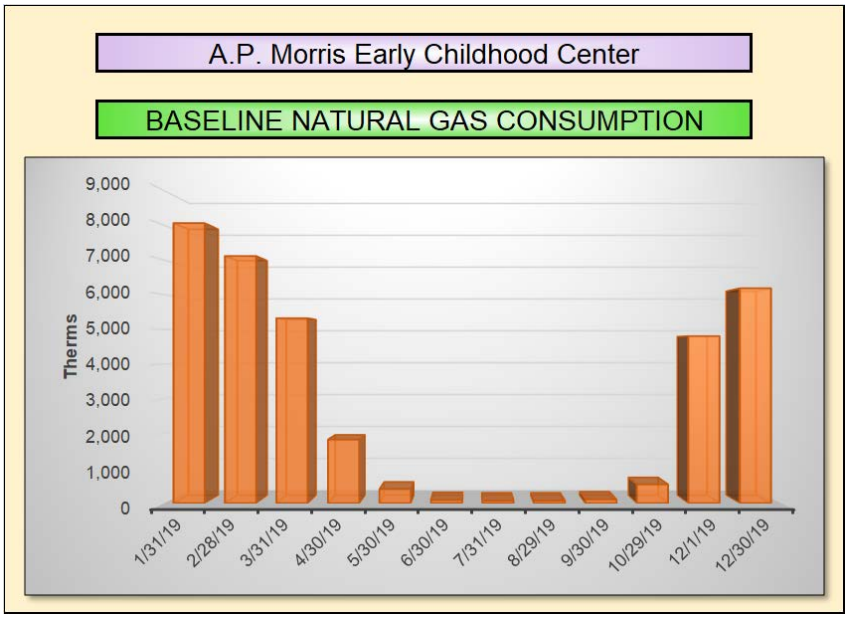


A.P. Morris Early Childhood Center							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	42 496 505 02			Meter #:	9211792			
Commodity:	PSE&G Basic Generation Service			Description:	143 Coe Ave Moris Erly			Rate Tariff:	Large Power & Lighting Secondary			
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/27/18	1/26/19	30,727	129	$371	$257	$3,501	$484	$4,613	$0.122	31	33%	107,924,972
1/27/19	2/26/19	29,021	138	$371	$244	$3,881	$517	$5,012	$0.142	31	30%	105,847,064
2/27/19	3/27/19	24,818	134	$371	$209	$3,434	$503	$4,517	$0.147	29	30%	94,546,520
3/28/19	4/26/19	17,069	106	$371	$162	$2,857	$396	$3,786	$0.177	30	27%	70,764,880
4/27/19	5/28/19	19,972	162	$371	$253	$3,135	$608	$4,367	$0.170	32	20%	83,863,548
5/29/19	6/26/19	26,788	208	$371	$340	$3,509	$2,636	$6,855	$0.144	29	21%	105,263,612
6/27/19	7/27/19	34,574	149	$371	$447	$3,713	$1,892	$6,423	$0.120	31	33%	124,152,444
7/28/19	8/26/19	31,439	141	$371	$408	$3,325	$1,785	$5,888	$0.119	30	34%	116,171,776
8/27/19	9/25/19	33,618	180	$371	$440	$3,331	$2,277	$6,419	$0.112	30	28%	121,941,468
9/26/19	10/24/19	26,606	161	$371	$348	$3,038	$604	$4,361	$0.127	29	26%	97,835,688
10/25/19	11/22/19	26,716	138	$371	$350	$2,993	$517	$4,231	$0.125	29	29%	96,269,580
11/23/19	12/26/19	33,017	123	$371	$432	$3,383	$462	$4,647	$0.116	34	34%	116,622,160
TOTALS		334,365	208	$4,450	$3,889	$40,098	$12,683	$61,119	$0.132	365	20%	1,241,203,712

A.P. Morris Early Childhood Center							ELECTRIC METER #2					
Provider:	PSE&G			Account #:	73 974 264 09			Meter #:	N/A			
Commodity:	PSE&G Basic Generation Service			Description:	143 Coe Ave			Rate Tariff:	Body Politic Lighting			
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Fixture Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
1/1/19	1/30/19	260		$35	$4	$12		$52	$0.064	30	0%	887,120
1/31/19	3/1/19	240		$35	$4	$14		$53	$0.076	30	0%	818,880
3/2/19	4/1/19	222		$35	$4	$11		$50	$0.067	31	0%	757,464
4/2/19	5/1/19	190		$35	$3	$10		$49	$0.073	30	0%	648,280
5/2/19	5/31/19	170		$35	$4	$10		$48	$0.078	30	0%	580,040
6/1/19	7/1/19	163		$35	$3	$8		$46	$0.067	31	0%	556,156
7/2/19	7/31/19	163		$35	$3	$8		$46	$0.069	30	0%	556,156
8/1/19	8/29/19	175		$35	$4	$7		$46	$0.062	29	0%	597,100
8/30/19	9/30/19	218		$35	$5	$8		$48	$0.058	32	0%	743,816
10/1/19	10/29/19	223		$35	$5	$10		$50	$0.065	29	0%	760,876
10/30/19	11/27/19	243		$35	$5	$10		$50	$0.063	29	0%	829,116
11/28/19	12/31/19	299		$35	$6	$14		$55	$0.067	34	0%	1,020,188
TOTALS		2,566	0	$421	$50	$122	$0	$594	$0.067	365	0%	8,755,192

A.P. Morris Early Childhood Center												
TOTAL ELECTRIC												
Usage kWh	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	Cost / kW Checksum	Cost / kWh Checksum	Total Cost / kWh Checksum	Days	Load Factor	BTU
31,891	129	$406	$261	$3,513	$484	$4,665	$3.75	$0.118	$0.146	31	33%	108,812,092
31,262	138	$406	$247	$3,895	$517	$5,065	$3.75	$0.133	$0.162	31	30%	106,665,944
27,932	134	$406	$212	$3,445	$503	$4,567	$3.75	$0.131	$0.163	29	30%	95,303,984
20,930	106	$406	$166	$2,867	$396	$3,835	$3.75	$0.145	$0.183	30	28%	71,413,160
24,749	162	$406	$257	$3,145	$608	$4,416	$3.75	$0.137	$0.178	32	20%	84,443,588
31,014	208	$406	$343	$3,516	$2,636	$6,901	$12.67	$0.124	$0.223	29	21%	105,819,768
36,550	149	$406	$450	$3,721	$1,892	$6,469	$12.67	$0.114	$0.177	31	33%	124,708,600
34,223	141	$406	$411	$3,332	$1,785	$5,934	$12.67	$0.109	$0.173	30	34%	116,768,876
35,957	180	$406	$445	$3,339	$2,277	$6,467	$12.67	$0.105	$0.180	30	28%	122,685,284
28,897	161	$406	$353	$3,048	$604	$4,411	$3.76	$0.118	$0.153	29	26%	98,596,564
28,458	138	$406	$355	$3,003	$517	$4,281	$3.76	$0.118	$0.150	29	30%	97,098,696
34,479	123	$406	$438	$3,396	$462	$4,702	$3.76	$0.111	$0.136	34	34%	117,642,348
366,342	208	$4,871	$3,939	$40,220	$12,683	$61,713	$7.17	$0.121	$0.168	365	20%	1,249,958,904

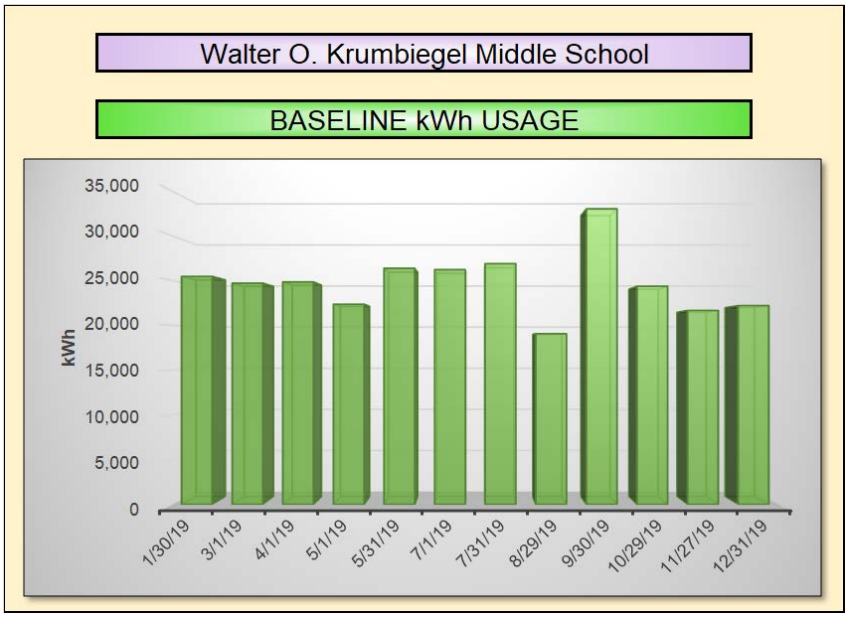
A.P. Morris Early Childhood Center						
Provider	Tioga Solar Union County 1, LLC		**Existing Solar PPA (kWh)**		
Meter/Acct #	Y1379-157				
Billing Period Start Date	Actual Reading	Existing Solar PPA (kWh)	$$	Cost / Unit Checksum	BTU
1/1/19	1/31/19	8,403	$924	$0.110	28,671,036
2/1/19	2/28/19	8,236	$770	$0.094	28,101,232
3/1/19	3/31/19	14,024	$1,348	$0.096	47,849,888
4/1/19	4/30/19	15,920	$1,530	$0.096	54,319,040
5/1/19	5/31/19	21,011	$2,020	$0.096	71,689,532
6/1/19	6/30/19	23,496	$2,259	$0.096	80,168,352
7/1/19	7/31/19	24,133	$2,320	$0.096	82,341,796
8/1/19	8/31/19	22,262	$2,140	$0.096	75,957,944
9/1/19	9/30/19	17,742	$1,706	$0.096	60,535,704
10/1/19	10/31/19	11,294	$1,086	$0.096	38,535,128
11/1/19	11/30/19	9,689	$931	$0.096	33,058,868
12/1/19	12/31/19	5,357	$515	$0.096	18,278,084
TOTALS		181,567	$17,548	$0.097	619,506,604

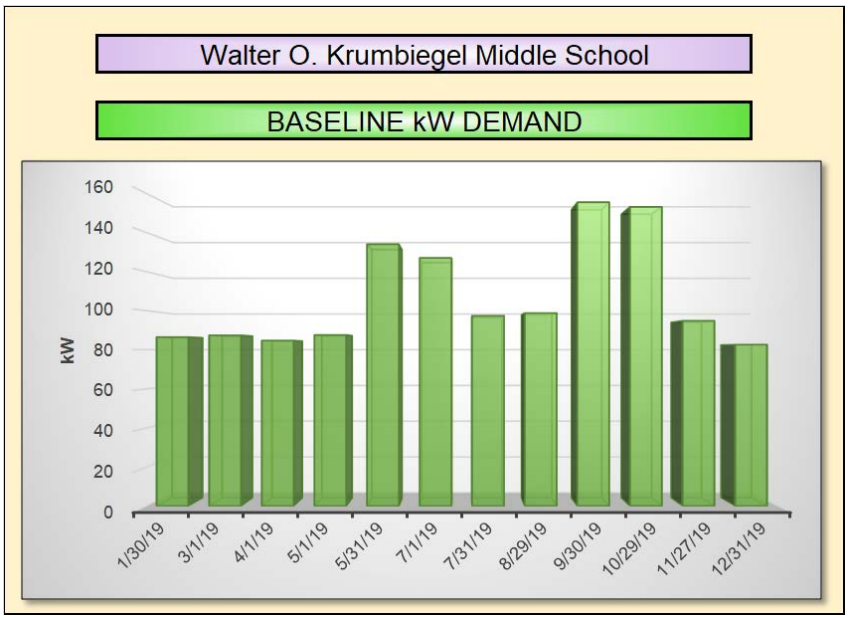


A.P. Morris Early Childhood Center								Natural Gas Meter #1	
Provider	E-Town		Account #	8792254390				Meter #	2576426
Commodity	E-Town (Basic Gas Service)		Commodity					Rate Tariff:	
Billing Period Start Date	**Actual Reading**	**Therms**	**Gas Delivery Charges**	**Gas Customer Charge**	**Gas Demand Charge**	**Gas Commodity Charges**	**Gas Total Charges**	**$/Therm Marginal Rate**	**BTU**
1/2/19	1/31/19	8,057	$1,845	$29	$572	$4,543	$6,990	$0.79	805,720,000
2/1/19	2/28/19	7,109	$1,628	$29	$572	$3,489	$5,718	$0.72	710,850,000
3/1/19	3/31/19	5,323	$1,219	$29	$572	$2,544	$4,364	$0.71	532,340,000
4/1/19	4/30/19	1,832	$419	$29	$572	$847	$1,867	$0.69	183,160,000
5/1/19	5/30/19	408	$95	$29	$572	$182	$878	$0.68	40,840,000
5/31/19	6/30/19	92	$21	$29	$572	$42	$664	$0.68	9,160,000
7/1/19	7/31/19	74	$17	$29	$572	$31	$649	$0.64	7,380,000
8/1/19	8/29/19	75	$17	$29	$572	$30	$648	$0.63	7,490,000
8/30/19	9/30/19	110	$47	$29	$572	$24	$672	$0.64	11,020,000
10/1/19	10/29/19	542	$124	$29	$572	$265	$990	$0.72	54,170,000
10/30/19	12/1/19	4,808	$1,176	$33	$629	$2,430	$4,268	$0.75	480,770,000
12/2/19	12/30/19	6,183	$1,633	$38	$682	$3,047	$5,399	$0.76	618,270,000
TOTALS		34,612	$8,241	$360	$7,033	$17,472	$33,106	$0.74	3,461,170,000

A.P. Morris Early Childhood Center						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210018885894					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
	2/9/19			$0	$0.00	0
2/10/19	3/11/19	71,000	$720	$720	$0.0101	0
3/12/19	4/9/19	93,000	$865	$865	$0.0093	0
4/10/19	5/9/19	72,000	$730	$730	$0.0101	0
5/10/19	6/10/19	84,000	$808	$808	$0.0096	0
6/11/19	7/10/19	59,000	$665	$665	$0.0113	0
7/11/19	8/12/19	35,000	$506	$506	$0.0145	0
8/13/19	9/10/19	30,000	$473	$473	$0.0158	0
9/11/19	10/10/19	95,000	$903	$903	$0.0095	0
10/11/19	11/8/19	76,000	$777	$777	$0.0102	0
11/9/19	12/11/19	84,000	$830	$830	$0.0099	0
12/12/19	1/10/20	73,000	$1,601	$1,601	$0.0219	0
TOTALS		772,000	$8,878	$8,878	$0.0115	0

Walter O. Krumbiegel Middle School Baseline Energy Use



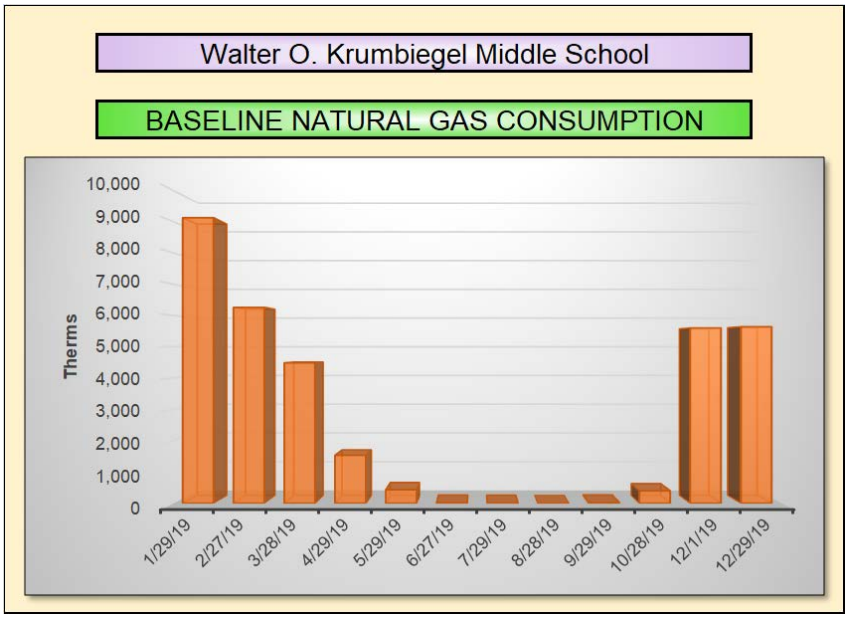


Walter O. Krumbiegel Middle School							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	42 278 070 18				Meter #:	9211952		
Commodity:	PSE&G Basic Generation Service			Commodity:	141 Hillside Ave Krum Mid				Rate Tariff:	Large Power & Lighting Secondary		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
1/1/19	1/30/19	23,677	81	$371	$199	$2,549	$302	$3,420	$0.116	30	41%	80,785,924
1/31/19	3/1/19	23,259	81	$371	$195	$2,823	$305	$3,695	$0.130	30	40%	79,359,708
3/2/19	4/1/19	23,249	79	$371	$195	$2,600	$297	$3,462	$0.120	31	40%	79,325,588
4/2/19	5/1/19	20,824	80	$371	$806	$2,467	$298	$3,942	$0.157	30	36%	71,051,488
5/2/19	5/31/19	25,531	125	$371	$324	$2,872	$469	$4,036	$0.125	30	28%	87,111,772
6/1/19	7/1/19	24,521	119	$371	$312	$2,571	$1,507	$4,760	$0.118	31	28%	83,665,652
7/2/19	7/31/19	25,752	92	$371	$433	$2,533	$1,068	$4,405	$0.115	30	39%	87,865,824
8/1/19	8/29/19	17,977	93	$371	$233	$1,971	$1,181	$3,756	$0.123	29	28%	61,337,524
8/30/19	9/30/19	30,705	146	$371	$402	$2,532	$1,848	$5,152	$0.096	32	27%	104,765,460
10/1/19	10/29/19	22,607	144	$371	$296	$2,204	$540	$3,410	$0.111	29	23%	77,135,084
10/30/19	11/27/19	20,251	88	$371	$265	$2,036	$330	$3,002	$0.114	29	33%	69,096,412
11/28/19	12/31/19	19,945	77	$371	$261	$2,110	$290	$3,032	$0.119	34	32%	68,052,340
TOTALS		278,298	146	$4,450	$3,923	$29,268	$8,434	$46,074	$0.119	365	22%	949,552,776

Walter O. Krumbiegel Middle School							ELECTRIC METER #2					
Provider:	PSE&G			Account #:	70 970 849 01				Meter #:	5318500		
Commodity:	PSE&G Basic Generation Service			Commodity:	141 Hillside Ave Krum Mid				Rate Tariff:	General Lighting & Power		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charges	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/26/18	1/19/19	1,000	6	$5	$16	$155	$24	$200	$0.171	25	28%	3,412,000
1/20/19	2/26/19	720	6	$5	$12	$151	$24	$191	$0.226	38	13%	2,456,640
2/27/19	3/27/19	920	6	$5	$15	$157	$22	$198	$0.187	29	24%	3,139,040
3/28/19	4/26/19	960	8	$5	$17	$157	$31	$210	$0.181	30	17%	3,275,520
4/27/19	5/28/19	320	9	$5	$7	$116	$35	$162	$0.382	32	5%	1,091,840
5/29/19	6/26/19	1,200	8	$5	$18	$160	$110	$294	$0.149	29	22%	4,094,400
6/27/19	7/26/19	640	5	$5	$10	$122	$72	$209	$0.207	30	17%	2,183,680
7/27/19	8/26/19	560	6	$5	$9	$113	$77	$204	$0.218	31	13%	1,910,720
8/27/19	9/25/19	1,640	10	$5	$120	$158	$38	$321	$0.170	30	24%	5,595,680
9/26/19	10/24/19	1,080	10	$5	$22	$136	$38	$200	$0.146	29	16%	3,684,960
10/25/19	11/22/19	680	7	$5	$14	$116	$28	$163	$0.191	29	14%	2,320,160
11/23/19	12/26/19	1,360	6	$5	$28	$151	$22	$206	$0.131	34	30%	4,640,320
TOTALS		11,080	10	$57	$288	$1,692	$520	$2,557	$0.179	366	13%	37,804,960

Walter O. Krumbiegel Middle School							ELECTRIC METER #3					
Provider:	PSE&G			Account #:	73 974 257 04				Meter #:	N/A		
Commodity:	PSE&G Basic Generation Service			Description:	141 Hillside Ave				Rate Tariff:	Body Politic Lighting		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Fixture Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
1/1/19	1/30/19	779		$105	$13	$37		$155	$0.064	30	0%	2,657,948
1/31/19	3/1/19	721		$105	$12	$43		$160	$0.076	30	0%	2,460,052
3/2/19	4/1/19	667		$105	$11	$33		$150	$0.067	31	0%	2,275,804
4/2/19	5/1/19	569		$105	$10	$31		$147	$0.073	30	0%	1,941,428
5/2/19	5/31/19	509		$105	$11	$29		$145	$0.078	30	0%	1,736,708
6/1/19	7/1/19	490		$105	$10	$23		$138	$0.068	31	0%	1,671,880
7/2/19	7/31/19	489		$105	$10	$24		$139	$0.069	30	0%	1,668,468
8/1/19	8/29/19	525		$105	$11	$22		$138	$0.062	29	0%	1,791,300
8/30/19	9/30/19	654		$105	$14	$24		$143	$0.058	32	0%	2,231,448
10/1/19	10/29/19	668		$105	$14	$29		$149	$0.065	29	0%	2,279,216
10/30/19	11/27/19	728		$105	$15	$30		$151	$0.063	29	0%	2,483,936
11/28/19	12/31/19	897		$105	$19	$41		$166	$0.067	34	0%	3,060,564
TOTALS		7,696	0	$1,264	$150	$367	$0	$1,781	$0.067	365	0%	26,258,752

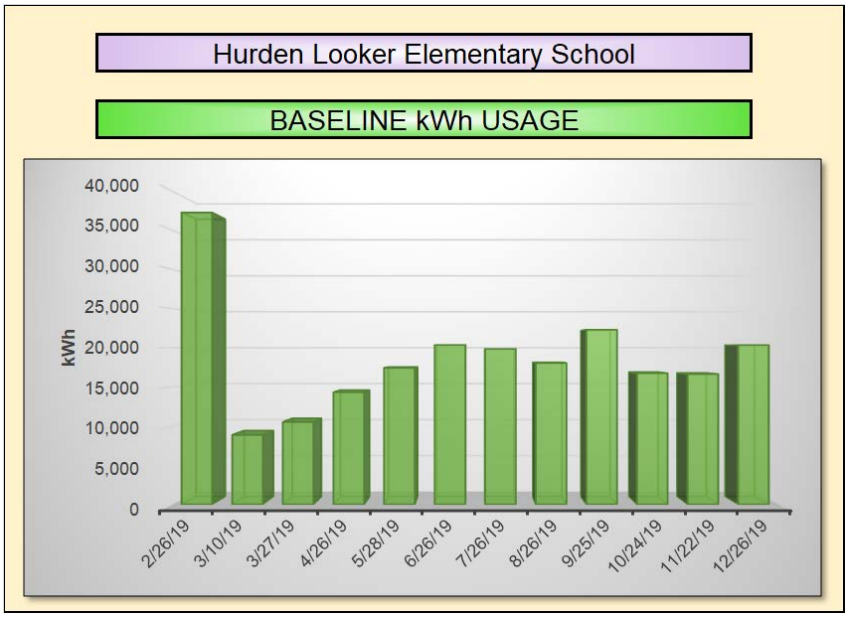
Walter O. Krumbiegel Middle School												
TOTAL ELECTRIC												
Usage kWh	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	Cost / kW Checksum	Cost / kWh Checksum	Total Cost / kWh Checksum	Days	Load Factor	BTU
25,456	87	$481	$228	$2,741	$325	$3,775	$3.76	$0.117	$0.148	30	41%	86,855,872
24,700	87	$481	$219	$3,017	$329	$4,045	$3.76	$0.131	$0.164	30	39%	84,276,400
24,836	85	$481	$221	$2,790	$318	$3,811	$3.76	$0.121	$0.153	31	39%	84,740,432
22,353	88	$481	$834	$2,655	$330	$4,299	$3.76	$0.156	$0.192	30	35%	76,268,436
26,360	134	$481	$341	$3,017	$504	$4,343	$3.76	$0.127	$0.165	30	27%	89,940,320
26,211	127	$481	$340	$2,754	$1,618	$5,192	$12.74	$0.118	$0.198	31	28%	89,431,932
26,881	97	$481	$453	$2,679	$1,139	$4,753	$11.70	$0.117	$0.177	30	38%	91,717,972
19,062	99	$481	$253	$2,106	$1,258	$4,098	$12.73	$0.124	$0.215	29	28%	65,039,544
32,999	156	$481	$536	$2,714	$1,886	$5,617	$12.13	$0.098	$0.170	32	28%	112,592,588
24,355	153	$481	$332	$2,369	$578	$3,760	$3.77	$0.111	$0.154	29	23%	83,099,260
21,659	95	$481	$295	$2,183	$358	$3,316	$3.78	$0.114	$0.153	29	33%	73,900,508
22,202	83	$481	$308	$2,302	$312	$3,403	$3.77	$0.118	$0.153	34	33%	75,753,224
297,074	156	$5,771	$4,360	$31,327	$8,954	$50,412	$6.94	$0.120	$0.170	365	22%	1,013,616,488

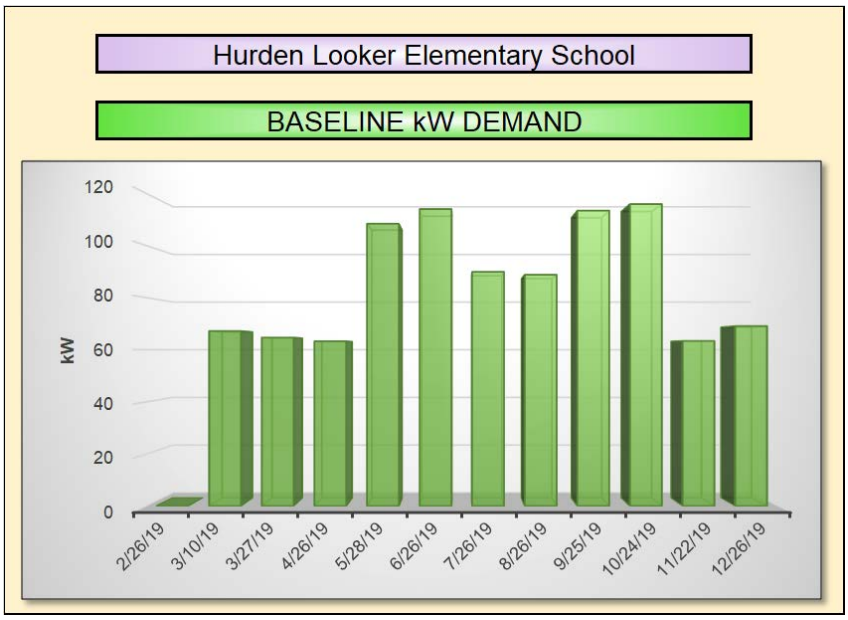


Walter O. Krumbiegel Middle School								Natural Gas Meter #1	
Provider	E-Town		Account #	3126092450				Meter #	2500133
Commodity	E-Town (Basic Gas Service)		Commodity					Rate Tariff:	
Billing Period Start Date	Actual Reading	Therms	Gas Delivery Charges	Gas Customer Charge	Gas Demand Charge	Gas Commodity Charges	Gas Total Charges	$/Therm Marginal Rate	BTU
1/2/19	1/29/19	9,120	$2,089	$29	$461	$5,143	$7,721	$0.79	912,010,000
1/30/19	2/27/19	6,258	$1,433	$29	$461	$3,088	$5,011	$0.72	625,790,000
2/28/19	3/28/19	4,486	$1,027	$29	$461	$2,145	$3,662	$0.71	448,610,000
3/29/19	4/29/19	1,536	$352	$29	$461	$712	$1,554	$0.69	153,560,000
4/30/19	5/29/19	436	$101	$29	$461	$195	$786	$0.68	43,610,000
5/30/19	6/27/19	14	$3	$29	$461	$6	$500	$0.68	1,430,000
6/28/19	7/29/19	10	$2	$29	$461	$4	$496	$0.65	990,000
7/30/19	8/28/19	0	$0	$29	$461	$0	$490	-	0
8/29/19	9/29/19	20	$5	$29	$461	$8	$503	$0.64	1,980,000
9/30/19	10/28/19	402	$92	$29	$461	$195	$777	$0.71	40,190,000
10/29/19	12/1/19	5,599	$1,367	$33	$505	$2,827	$4,732	$0.75	559,890,000
12/2/19	12/29/19	5,638	$2,489	$38	$549	$2,779	$5,854	$0.93	563,770,000
TOTALS		33,518	$8,960	$360	$5,665	$17,102	$32,086	$0.78	3,351,830,000

Walter O. Krumbiegel Middle School						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210022273308					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
1/11/19	2/9/19	61,840	$765	$765	$0.0124	0
2/10/19	3/11/19	43,636	$675	$675	$0.0155	0
3/12/19	4/9/19	46,132	$692	$692	$0.0150	0
4/10/19	5/9/19	30,424	$589	$589	$0.0194	0
5/10/19	6/10/19	35,660	$623	$623	$0.0175	0
6/11/19	7/10/19	18,952	$546	$546	$0.0288	0
7/11/19	8/12/19	14,212	$500	$500	$0.0352	0
8/13/19	9/10/19	8,480	$477	$477	$0.0562	0
9/11/19	10/10/19	34,164	$647	$647	$0.0189	0
10/11/19	11/8/19	60,344	$820	$820	$0.0136	0
11/9/19	12/11/19	66,328	$860	$860	$0.0130	0
12/12/19	1/10/20	48,124	$760	$760	$0.0158	0
TOTALS		468,296	$7,953	$7,953	$0.0170	0

Hurden Looker Elementary School Baseline Energy Use

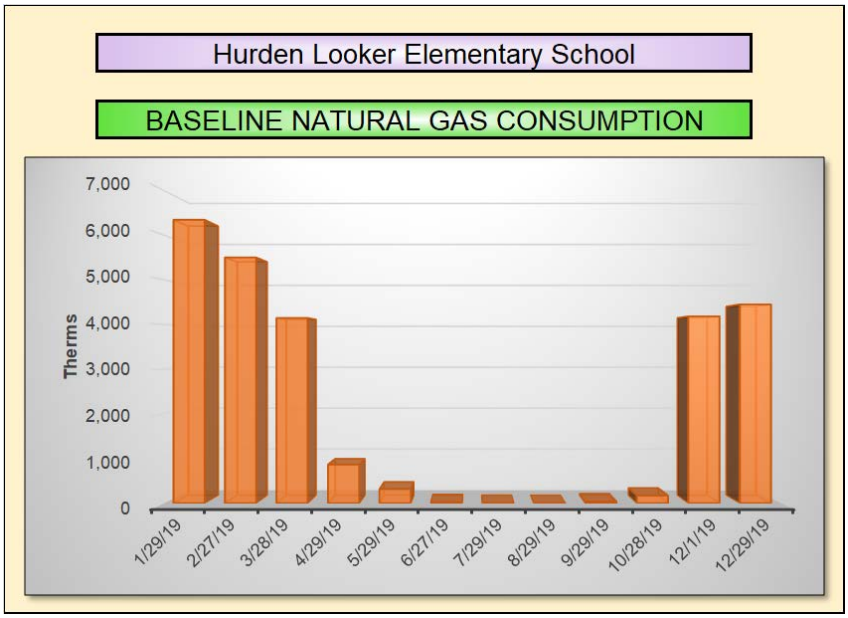




Hurden Looker Elementary School							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	73 974 268 08				Meter #:	9220330		
Commodity:	PSE&G Basic Generation Service			Description:	1261 Liberty Ave Looker Sch				Rate Tariff:	General Lighting & Power		
Billing Period Start Date	Actual Reading	Usage kWh In	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/26/18	2/26/19	36,720	0	$9	$587	$5,607	$0	$6,203	$0.169	63	0%	125,288,640
2/27/19	3/10/19	8,400	67	$2	$135	$1,193	$106	$1,436	$0.158	12	43%	28,660,800
3/11/19	3/27/19	10,076	65	$3	$162	$1,563	$144	$1,871	$0.171	17	38%	34,379,312
3/28/19	4/26/19	13,947	63	$5	$235	$2,481	$249	$2,969	$0.195	30	31%	47,587,164
4/27/19	5/28/19	17,087	108	$5	$347	$2,729	$426	$3,507	$0.180	32	21%	58,300,844
5/29/19	6/26/19	20,027	114	$5	$308	$2,714	$1,571	$4,597	$0.151	29	25%	68,332,124
6/27/19	7/26/19	19,523	90	$5	$304	$2,553	$1,239	$4,099	$0.146	30	30%	66,612,476
7/27/19	8/26/19	17,696	89	$5	$277	$2,324	$1,223	$3,828	$0.147	31	27%	60,378,752
8/27/19	9/25/19	21,864	113	$5	$344	$2,423	$1,562	$4,334	$0.127	30	27%	74,599,968
9/26/19	10/24/19	16,296	116	$5	$338	$2,212	$456	$3,011	$0.156	29	20%	55,601,952
10/25/19	11/22/19	16,145	63	$5	$335	$2,178	$250	$2,767	$0.156	29	37%	55,086,740
11/23/19	12/26/19	19,737	69	$5	$409	$2,408	$272	$3,095	$0.143	34	35%	67,342,644
TOTALS		217,518	116	$57	$3,779	$30,385	$7,496	$41,718	$0.157	366	21%	742,171,416

Hurden Looker Elementary School							ELECTRIC METER #2					
Provider:	PSE&G			Account #:	73 974 265 06				Meter #:	N/A		
Commodity:	PSE&G Basic Generation Service			Description:	1265 Liberty Ave				Rate Tariff:	Body Politic Lighting		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Fixture Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
1/1/19	1/30/19	519		$70	$8	$25		$104	$0.064	30	0%	1,770,828
1/31/19	3/1/19	481		$70	$8	$29		$107	$0.076	30	0%	1,641,172
3/2/19	4/1/19	452		$71	$7	$23		$101	$0.067	31	0%	1,542,224
4/2/19	5/1/19	379		$70	$7	$21		$98	$0.073	30	0%	1,293,148
5/2/19	5/31/19	339		$70	$7	$20		$97	$0.078	30	0%	1,156,668
6/1/19	7/1/19	326		$70	$7	$15		$92	$0.068	31	0%	1,112,312
7/2/19	7/31/19	326		$70	$7	$16		$93	$0.069	30	0%	1,112,312
8/1/19	8/29/19	350		$70	$7	$14		$92	$0.062	29	0%	1,194,200
8/30/19	9/30/19	436		$70	$9	$16		$96	$0.058	32	0%	1,487,632
10/1/19	10/29/19	446		$70	$9	$20		$99	$0.065	29	0%	1,521,752
10/30/19	11/28/19	485		$70	$10	$20		$101	$0.063	30	0%	1,654,820
11/29/19	12/31/19	598		$70	$13	$28		$110	$0.067	33	0%	2,040,376
TOTALS		5,137	0	$844	$100	$245	$0	$1,189	$0.067	365	0%	17,527,444

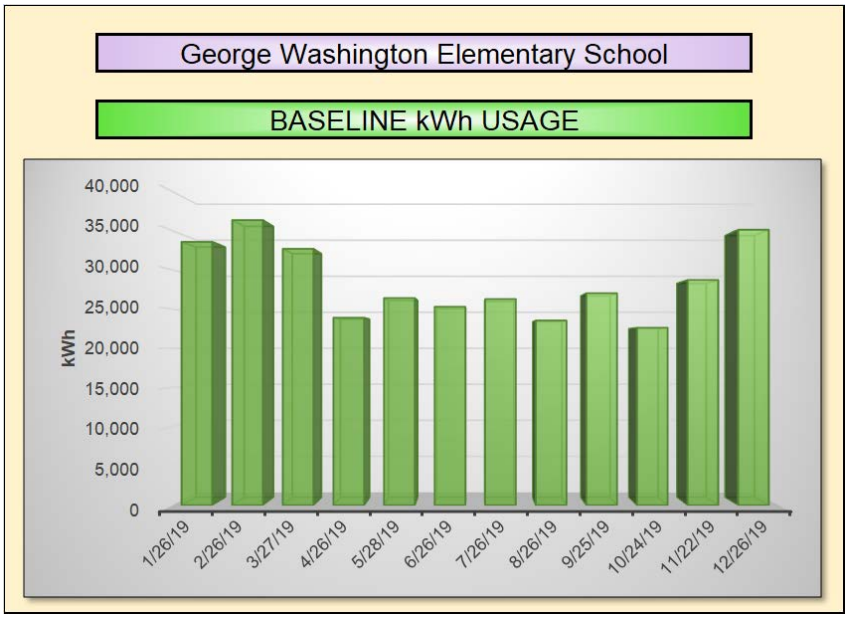
Hurden Looker Elementary School												
TOTAL ELECTRIC												
Usage kWh	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	Cost / kW Checksum	Cost / kWh Checksum	Total Cost / kWh Checksum	Days	Load Factor	BTU
37,239	0	$80	$595	$5,632	$0	$6,307	$0.00	$0.167	$0.169	63	0%	127,059,468
8,881	67	$72	$143	$1,222	$106	$1,542	$1.57	$0.154	$0.174	12	46%	30,301,972
10,528	65	$74	$169	$1,585	$144	$1,972	$2.23	$0.167	$0.187	17	40%	35,921,536
14,326	63	$75	$241	$2,502	$249	$3,067	$3.93	$0.192	$0.214	30	31%	48,880,312
17,426	108	$75	$354	$2,749	$426	$3,604	$3.93	$0.178	$0.207	32	21%	59,457,512
20,353	114	$75	$314	$2,729	$1,571	$4,689	$13.78	$0.150	$0.230	29	26%	69,444,436
19,849	90	$75	$310	$2,568	$1,239	$4,192	$13.78	$0.145	$0.211	30	31%	67,724,788
18,046	89	$75	$284	$2,338	$1,223	$3,920	$13.78	$0.145	$0.217	31	27%	61,572,952
22,300	113	$75	$353	$2,439	$1,562	$4,430	$13.78	$0.125	$0.199	30	27%	76,087,600
16,742	116	$75	$347	$2,232	$456	$3,110	$3.94	$0.154	$0.186	29	21%	57,123,704
16,630	63	$75	$345	$2,198	$250	$2,868	$3.94	$0.153	$0.172	29	38%	56,741,560
20,335	69	$75	$422	$2,436	$272	$3,205	$3.94	$0.141	$0.158	34	36%	69,383,020
222,655	116	$901	$3,879	$30,631	$7,496	$42,907	$7.82	$0.155	$0.193	366	22%	759,698,860

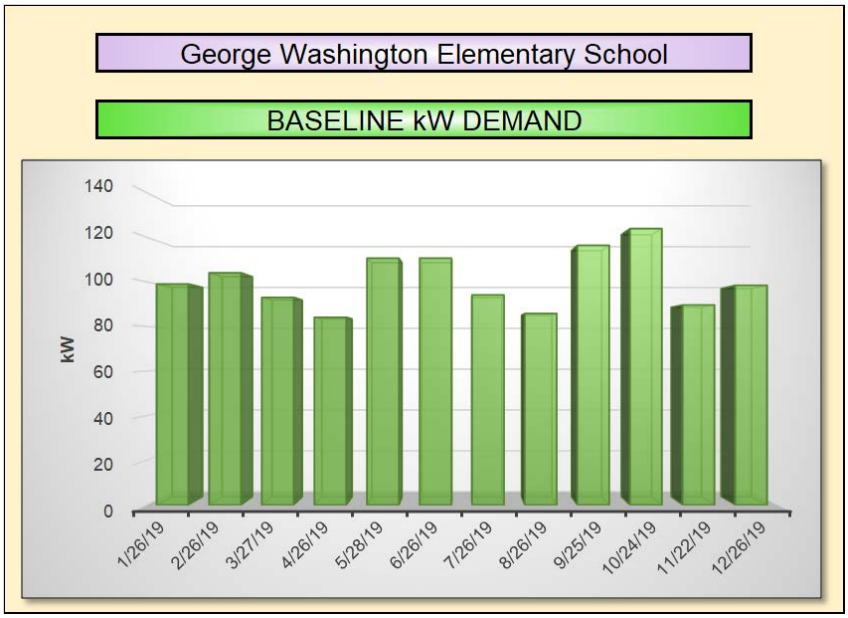


Hurden Looker Elementary School								Natural Gas Meter #1	
Provider	E-Town		Account #	314236390				Meter #	2858225
Commodity	E-Town (Basic Gas Service)		Account #					Meter #	
Billing Period Start Date	Actual Reading	Therms	Gas Delivery Charges	Gas Customer Charge	Gas Demand Charge	Gas Commodity Charges	Gas Total Charges	$/Therm Marginal Rate	BTU
1/2/19	1/29/19	6,341	$1,452	$29	$347	$3,576	$5,403	$0.79	634,090,000
1/30/19	2/27/19	5,498	$1,259	$29	$347	$2,713	$4,348	$0.72	549,820,000
2/28/19	3/28/19	4,144	$949	$29	$347	$1,982	$3,306	$0.71	414,420,000
3/29/19	4/29/19	864	$198	$29	$347	$400	$974	$0.69	86,370,000
4/30/19	5/29/19	318	$74	$29	$347	$142	$591	$0.68	31,800,000
5/30/19	6/27/19	21	$5	$29	$347	$9	$390	$0.68	2,070,000
6/28/19	7/29/19	2	$0	$29	$347	$1	$377	$0.65	210,000
7/30/19	8/29/19	1	$0	$29	$347	$0	$376	$0.63	100,000
8/30/19	9/29/19	37	$8	$29	$347	$15	$399	$0.64	3,710,000
9/30/19	10/28/19	172	$39	$29	$347	$84	$499	$0.71	17,220,000
10/29/19	12/1/19	4,180	$601	$33	$380	$2,531	$3,544	$0.75	418,030,000
12/2/19	12/29/19	4,448	$1,175	$38	$413	$2,192	$3,817	$0.76	444,770,000
TOTALS		26,026	$5,760	$360	$4,258	$13,645	$24,024	$0.75	2,602,610,000

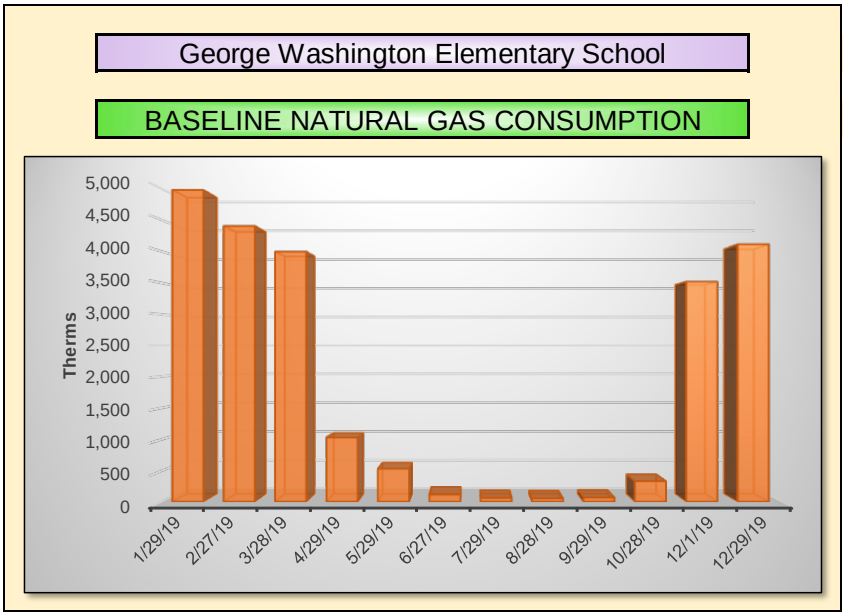
Hurden Looker Elementary School						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210019267802					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
1/12/19	2/11/19	36,000	$507	$507	$0.0141	0
2/12/19	3/13/19	37,000	$513	$513	$0.0139	0
3/14/19	4/10/19	35,000	$500	$500	$0.0143	0
4/11/19	5/10/19	31,000	$975	$975	$0.0315	0
5/11/19	6/11/19	40,000	$534	$534	$0.0134	0
6/12/19	7/11/19	24,000	$986	$986	$0.0411	0
7/12/19	8/13/19	13,000	$815	$815	$0.0627	0
8/14/19	9/11/19	12,000	$372	$372	$0.0310	0
9/12/19	10/10/19	34,000	$518	$518	$0.0152	0
10/11/19	11/8/19	58,000	$676	$676	$0.0117	0
11/9/19	12/11/19	63,000	$709	$709	$0.0113	0
12/12/19	1/13/20	33,000	$526	$526	$0.0159	0
TOTALS		416,000	$7,631	$7,631	$0.0183	0

George Washington Elementary School Baseline Energy Use





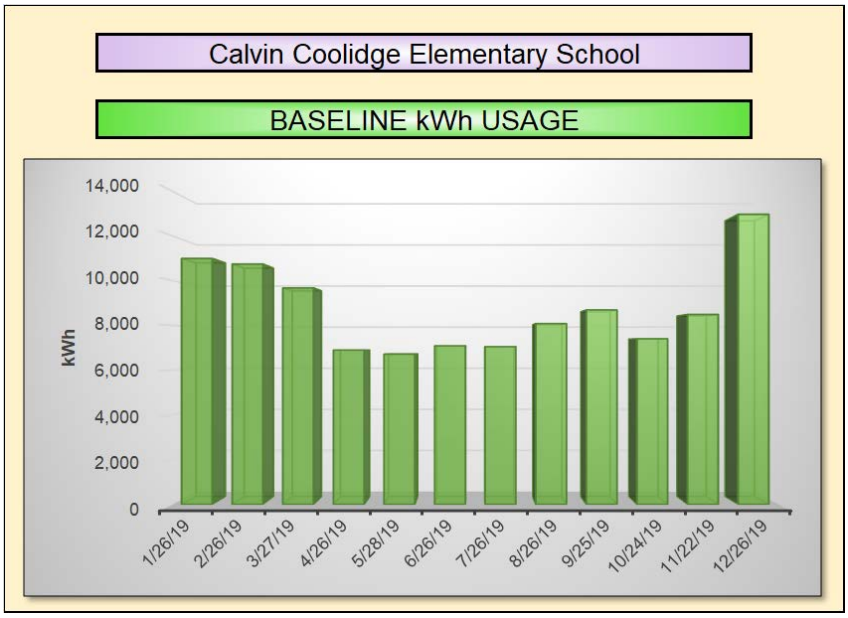
George Washington Elementary School							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	42 421 519 18				Meter #:	9204892		
Commodity:	PSE&G Basic Generation Service			Description:	1530 Leslie St Wash Sch				Rate Tariff:	Large Power & Lighting Secondary		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/27/18	1/26/19	33,554	99	$371	$280	$3,017	$371	$4,039	$0.098	31	46%	114,486,248
1/27/19	2/26/19	36,327	104	$371	$305	$3,581	$390	$4,646	$0.107	31	47%	123,947,724
2/27/19	3/27/19	32,666	93	$371	$274	$3,130	$349	$4,124	$0.104	29	50%	111,456,392
3/28/19	4/26/19	23,893	84	$371	$219	$2,627	$315	$3,533	$0.119	30	39%	81,522,916
4/27/19	5/28/19	26,401	111	$371	$335	$2,900	$415	$4,021	$0.123	32	31%	90,080,212
5/29/19	6/26/19	25,294	111	$371	$321	$2,582	$1,401	$4,675	$0.115	29	33%	86,303,128
6/27/19	7/26/19	26,263	94	$371	$339	$2,498	$1,192	$4,399	$0.108	30	39%	89,609,356
7/27/19	8/26/19	23,542	86	$371	$306	$2,185	$1,087	$3,948	$0.106	31	37%	80,325,304
8/27/19	9/25/19	27,009	116	$371	$353	$2,281	$1,473	$4,478	$0.098	30	32%	92,154,708
9/26/19	10/24/19	22,613	124	$371	$296	$2,102	$465	$3,234	$0.106	29	26%	77,155,556
10/25/19	11/22/19	28,696	90	$371	$376	$2,318	$337	$3,402	$0.094	29	46%	97,910,752
11/23/19	12/26/19	35,097	98	$371	$459	$2,713	$370	$3,914	$0.090	34	44%	119,750,964
TOTALS		341,355	124	$4,450	$3,865	$31,934	$8,165	$48,413	$0.105	365	31%	1,164,703,260

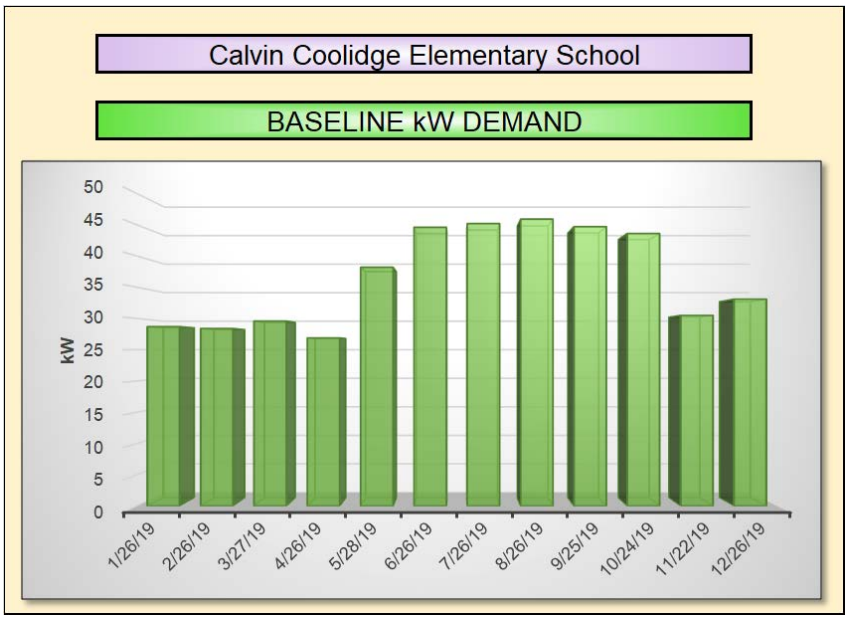


George Washington Elementary School								Natural Gas Meter #1	
Provider	E-Town		Account #	527272420				Meter #	2538342
Commodity	E-Town (Basic Gas Service)		Account #					Meter #	
Billing Period Start Date	**Actual Reading**	**Therms**	**Gas Delivery Charges**	**Gas Customer Charge**	**Gas Demand Charge**	**Gas Commodity Charges**	**Gas Total Charges**	**$/Therm Marginal Rate**	**BTU**
1/2/19	1/29/19	4,987	$1,142	$29	$308	$2,812	$4,291	$0.79	498,710,000
1/30/19	2/27/19	4,410	$1,010	$29	$308	$2,176	$3,523	$0.72	441,020,000
2/28/19	3/28/19	3,999	$916	$29	$308	$1,912	$3,165	$0.71	399,910,000
3/29/19	4/29/19	1,027	$235	$29	$308	$476	$1,048	$0.69	102,710,000
4/30/19	5/29/19	528	$123	$29	$308	$236	$695	$0.68	52,820,000
5/30/19	6/27/19	116	$26	$29	$308	$53	$416	$0.68	11,590,000
6/28/19	7/29/19	62	$14	$29	$308	$26	$377	$0.65	6,170,000
7/30/19	8/28/19	54	$12	$29	$308	$22	$371	$0.63	5,400,000
8/29/19	9/29/19	67	$15	$29	$308	$28	$380	$0.64	6,720,000
9/30/19	10/28/19	329	$75	$29	$308	$160	$572	$0.71	32,920,000
10/29/19	12/1/19	3,520	$860	$33	$337	$1,777	$3,007	$0.75	351,950,000
12/2/19	12/29/19	4,118	$1,088	$38	$367	$2,030	$3,522	$0.76	411,810,000
TOTALS		23,217	$5,516	$360	$3,783	$11,707	$21,366	$0.74	2,321,730,000

George Washington Elementary School						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210023895954					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
1/11/19	2/9/19	46,000		$0	$0.0000	0
2/10/19	3/11/19	34,000	$359	$359	$0.0105	0
3/12/19	4/9/19	49,000	$458	$458	$0.0093	0
4/10/19	5/9/19	30,000	$333	$333	$0.0111	0
5/10/19	6/10/19	46,000	$439	$439	$0.0095	0
6/11/19	7/10/19	14,000	$239	$239	$0.0171	0
7/11/19	8/12/19	8,000	$184	$184	$0.0230	0
8/13/19	9/10/19	14,000	$239	$239	$0.0171	0
9/11/19	10/10/19	29,000	$338	$338	$0.0117	0
10/11/19	11/8/19	29,000	$338	$338	$0.0117	0
11/9/19	12/11/19	27,000	$325	$325	$0.0120	0
12/12/19	1/10/20	22,000	$299	$299	$0.0136	0
TOTALS		348,000	$3,551	$3,551	$0.0102	0

Calvin Coolidge Elementary School Baseline Energy Use



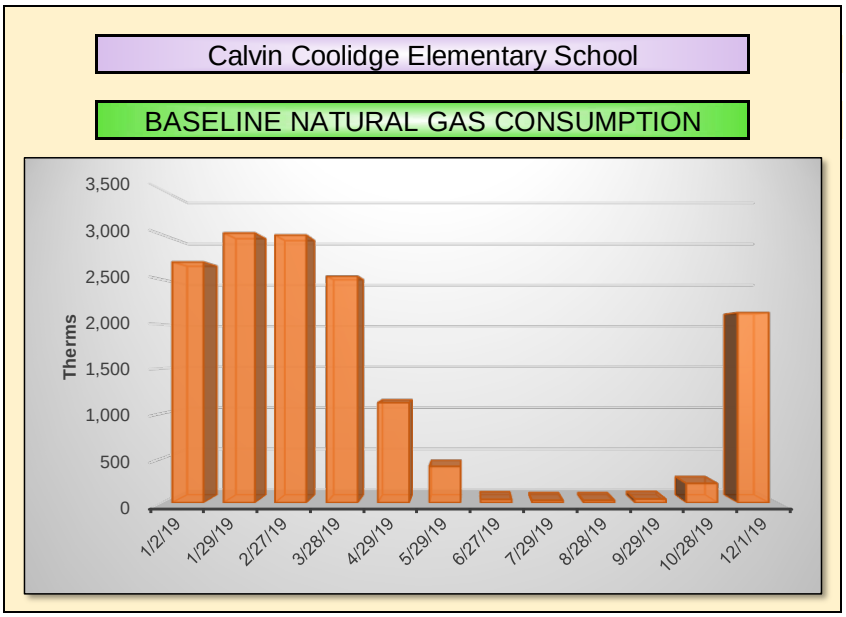


Calvin Coolidge Elementary School							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	73 974 269 05				Meter #:	9211799		
Commodity:	PSE&G Basic Generation Service			Description:	614 Tillman St Coolidge				Rate Tariff:	General Lighting & Power		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/27/18	1/26/19	10,383	29	$5	$166	$653	$113	$936	$0.079	31	49%	35,699,756
1/27/19	2/26/19	10,095	28	$5	$162	$730	$112	$1,008	$0.088	31	49%	34,990,060
2/27/19	3/27/19	8,922	30	$5	$143	$587	$116	$851	$0.082	29	45%	31,468,876
3/28/19	4/26/19	5,797	27	$5	$96	$409	$106	$615	$0.087	30	34%	22,229,180
4/27/19	5/28/19	5,418	38	$5	$110	$404	$150	$669	$0.095	32	22%	21,737,852
5/29/19	6/26/19	5,701	45	$5	$88	$336	$562	$991	$0.074	29	22%	23,061,708
6/27/19	7/26/19	5,391	45	$5	$84	$313	$615	$1,017	$0.074	30	21%	22,928,640
7/27/19	8/26/19	6,705	46	$5	$105	$347	$600	$1,057	$0.067	31	23%	26,364,524
8/27/19	9/25/19	7,658	45	$5	$120	$351	$616	$1,092	$0.062	30	26%	28,145,588
9/26/19	10/24/19	6,476	44	$5	$134	$314	$172	$624	$0.069	29	23%	23,733,872
10/25/19	11/22/19	7,704	31	$5	$160	$356	$120	$641	$0.067	29	38%	27,292,588
11/23/19	12/26/19	12,280	33	$5	$255	$604	$130	$994	$0.070	34	46%	42,162,084
TOTALS		92,530	46	$57	$1,622	$5,405	$3,411	$10,495	$0.076	365	25%	339,814,728

Calvin Coolidge Elementary School							ELECTRIC METER #2					
Provider:	PSE&G			Account #:	73 974 259 09				Meter #:	N/A		
Commodity:	PSE&G Basic Generation Service			Description:	614 Tillman St				Rate Tariff:	Body Politic Lighting		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Fixture Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
1/1/19	1/30/19	519		$70	$8	$25		$104	$0.064	30	0%	1,770,828
1/31/19	3/1/19	481		$70	$8	$29		$107	$0.076	30	0%	1,641,172
3/2/19	4/1/19	445		$70	$7	$22		$100	$0.067	31	0%	1,518,340
4/2/19	5/1/19	379		$70	$7	$21		$98	$0.073	30	0%	1,293,148
5/2/19	5/31/19	339		$70	$7	$20		$97	$0.078	30	0%	1,156,668
6/1/19	7/1/19	326		$70	$7	$15		$92	$0.068	31	0%	1,112,312
7/2/19	7/31/19	326		$70	$7	$16		$93	$0.069	30	0%	1,112,312
8/1/19	8/29/19	350		$70	$7	$14		$92	$0.062	29	0%	1,194,200
8/30/19	9/30/19	436		$70	$9	$16		$96	$0.058	32	0%	1,487,632
10/1/19	10/29/19	446		$70	$9	$20		$99	$0.065	29	0%	1,521,752
10/30/19	11/27/19	485		$70	$10	$20		$101	$0.063	29	0%	1,654,820
11/28/19	12/31/19	598		$70	$13	$28		$110	$0.067	34	0%	2,040,376
TOTALS		5,130	0	$843	$100	$245	$0	$1,188	$0.067	365	0%	17,503,560

Calvin Coolidge Elementary School												
TOTAL ELECTRIC												
Usage kWh	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	Cost / kW Checksum	Cost / kWh Checksum	Total Cost / kWh Checksum	Days	Load Factor	BTU
10,982	29	$75	$174	$678	$113	$1,040	$3.93	$0.078	$0.095	31	51%	37,470,584
10,736	28	$75	$170	$758	$112	$1,115	$3.93	$0.086	$0.104	31	51%	36,631,232
9,668	30	$75	$150	$610	$116	$951	$3.93	$0.079	$0.098	29	47%	32,987,216
6,894	27	$75	$103	$430	$106	$713	$3.93	$0.077	$0.103	30	36%	23,522,328
6,710	38	$75	$117	$424	$150	$766	$3.93	$0.081	$0.114	32	23%	22,894,520
7,085	45	$75	$94	$351	$562	$1,083	$12.61	$0.063	$0.153	29	23%	24,174,020
7,046	45	$75	$91	$329	$615	$1,109	$13.60	$0.060	$0.157	30	22%	24,040,952
8,077	46	$75	$112	$362	$600	$1,149	$13.07	$0.059	$0.142	31	24%	27,558,724
8,685	45	$75	$130	$367	$616	$1,188	$13.78	$0.057	$0.137	30	27%	29,633,220
7,402	44	$75	$143	$333	$172	$723	$3.94	$0.064	$0.098	29	24%	25,255,624
8,484	31	$75	$170	$376	$120	$742	$3.94	$0.064	$0.087	29	40%	28,947,408
12,955	33	$75	$267	$631	$130	$1,104	$3.94	$0.069	$0.085	34	48%	44,202,460
104,724	46	$900	$1,722	$5,650	$3,411	$11,682	$7.76	$0.070	$0.112	365	26%	357,318,288

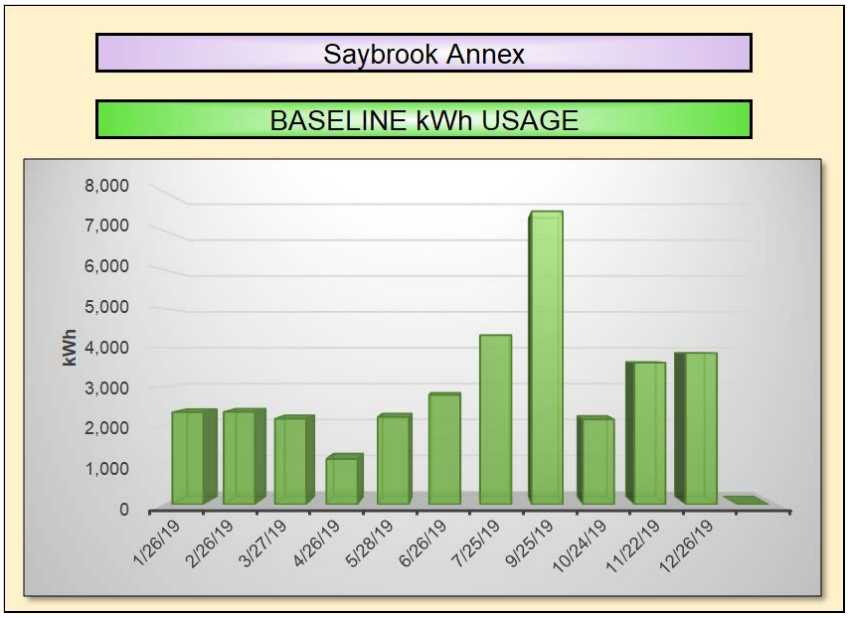
Calvin Coolidge Elementary School					
Provider	Tioga Solar Union County 1, LLC	**Existing Solar PPA (kWh)**			
Meter/Acct #	Y1379-157				
Billing Period Start Date	Actual Reading	Existing Solar PPA (kWh)	$$	Cost / Unit Checksum	BTU
1/1/19	1/31/19	1,882	$207	$0.110	6,421,384
2/1/19	2/28/19	1,743	$163	$0.094	5,947,116
3/1/19	3/31/19	2,895	$278	$0.096	9,877,740
4/1/19	4/30/19	3,794	$365	$0.096	12,945,128
5/1/19	5/31/19	4,045	$389	$0.096	13,801,540
6/1/19	6/30/19	4,535	$436	$0.096	15,473,420
7/1/19	7/31/19	4,677	$450	$0.096	15,957,924
8/1/19	8/31/19	4,420	$425	$0.096	15,081,040
9/1/19	9/30/19	3,611	$347	$0.096	12,320,732
10/1/19	10/31/19	2,377	$229	$0.096	8,110,324
11/1/19	11/30/19	2,129	$205	$0.096	7,264,148
12/1/19	12/31/19	1,237	$119	$0.096	4,220,644
TOTALS		37,345	$3,611	$0.097	127,421,140

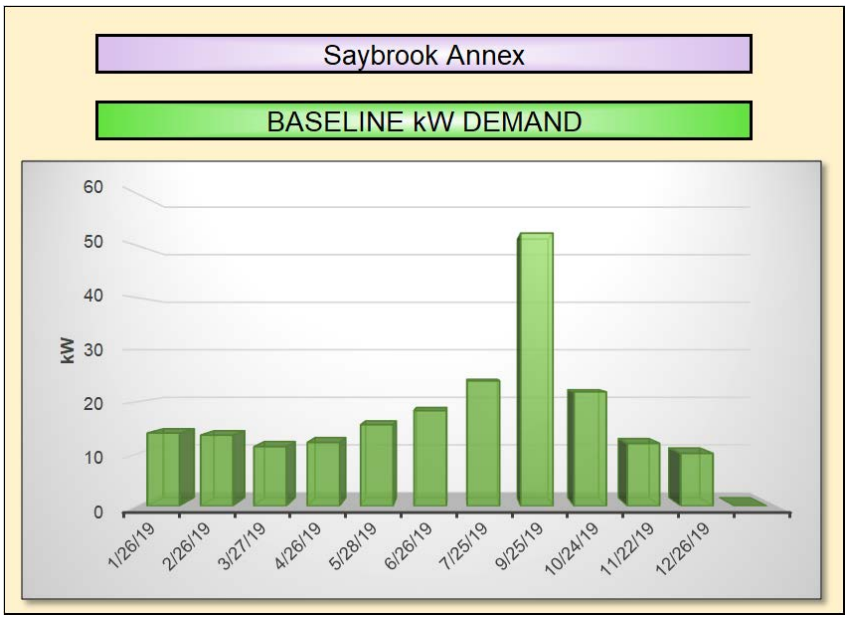


Calvin Coolidge Elementary School								Natural Gas Meter #1	
Provider	E-Town		Account #	1846267320				Meter #	3200683
Commodity	E-Town (Basic Gas Service)		Commodity					Rate Tariff:	
Billing Period Start Date	**Actual Reading**	**Therms**	**Gas Delivery Charges**	**Gas Customer Charge**	**Gas Demand Charge**	**Gas Commodity Charges**	**Gas Total Charges**	**$/Therm Marginal Rate**	**BTU**
11/30/18	1/2/19	2,696	$659	$29	$201	$1,772	$2,661	$0.90	269,590,000
1/3/19	1/29/19	3,020	$692	$29	$201	$1,703	$2,624	$0.79	302,010,000
1/30/19	2/27/19	2,997	$686	$29	$201	$1,479	$2,395	$0.72	299,740,000
2/28/19	3/28/19	2,536	$581	$29	$201	$1,213	$2,023	$0.71	253,630,000
3/29/19	4/29/19	1,121	$257	$29	$201	$520	$1,006	$0.69	112,100,000
4/30/19	5/29/19	406	$94	$29	$201	$182	$505	$0.68	40,640,000
5/30/19	6/27/19	36	$8	$29	$201	$16	$254	$0.68	3,620,000
6/28/19	7/29/19	26	$6	$29	$201	$11	$246	$0.65	2,580,000
7/30/19	8/28/19	27	$6	$29	$201	$11	$246	$0.63	2,690,000
8/29/19	9/29/19	41	$9	$29	$201	$17	$256	$0.64	4,140,000
9/30/19	10/28/19	215	$49	$29	$201	$105	$383	$0.71	21,520,000
10/29/19	12/1/19	2,129	$520	$33	$220	$1,075	$1,848	$0.75	212,880,000
TOTALS		**15,251**	**$3,568**	**$351**	**$2,427**	**$8,102**	**$14,449**	**$0.77**	**1,525,140,000**

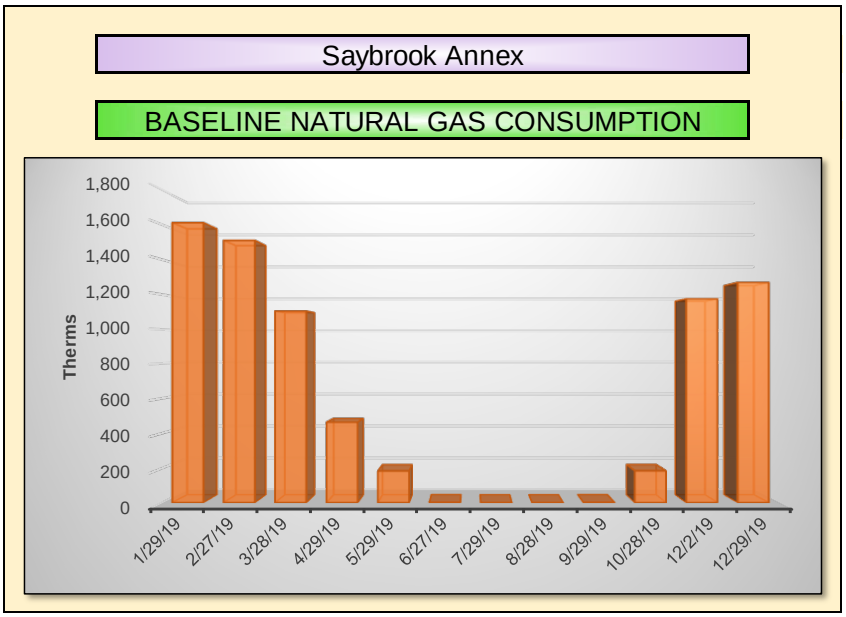
Calvin Coolidge Elementary School						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210019583726					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
1/12/19	2/11/19	27,000	$313	$313	$0.0116	0
2/12/19	3/13/19	31,000	$339	$339	$0.0109	0
3/14/19	4/10/19	18,000	$253	$253	$0.0141	0
4/11/19	5/10/19	11,000	$208	$208	$0.0189	0
5/11/19	6/11/19	25,000	$300	$300	$0.0120	0
6/12/19	7/11/19	8,000	$222	$222	$0.0278	0
7/12/19	8/13/19	2,000	$160	$160	$0.0798	0
8/14/19	9/11/19	6,000	$186	$186	$0.0310	0
9/12/19	10/10/19	13,000	$232	$232	$0.0179	0
10/11/19	11/8/19	13,000	$232	$232	$0.0179	0
11/9/19	12/11/19	26,000	$318	$318	$0.0122	0
12/12/19	1/13/20	25,000	$319	$319	$0.0128	0
TOTALS		205,000	$3,082	$3,082	$0.0150	0

Saybrook Annex Baseline Energy Use





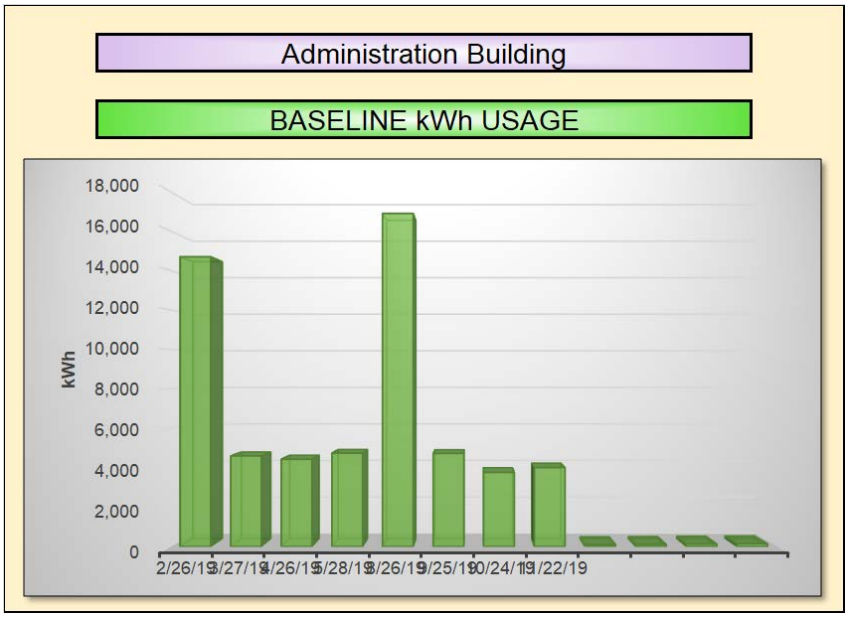
Saybrook Annex							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	73 974 261 07				Meter #:	626101593		
Commodity:	PSE&G Basic Generation Service			Description:	171 Virginia St Saybrk Anx				Rate Tariff:	General Lighting & Power		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
12/26/18	1/26/19	2,352	14	$5	$37	$527	$55	$624	$0.240	32	22%	8,025,024
1/27/19	2/26/19	2,361	14	$5	$38	$555	$53	$651	$0.251	31	23%	8,055,732
2/27/19	3/27/19	2,185	11	$5	$35	$528	$45	$613	$0.258	29	28%	7,455,220
3/28/19	4/26/19	1,156	12	$5	$20	$448	$48	$521	$0.405	30	13%	3,944,272
4/27/19	5/28/19	2,230	16	$5	$45	$522	$61	$633	$0.254	32	19%	7,608,760
5/29/19	6/26/19	2,789	18	$5	$43	$497	$252	$797	$0.194	29	22%	9,516,068
6/27/19	7/25/19	4,322	24	$5	$67	$550	$331	$953	$0.143	29	26%	14,746,664
7/26/19	9/25/19	7,484	52	$9	$117	$963	$722	$1,812	$0.144	62	10%	25,535,408
9/26/19	10/24/19	2,166	22	$5	$45	$409	$86	$545	$0.210	29	14%	7,390,392
10/25/19	11/22/19	3,618	12	$5	$75	$470	$47	$597	$0.151	29	43%	12,344,616
11/23/19	12/26/19	3,863	10	$5	$80	$494	$40	$618	$0.149	34	47%	13,180,556
												0
TOTALS		34,526	52	$57	$603	$5,963	$1,740	$8,364	$0.190	366	8%	117,802,712

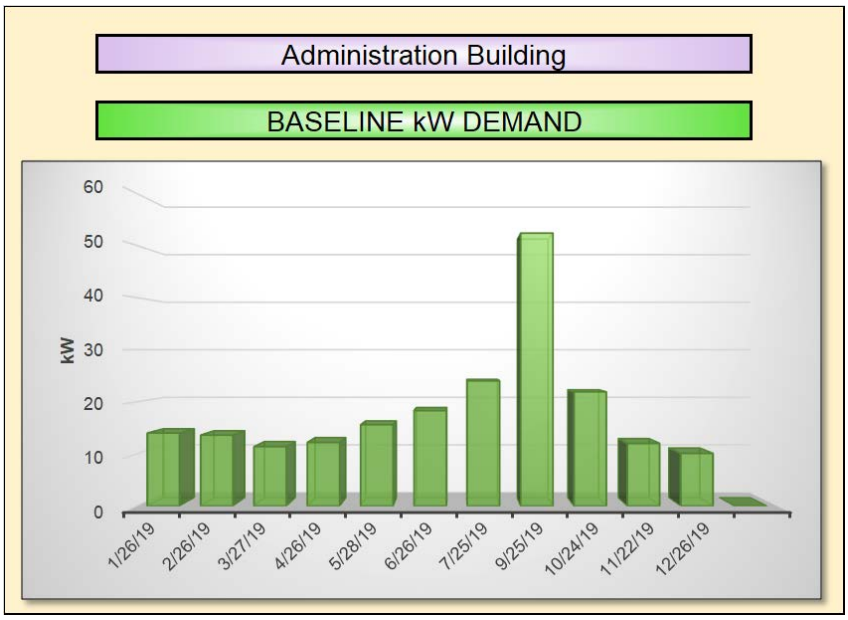


Saybrook Annex								Natural Gas Meter #1	
Provider	E-Town		Account #	2002792781				Meter #	302845
Commodity	E-Town (Basic Gas Service)		Commodity					Rate Tariff:	
Billing Period Start Date	**Actual Reading**	**Therms**	**Gas Delivery Charges**	**Gas Customer Charge**	**Gas Demand Charge**	**Gas Commodity Charges**	**Gas Total Charges**	**$/Therm Marginal Rate**	**BTU**
1/2/19	1/29/19	1,613	$369	$29	$92	$909	$1,400	$0.79	161,280,000
1/30/19	2/27/19	1,511	$346	$29	$92	$745	$1,212	$0.72	151,080,000
2/28/19	3/28/19	1,104	$253	$29	$92	$528	$902	$0.71	110,400,000
3/29/19	4/29/19	464	$106	$29	$92	$215	$442	$0.69	46,400,000
4/30/19	5/29/19	183	$42	$29	$92	$82	$245	$0.68	18,310,000
5/30/19	6/27/19	1	$0	$29	$92	$1	$122	$0.76	110,000
6/28/19	7/29/19	0	$0	$29	$92	$0	$121	-	0
7/30/19	8/28/19	0	$0	$29	$92	$0	$121	-	0
8/29/19	9/29/19	1	$0	$29	$92	$0	$121	$0.65	110,000
9/30/19	10/28/19	184	$42	$29	$92	$89	$252	$0.71	18,390,000
10/29/19	12/2/19	1,174	$287	$33	$101	$593	$1,013	$0.75	117,390,000
12/3/19	12/29/19	1,269	$335	$38	$109	$625	$1,107	$0.76	126,850,000
TOTALS		**7,503**	**$1,781**	**$360**	**$1,129**	**$3,788**	**$7,058**	**$0.74**	**750,320,000**

Saybrook Annex						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210022274738					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
1/11/19	2/9/19	137,000	$1,037	$1,037	$0.0076	0
2/10/19	3/11/19	32,000	$345	$345	$0.0108	0
3/12/19	4/9/19	14,000	$227	$227	$0.0162	0
4/10/19	5/9/19	10,000	$201	$201	$0.0201	0
5/10/19	6/10/19	6,000	$174	$174	$0.0291	0
6/11/19	7/10/19	20,000	$279	$279	$0.0139	0
7/11/19	8/12/19	60,000	$526	$526	$0.0088	0
8/13/19	9/10/19	47,000	$457	$457	$0.0097	0
9/11/19	10/10/19	14,000	$239	$239	$0.0171	0
10/11/19	11/8/19	22,000	$292	$292	$0.0133	0
11/9/19	12/11/19	6,000	$186	$186	$0.0310	0
12/12/19	1/10/20	23,000	$492	$492	$0.0214	0
TOTALS		391,000	$4,455	$4,455	$0.0114	0

Administration Building Baseline Energy Use

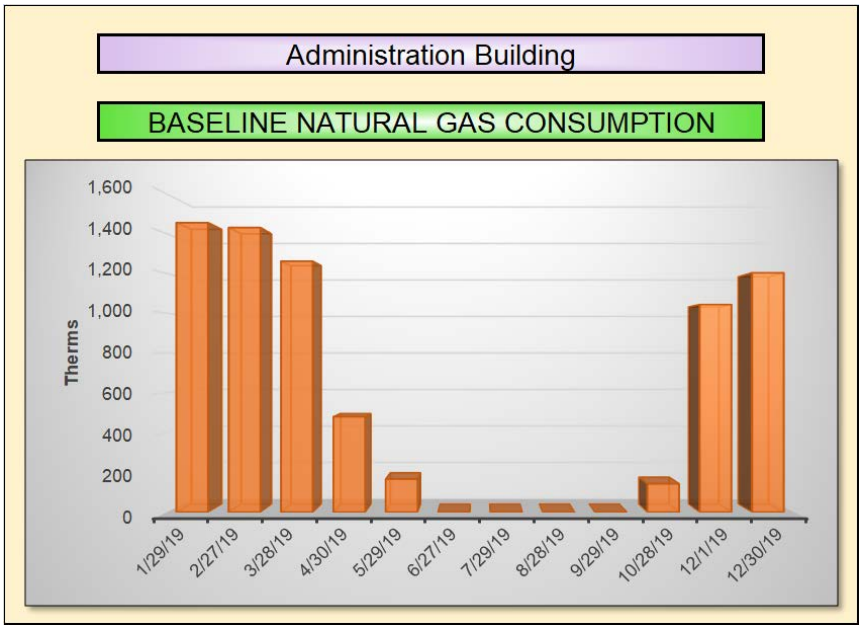




Administration Building							ELECTRIC METER #1					
Provider:	PSE&G			Account #:	73 974 256 07				Meter #:	9201587		
Commodity:	PSE&G Basic Generation Service			Description:	195 Virginia St Bd of Ed				Rate Tariff:	General Lighting & Power		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
11/26/18	2/26/19	14,560	53	$14	$231	$2,316	$207	$2,768	$0.175	93	12%	49,678,720
2/27/19	3/27/19	4,480	17	$5	$72	$745	$66	$887	$0.182	29	38%	15,285,760
3/28/19	4/26/19	4,320	17	$5	$75	$724	$66	$870	$0.185	30	36%	14,739,840
4/27/19	5/28/19	4,640	21	$5	$94	$757	$82	$938	$0.183	32	29%	15,831,680
5/29/19	8/26/19	16,800	86	$14	$261	$2,064	$1,190	$3,530	$0.138	90	9%	57,321,600
8/27/19	9/25/19	4,640	22	$5	$73	$584	$309	$971	$0.142	30	29%	15,831,680
9/26/19	10/24/19	3,680	22	$5	$76	$549	$85	$715	$0.170	29	24%	12,556,160
10/25/19	11/22/19	3,920	18	$5	$81	$553	$69	$708	$0.162	29	32%	13,375,040
TOTALS		57,040	86	$57	$963	$8,292	$2,074	$11,387	$0.162	362	8%	194,620,480

Administration Building								ELECTRIC METER #2				
Provider:	PSE&G			Account #:	73 974 260 18				Meter #:	N/A		
Commodity:	PSE&G Basic Generation Service			Description:	195 Virginia St Lgts				Rate Tariff:	Body Politic Lighting		
Billing Period Start Date	Actual Reading	Usage kWh Net	Demand kW	Fixture Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	$ / kWh Marginal Rate	Days	Load Factor	BTU
1/1/19	1/30/19	130		$18	$2	$6		$26	$0.064	30	0%	443,560
1/31/19	3/1/19	120		$18	$2	$7		$27	$0.076	30	0%	409,440
3/2/19	4/1/19	111		$18	$2	$6		$25	$0.066	31	0%	378,732
4/2/19	5/1/19	95		$18	$2	$5		$24	$0.073	30	0%	324,140
5/2/19	5/31/19	85		$18	$2	$5		$24	$0.078	30	0%	290,020
6/1/19	7/1/19	82		$18	$2	$4		$23	$0.068	31	0%	279,784
7/2/19	7/31/19	82		$18	$2	$4		$23	$0.069	30	0%	279,784
8/1/19	8/29/19	88		$18	$2	$4		$23	$0.062	29	0%	300,256
8/30/19	9/30/19	100		$18	$2	$5		$24	$0.069	32	0%	339,494
10/1/19	10/29/19	111		$18	$2	$5		$25	$0.065	29	0%	378,732
10/30/19	11/27/19	130		$18	$2	$6		$26	$0.069	29	0%	443,560
11/28/19	12/31/19	149		$18	$3	$7		$28	$0.067	34	0%	508,388
TOTALS		1,283	0	$211	$25	$64	$0	$299	$0.069	365	0%	4,375,890

Administration Building												
TOTAL ELECTRIC												
Usage kWh	Demand kW	Electric Customer Charge	Electric Delivery Charges	Electric Commodity Charges	Electric Demand Charges	Total Electric Charges	Cost / kW Checksum	Cost / kWh Checksum	Total Cost / kWh Checksum	Days	Load Factor	BTU
14,690	53	$32	$233	$2,322	$207	$2,794	$3.93	$0.174	$0.190	93	12%	50,122,280
4,600	17	$22	$74	$752	$66	$914	$3.93	$0.179	$0.199	29	39%	15,695,200
4,431	17	$22	$77	$730	$66	$895	$3.93	$0.182	$0.202	30	37%	15,118,572
4,735	21	$22	$96	$762	$82	$962	$3.93	$0.181	$0.203	32	30%	16,155,820
16,885	86	$32	$263	$2,069	$1,190	$3,554	$13.78	$0.138	$0.210	90	9%	57,611,620
4,722	22	$22	$75	$588	$309	$994	$13.78	$0.140	$0.210	30	29%	16,111,464
3,762	22	$22	$78	$553	$85	$738	$3.94	$0.168	$0.196	29	25%	12,835,944
4,008	18	$22	$83	$557	$69	$731	$3.94	$0.160	$0.182	29	33%	13,675,296
100	0	$18	$2	$5	$0	$24	$0.00	$0.069	$0.245	0	0%	339,494
111	0	$18	$2	$5	$0	$25	$0.00	$0.065	$0.223	0	0%	378,732
130	0	$18	$2	$6	$0	$26	$0.00	$0.069	$0.204	0	0%	443,560
149	0	$18	$3	$7	$0	$28	$0.00	$0.067	$0.185	0	0%	508,388
58,323	86	$267	$988	$8,356	$2,074	$11,685	$8.13	$0.160	$0.200	362	8%	198,996,370



Administration Building							Natural Gas Meter #1		
Provider	E-Town		Account #	6072292781				Meter #	
Commodity	E-Town (Basic Gas Service)		Account #					Meter #	
Billing Period Start Date	Actual Reading	Therms	Gas Delivery Charges	Gas Customer Charge	Gas Demand Charge	Gas Commodity Charges	Gas Total Charges	$/Therm Marginal Rate	BTU
1/2/19	1/29/19	1,454	$333	$29	$95	$820	$1,277	$0.79	145,390,000
1/30/19	2/27/19	1,430	$327	$29	$95	$705	$1,157	$0.72	142,970,000
2/28/19	3/28/19	1,261	$289	$29	$95	$603	$1,016	$0.71	126,080,000
3/29/19	4/30/19	480	$110	$29	$95	$222	$456	$0.69	47,960,000
5/1/19	5/29/19	167	$39	$29	$95	$74	$237	$0.68	16,650,000
5/30/19	6/27/19	0	$0	$29	$95	$0	$124	-	0
6/28/19	7/29/19	0	$0	$29	$95	$0	$124	-	0
7/30/19	8/28/19	0	$0	$29	$95	$0	$124	-	0
8/29/19	9/29/19	0	$0	$29	$95	$0	$124	-	0
9/30/19	10/28/19	143	$33	$29	$95	$70	$226	$0.71	14,310,000
10/29/19	12/1/19	1,043	$150	$33	$104	$631	$919	$0.75	104,300,000
12/2/19	12/30/19	1,202	$318	$38	$113	$593	$1,061	$0.76	120,240,000
TOTALS		7,179	$1,598	$360	$1,169	$3,718	$6,845	$0.74	717,900,000

Administration Building						
Provider	American Water		Water & Sewer (Gal)			
Acct #	1018-210018885894					
Billing Period Start Date	Actual Reading	Water & Sewer (Gal)	Usage Charges	Total Charges	Cost / Unit Checksum	BTU
	2/10/19			$0	$0.00	0
2/11/19	3/11/19	4,000	$161	$161	$0.0403	0
3/12/19	4/6/19	7,000	$181	$181	$0.0259	0
4/7/19	5/9/19	9,000	$194	$194	$0.0216	0
5/10/19	6/10/19	5,000	$168	$168	$0.0336	0
6/11/19	7/10/19	25,000	$312	$312	$0.0125	0
7/11/19	8/12/19	3,000	$166	$166	$0.0554	0
8/13/19	9/10/19	3,000	$166	$166	$0.0554	0
9/11/19	10/10/19	10,000	$213	$213	$0.0213	0
10/11/19	11/8/19	14,000	$239	$239	$0.0171	0
11/9/19	12/11/19	16,000	$252	$252	$0.0158	0
12/12/19	1/10/20	8,000	$207	$207	$0.0258	0
TOTALS		104,000	$2,259	$2,259	$0.0217	0

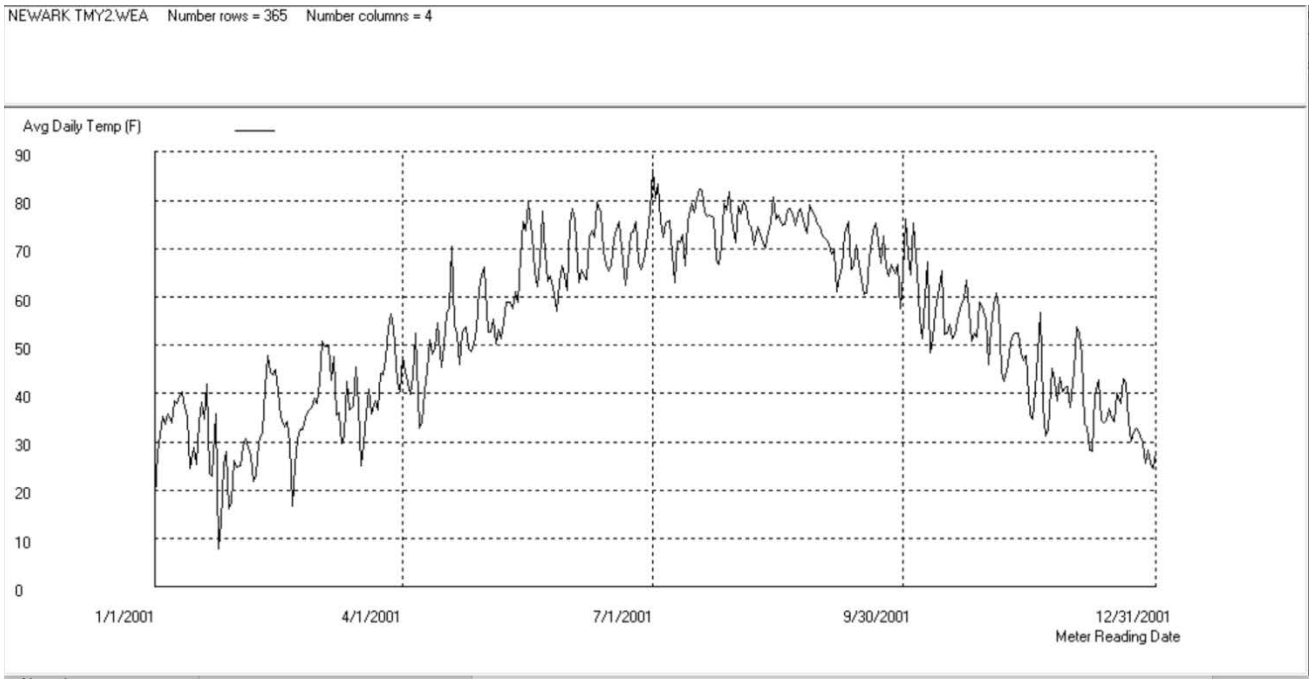
Energy Savings Utility Rates

DCO Energy used the following marginal rates to calculate energy cost savings:

CALCULATED UTILITY RATES - MARGINAL RATES USED FOR SAVINGS							
BUILDING/FACILITY	ELECTRIC				NATURAL GAS	Existing Solar PPA (kWh)	Water & Sewer (Gal)
	$ / kW Oct. thru May	$ / kW June thru Sept.	$ / kWh Marginal Rate	$ / kWh Blended Rate	$ / Therm Marginal Rate	$ / kWh Marginal Rate	$ / Gal Marginal Rate
Hillside High School	$3.82	$12.52	$0.110	$0.146	$0.74	$0.096	$0.0094
A.P. Morris Early Childhood Center	$3.75	$12.67	$0.121	$0.168	$0.74	$0.097	$0.0115
Walter O. Krumbiegel Middle School	$3.77	$12.33	$0.120	$0.170	$0.78	$0.00	$0.0170
Hurden Looker Elementary School	$3.45	$13.78	$0.155	$0.193	$0.75	$0.00	$0.0183
George Washington Elementary School	$3.75	$12.67	$0.105	$0.142	$0.74	$0.00	$0.0102
Calvin Coolidge Elementary School	$3.93	$13.26	$0.070	$0.112	$0.77	$0.097	$0.0150
Saybrook Annex	$3.93	$13.78	$0.190	$0.242	$0.74	$0.00	$0.0114
Administration Building	$3.93	$13.78	$0.160	$0.200	$0.74	$0.00	$0.0217

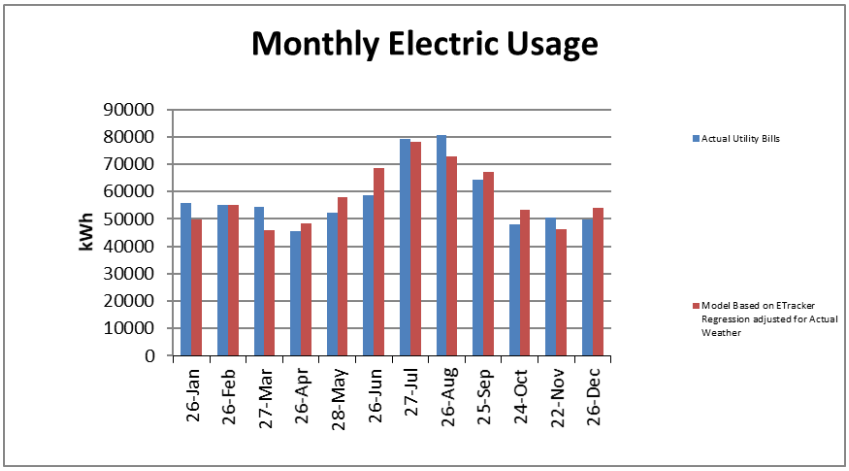
Hillside Public Schools – Baseline Weather Data

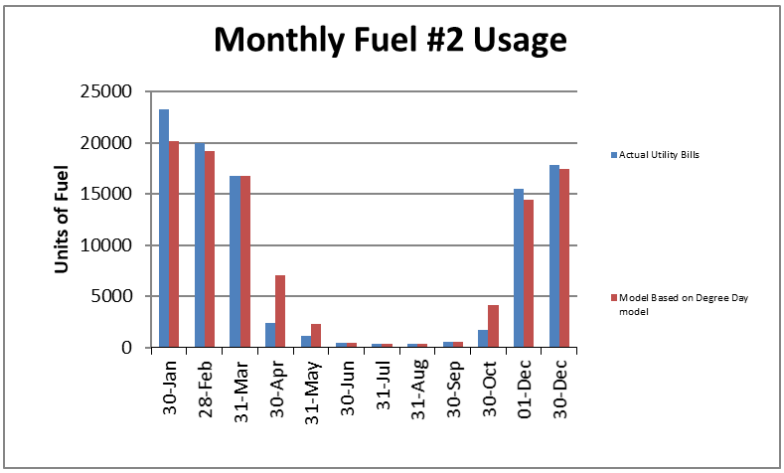
In accordance with the New Jersey Pay for Performance incentive program, TMY2 weather data was used for all weather normalized calculations and energy models utilizing weather data. The graph below represents the Newark TMY2 weather file used for the Hillside area.



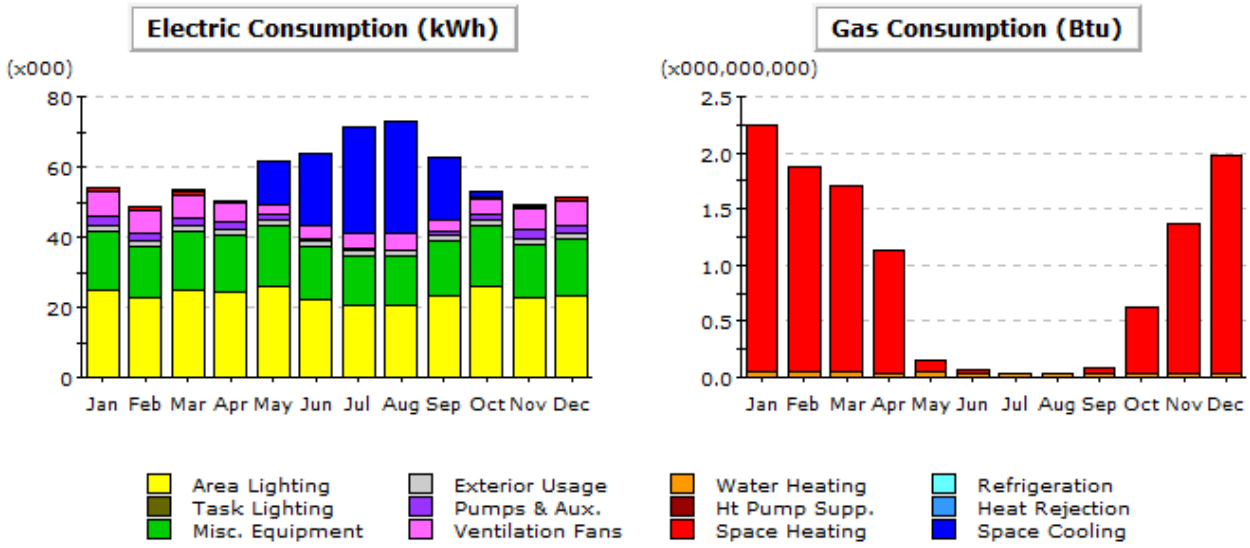
Hillside High School– Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

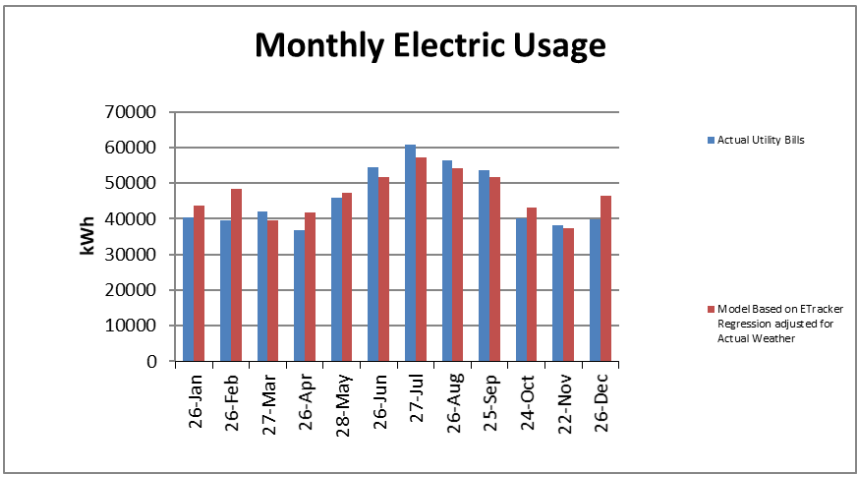
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.01	0.02	0.10	0.29	11.95	20.80	30.34	31.87	17.78	1.75	0.18	0.07	115.19
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.29	1.11	1.06	0.73	0.07	0.02	0.01	0.00	0.03	0.40	0.89	1.19	6.81
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	7.11	6.24	6.48	5.08	3.10	3.59	4.39	4.56	3.36	4.11	6.03	6.89	60.92
Pumps & Aux.	2.51	2.26	2.46	2.19	1.47	0.51	0.18	0.05	0.83	1.87	2.37	2.49	19.19
Ext. Usage	1.67	1.51	1.67	1.62	1.67	1.62	1.67	1.67	1.62	1.67	1.62	1.67	19.65
Misc. Equip.	16.64	15.05	16.64	16.32	17.30	15.14	14.01	14.01	15.88	17.30	15.22	15.74	189.24
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	24.87	22.49	24.87	24.29	25.83	22.13	20.72	20.72	23.29	25.83	22.79	23.47	281.30
Total	54.09	48.68	53.27	50.51	61.40	63.81	71.33	72.89	62.80	52.93	49.09	51.52	692.31

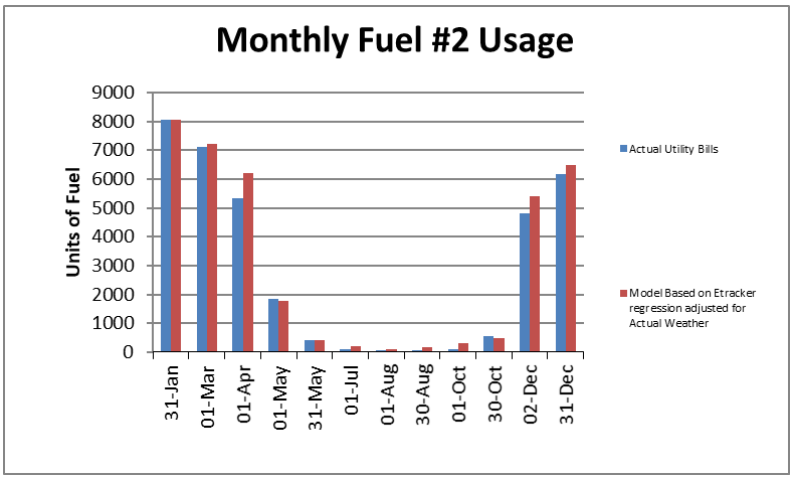
Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.20	1.83	1.65	1.09	0.10	0.03	0.01	0.00	0.05	0.59	1.33	1.94	10.83
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.05	0.05	0.05	0.04	0.05	0.04	0.03	0.03	0.04	0.04	0.04	0.03	0.48
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.25	1.88	1.70	1.13	0.15	0.07	0.04	0.03	0.08	0.63	1.37	1.97	11.31

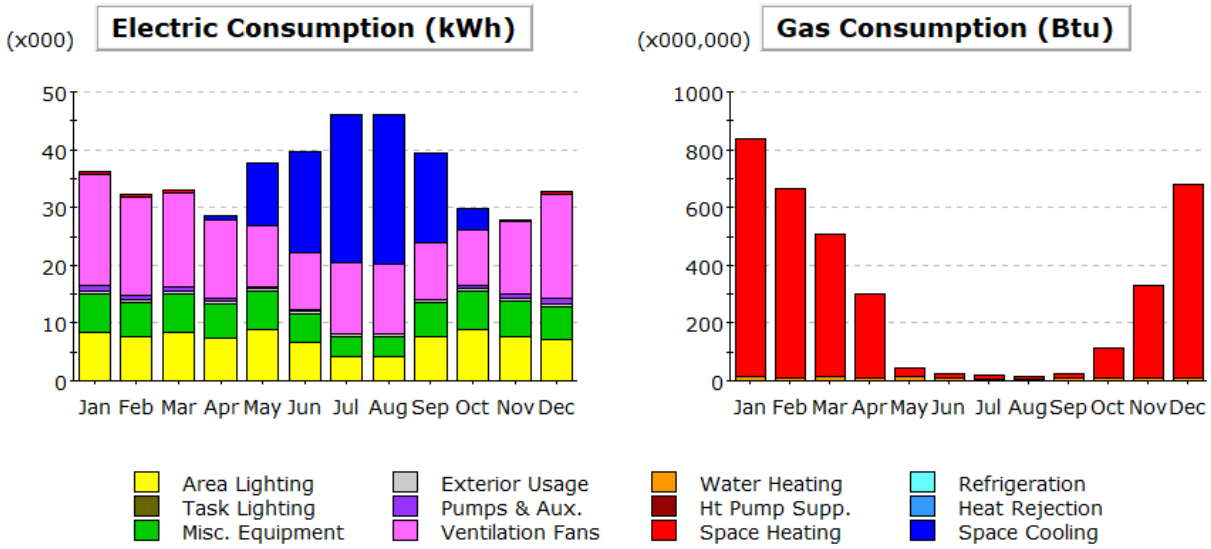
A.P. Morris Early Childhood Center – Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

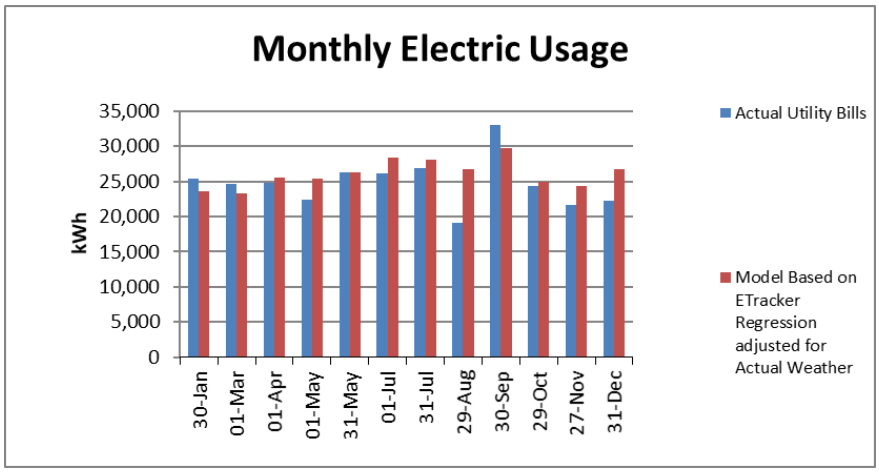
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.00	0.00	0.18	0.52	10.67	17.53	25.68	25.71	15.44	3.58	0.09	0.06	99.45
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.47	0.38	0.31	0.20	-	-	-	-	-	0.08	0.23	0.42	2.09
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	19.37	16.99	16.29	13.35	10.64	9.92	12.38	12.27	9.78	9.62	12.63	18.04	161.27
Pumps & Aux.	0.95	0.85	0.89	0.71	0.36	0.12	0.04	0.01	0.19	0.51	0.79	0.93	6.35
Ext. Usage	0.46	0.42	0.46	0.45	0.46	0.45	0.46	0.46	0.45	0.46	0.45	0.46	5.44
Misc. Equip.	6.52	5.90	6.52	5.74	6.66	5.08	3.39	3.39	5.83	6.66	5.97	5.63	67.30
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	8.47	7.66	8.47	7.50	8.81	6.61	4.17	4.17	7.67	8.81	7.75	7.20	87.27
Total	36.25	32.20	33.11	28.46	37.59	39.71	46.12	46.01	39.35	29.72	27.91	32.74	429.17

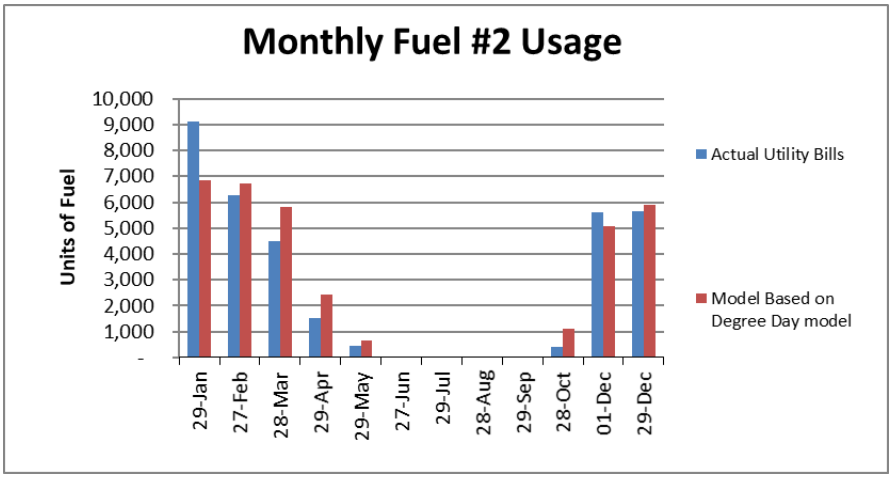
Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	825.4	652.6	492.1	290.5	30.9	14.5	13.0	11.5	15.7	102.8	319.4	670.5	3,439.1
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	12.6	11.8	13.1	10.3	12.4	8.6	5.1	4.9	8.9	10.7	10.1	9.2	117.7
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	838.1	664.4	505.2	300.8	43.3	23.2	18.2	16.5	24.6	113.4	329.5	679.7	3,556.8

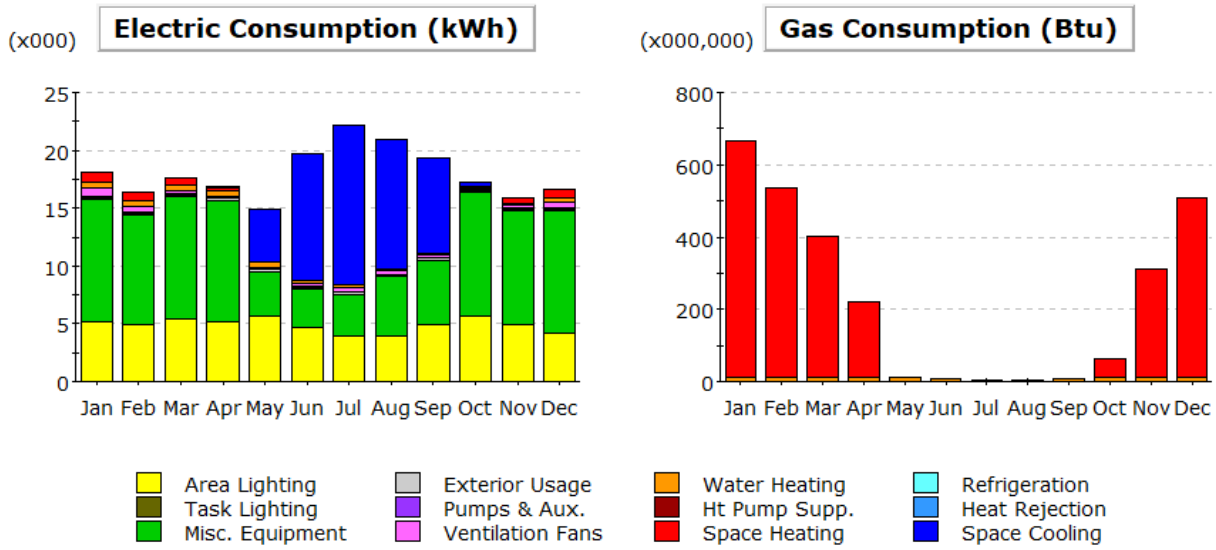
Walter O. Krumbiegel Middle School – Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

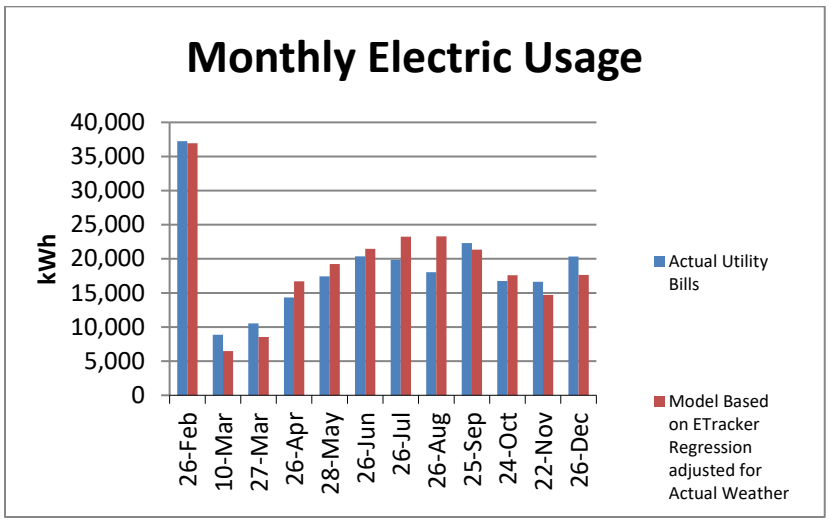
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	0.05	4.54	11.02	13.85	11.17	8.23	0.37	-	-	49.23
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.83	0.73	0.61	0.34	-	-	-	-	-	0.09	0.50	0.72	3.82
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.45	0.43	0.48	0.41	0.49	0.19	0.19	0.18	0.18	0.19	0.18	0.37	3.75
Vent. Fans	0.74	0.53	0.30	0.11	0.13	0.33	0.41	0.32	0.24	0.02	0.20	0.50	3.83
Pumps & Aux.	0.11	0.10	0.11	0.09	0.07	0.03	0.01	0.02	0.04	0.08	0.10	0.11	0.87
Ext. Usage	0.16	0.14	0.16	0.15	0.16	0.15	0.16	0.16	0.15	0.16	0.15	0.16	1.84
Misc. Equip.	10.54	9.53	10.54	10.57	3.91	3.38	3.63	5.13	5.57	10.71	9.83	10.54	93.87
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	5.21	4.90	5.42	5.13	5.63	4.64	3.92	3.92	4.95	5.63	4.97	4.18	58.51
Total	18.05	16.36	17.61	16.85	14.91	19.74	22.16	20.90	19.37	17.26	15.93	16.57	215.71

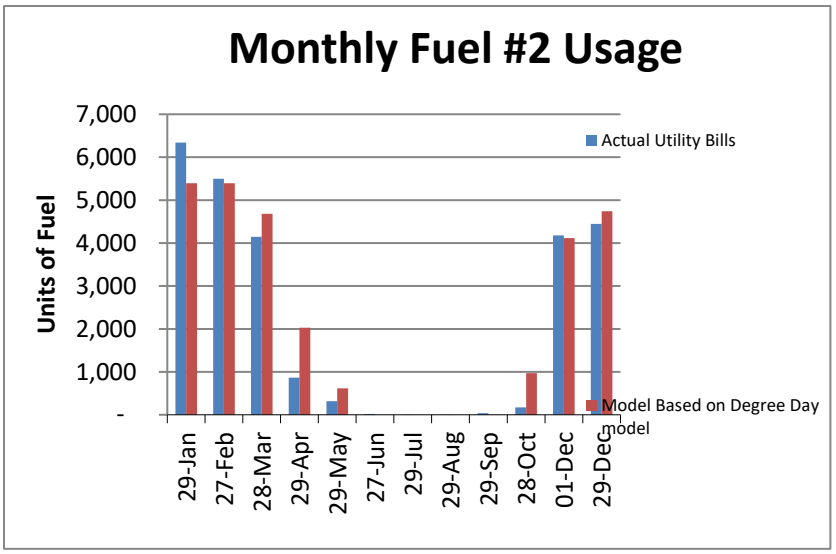
Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	655.8	524.9	390.0	208.3	-	-	-	-	-	53.1	302.1	496.7	2,630.8
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	12.1	11.6	12.9	11.2	12.4	9.2	5.0	4.8	9.4	11.6	10.9	9.9	121.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	667.9	536.5	402.9	219.5	12.4	9.2	5.0	4.8	9.4	64.7	313.0	506.6	2,751.8

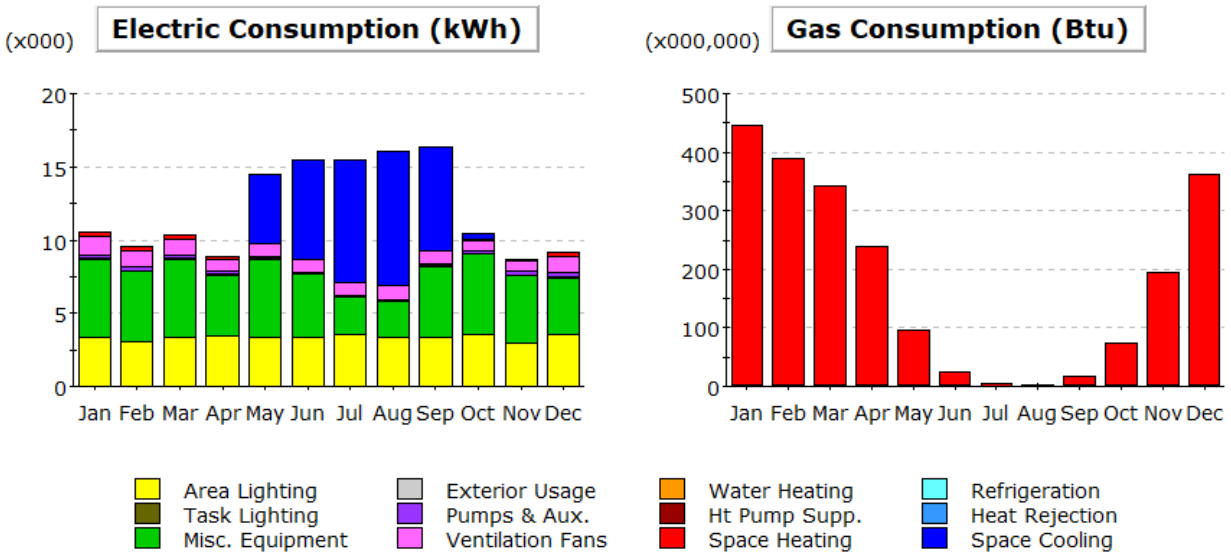
Hurden Looker Elementary School – Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

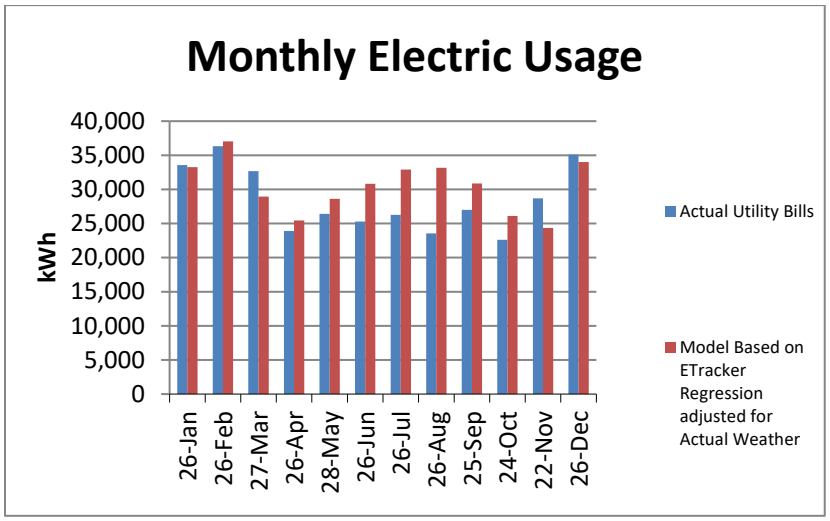
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	4.71	6.73	8.35	9.20	7.04	0.46	0.00	-	36.50
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.33	0.29	0.26	0.18	0.07	0.02	0.00	0.00	0.01	0.05	0.15	0.27	1.64
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.25	1.15	1.05	0.82	0.83	0.88	0.95	0.96	0.91	0.67	0.70	1.12	11.29
Pumps & Aux.	0.25	0.23	0.25	0.22	0.15	0.05	0.02	0.01	0.09	0.19	0.24	0.25	1.95
Ext. Usage	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.88
Misc. Equip.	5.28	4.77	5.28	4.12	5.28	4.32	2.55	2.46	4.86	5.51	4.58	3.90	52.90
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	3.39	3.06	3.39	3.49	3.39	3.36	3.51	3.39	3.36	3.51	2.99	3.51	40.37
Total	10.58	9.58	10.30	8.90	14.50	15.44	15.46	16.08	16.35	10.48	8.72	9.14	145.52

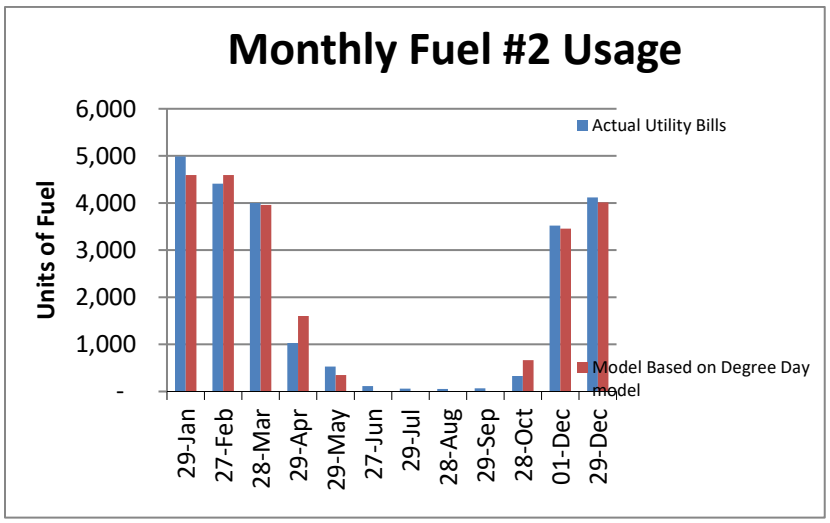
Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	442.3	386.8	340.1	236.8	92.5	21.4	5.1	1.2	16.1	72.6	192.7	361.0	2,168.5
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	2.8	2.6	2.9	2.3	2.7	2.0	1.0	0.9	2.0	2.4	2.2	2.1	25.9
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	445.1	389.5	343.0	239.1	95.2	23.4	6.0	2.2	18.1	75.0	194.9	363.1	2,194.4

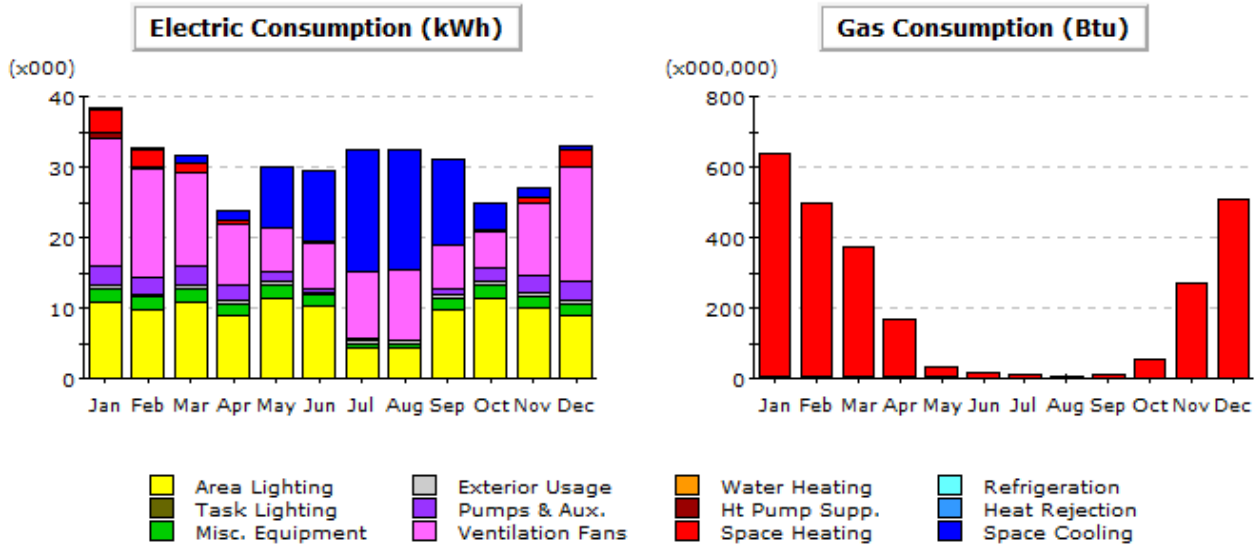
George Washington Elementary School – Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

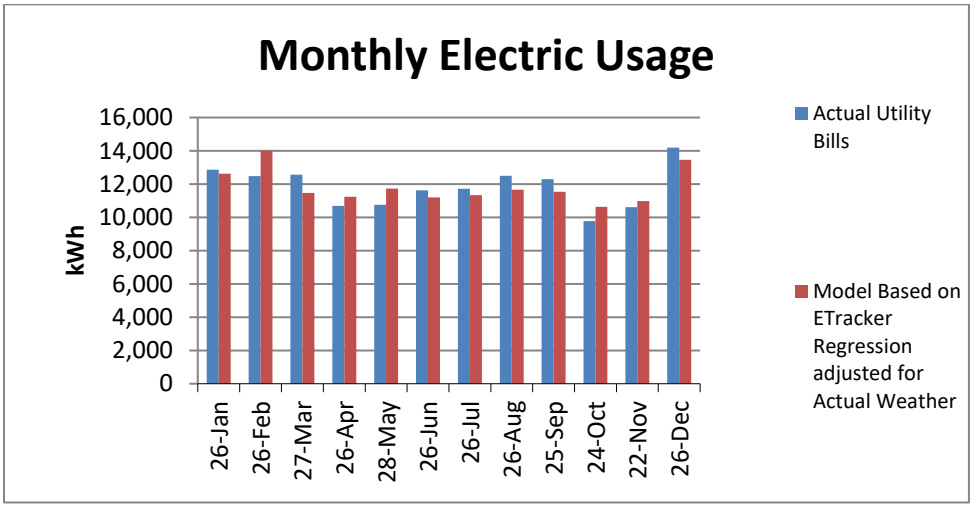
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.30	0.34	0.89	1.45	8.61	10.11	17.26	17.18	12.12	3.96	1.39	0.58	74.19
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	3.07	2.33	1.37	0.53	0.07	0.03	0.01	0.00	0.01	0.11	0.72	2.22	10.48
HP Supp.	0.76	0.27	0.08	0.02	-	-	-	-	-	0.00	0.03	0.16	1.32
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	18.16	15.35	13.25	8.55	6.24	6.59	9.53	9.83	6.27	5.34	10.28	16.21	125.61
Pumps & Aux.	2.72	2.45	2.67	2.27	1.34	0.46	0.17	0.06	0.74	1.79	2.49	2.70	19.85
Ext. Usage	0.50	0.45	0.50	0.48	0.50	0.48	0.50	0.50	0.48	0.50	0.48	0.50	5.85
Misc. Equip.	1.96	1.77	1.96	1.58	2.02	1.46	0.71	0.71	1.76	2.02	1.81	1.60	19.34
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	10.81	9.78	10.81	8.96	11.24	10.33	4.24	4.24	9.69	11.24	9.89	8.90	110.15
Total	38.27	32.74	31.53	23.83	30.02	29.45	32.42	32.51	31.08	24.95	27.10	32.88	366.79

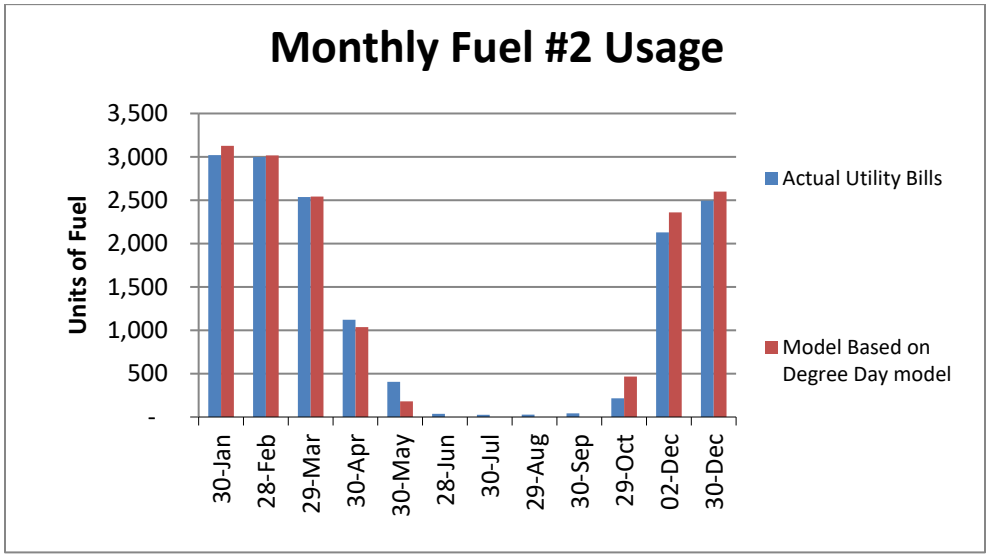
Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	634.4	495.1	371.5	166.2	28.0	14.9	8.6	4.0	10.5	53.0	269.7	506.3	2,562.4
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	3.1	2.9	3.2	3.0	3.0	2.4	1.7	1.7	2.3	2.6	2.6	2.7	31.2
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	637.6	498.0	374.8	169.2	31.1	17.3	10.4	5.7	12.8	55.6	272.3	509.0	2,593.6

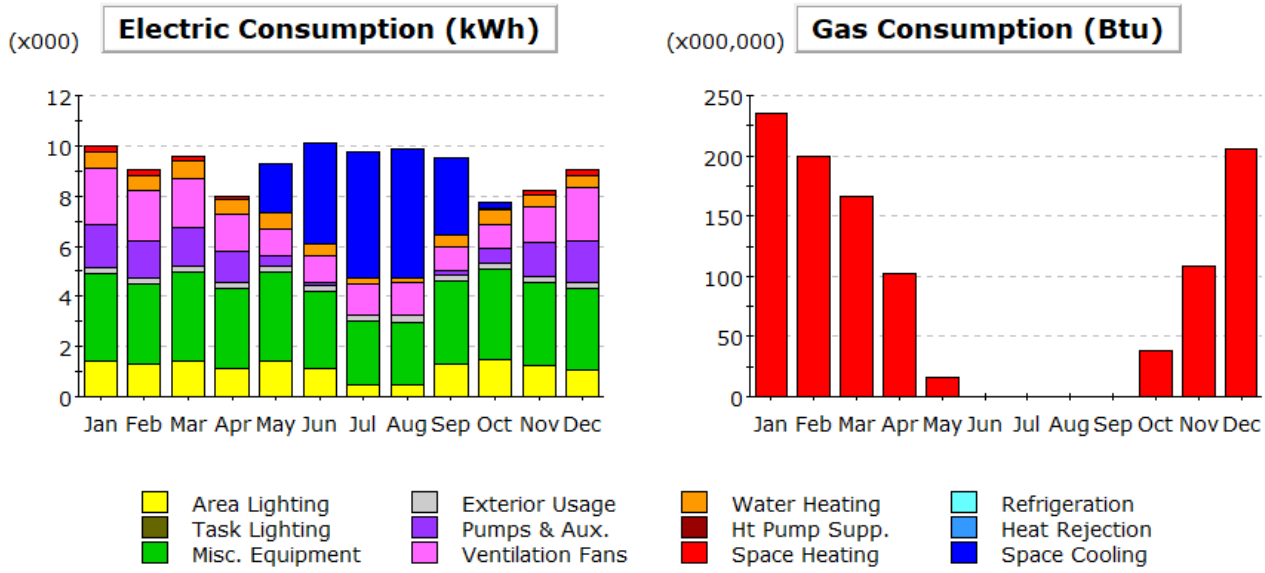
Calvin Coolidge Elementary School – Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

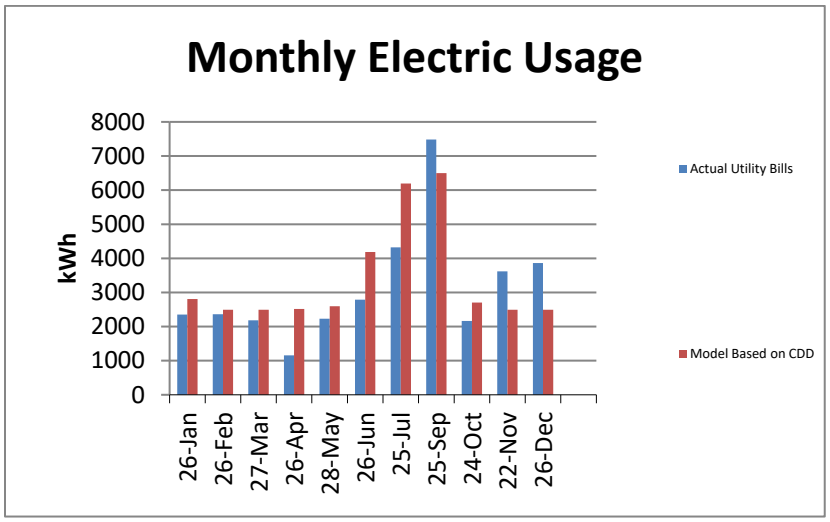
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.00	0.01	1.95	3.99	5.07	5.15	3.10	0.26	0.00	-	19.53
Heat Relect.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.23	0.20	0.20	0.15	0.03	-	-	-	-	0.07	0.16	0.22	1.26
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.68	0.64	0.71	0.55	0.65	0.47	0.22	0.20	0.48	0.57	0.52	0.49	6.19
Vent. Fans	2.26	2.00	1.94	1.51	1.04	1.07	1.21	1.30	0.95	0.96	1.42	2.13	17.79
Pumps & Aux.	1.68	1.50	1.55	1.21	0.44	0.13	0.04	0.01	0.18	0.59	1.33	1.62	10.26
Ext. Usage	0.25	0.22	0.25	0.24	0.25	0.24	0.25	0.25	0.24	0.25	0.24	0.25	2.89
Misc. Equip.	3.48	3.19	3.53	3.21	3.53	3.11	2.52	2.52	3.30	3.58	3.30	3.24	38.49
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	1.43	1.29	1.43	1.13	1.43	1.10	0.48	0.47	1.28	1.48	1.25	1.08	13.84
Total	10.00	9.04	9.60	8.01	9.31	10.10	9.77	9.90	9.53	7.75	8.22	9.02	110.25

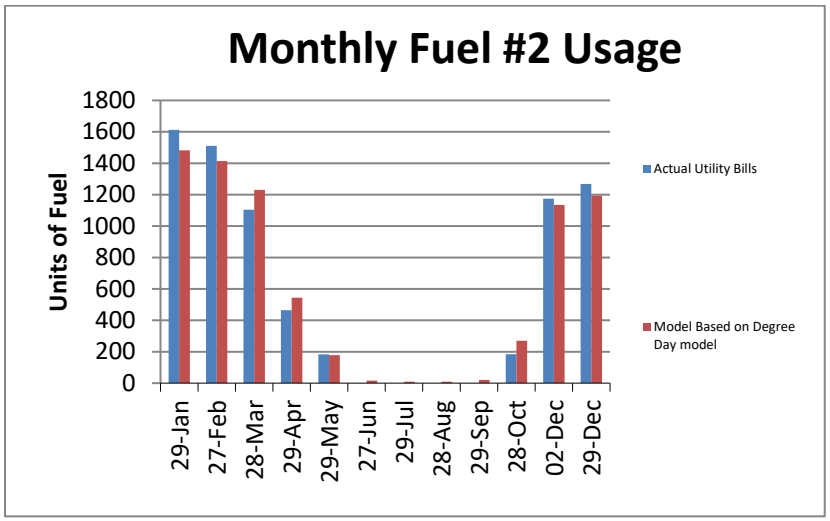
Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Relect.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	235.6	199.1	166.4	102.2	16.2	-	-	-	-	37.5	108.4	206.0	1,071.4
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.1
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	235.7	199.3	166.6	102.4	16.4	0.2	0.2	0.2	0.2	37.7	108.6	206.2	1,073.5

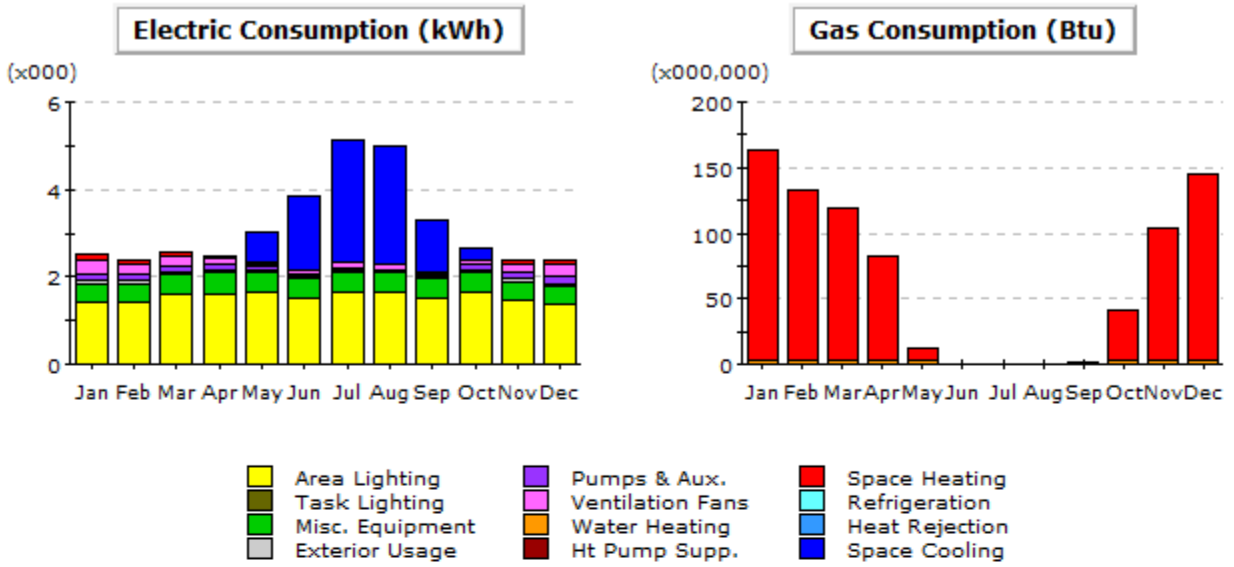
Saybrook Annex – Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

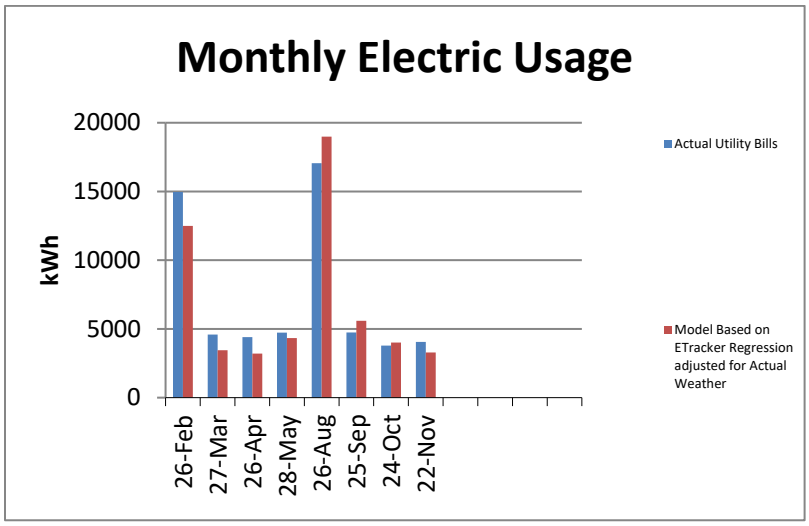
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	0.00	0.71	1.73	2.81	2.69	1.19	0.27	-	-	9.39
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.11	0.09	0.08	0.06	0.01	-	-	-	-	0.03	0.07	0.10	0.54
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	0.33	0.26	0.22	0.14	0.06	0.09	0.14	0.13	0.06	0.09	0.21	0.30	2.02
Pumps & Aux.	0.16	0.15	0.16	0.13	0.08	0.03	0.01	0.00	0.04	0.11	0.15	0.16	1.17
Ext. Usage	0.06	0.05	0.06	0.05	0.06	0.05	0.06	0.06	0.05	0.06	0.05	0.06	0.66
Misc. Equip.	0.42	0.42	0.47	0.48	0.49	0.45	0.49	0.49	0.45	0.49	0.43	0.41	5.48
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	1.43	1.43	1.58	1.61	1.63	1.51	1.63	1.63	1.51	1.63	1.46	1.38	18.45
Total	2.52	2.40	2.56	2.48	3.02	3.87	5.12	4.99	3.31	2.67	2.37	2.40	37.71

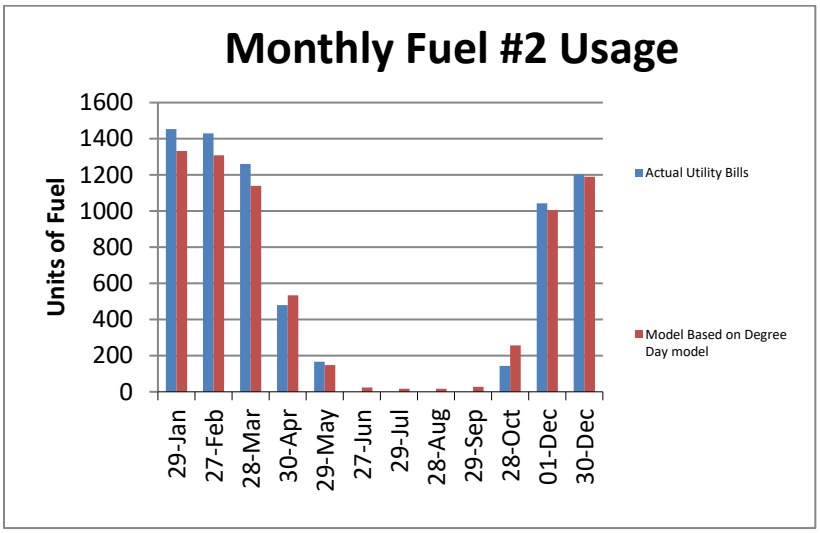
Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	160.31	130.26	115.74	80.12	8.61	-	-	-	-	38.00	101.96	141.90	776.92
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	3.07	2.89	3.20	2.46	3.04	0.30	0.29	0.28	1.86	2.57	2.42	2.88	25.27
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	163.39	133.15	118.94	82.59	11.65	0.30	0.29	0.28	1.86	40.58	104.38	144.78	802.19

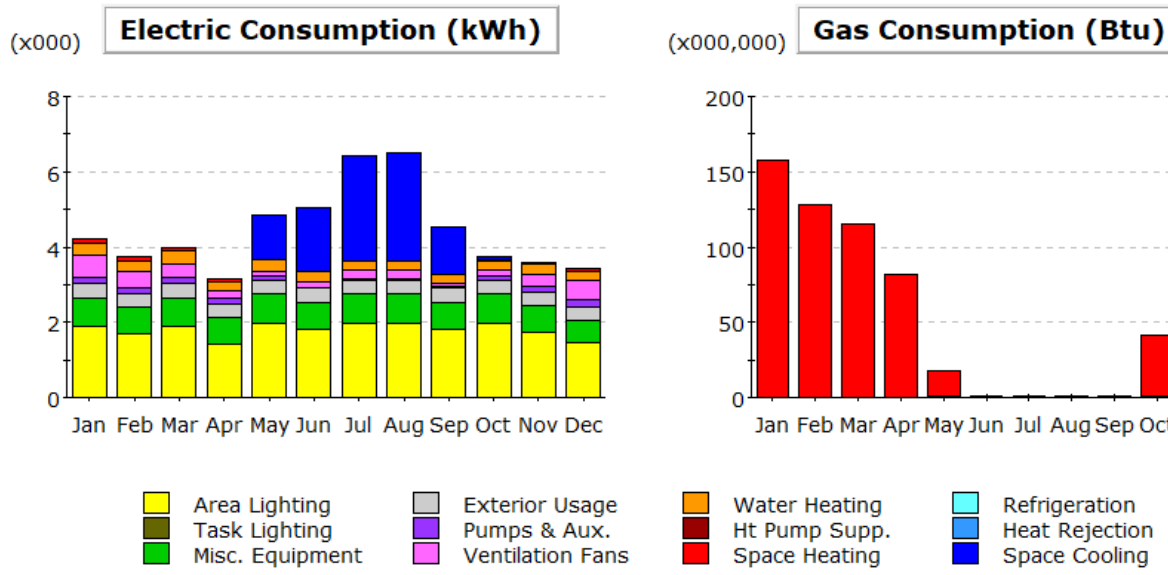
Administration Building – Energy Modeling Baseline

Baseline energy use has been analyzed using eQuest energy simulation software. The New Jersey Pay for Performance incentive program requires +/- 5% accuracy when simulating baseline annual energy use. To calibrate the model, eTracker weather normalization software was used to establish the relationship between weather and energy use of each building. Shown below are the comparison charts and the modeling software baseline output reports. The reports show the model baseline produced by DCO Energy is within acceptable tolerances.





Below is the monthly energy consumption output for the baseline model.



Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	1.15	1.69	2.77	2.88	1.25	0.09	-	-	9.82
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.10	0.08	0.07	0.05	0.01	-	-	-	-	0.03	0.06	0.09	0.51
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.32	0.30	0.33	0.24	0.32	0.27	0.27	0.26	0.24	0.27	0.25	0.23	3.29
Vent. Fans	0.58	0.44	0.36	0.22	0.13	0.15	0.23	0.24	0.10	0.12	0.32	0.51	3.40
Pumps & Aux.	0.18	0.16	0.17	0.15	0.09	0.03	0.01	0.00	0.05	0.12	0.16	0.18	1.29
Ext. Usage	0.38	0.34	0.38	0.37	0.38	0.37	0.38	0.38	0.37	0.38	0.37	0.38	4.47
Misc. Equip.	0.77	0.70	0.77	0.68	0.80	0.74	0.80	0.80	0.74	0.80	0.71	0.60	8.89
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	1.88	1.70	1.88	1.43	1.95	1.80	1.95	1.95	1.80	1.95	1.72	1.44	21.46
Total	4.21	3.73	3.97	3.14	4.83	5.03	6.42	6.51	4.53	3.76	3.59	3.42	53.14

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	157.31	127.96	114.48	81.11	17.24	-	-	-	-	40.57	95.59	139.19	773.44
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	0.28	0.27	0.35	0.40	0.56	0.58	0.60	0.60	0.58	0.53	0.40	0.32	5.46
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	157.59	128.23	114.83	81.51	17.80	0.58	0.60	0.60	0.58	41.10	95.99	139.51	778.91

ENERGY SAVINGS PLAN

SECTION 3 – ENERGY CONSERVATION MEASURES

Energy Conservation Measure Breakdown by Building

The matrix below details which ECMs were applied and evaluated by building. It also indicates which ECMs were included in the project and which ECMs were not included in the project.

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
1	LED Lighting Replacement	✔	✔	✔	✔	✔	✔	✔	✔
2	Upgrade/Install Control System	✔	✔	✔	✔	✔	✔		
3	Boiler Replacement					✔	✔		
4	Premium Efficiency Pump Motors and VFDs					✔	✔		
5	Rooftop Unit Replacement	✔	✔						
6	Split System AC & AHU Replacement	✔							
7	Pipe and Valve Insulation	✔	✔	✔	✔	✔	✔	✔	
8	Water Conservation	✔	✔	✔	✔	✔	✔	✔	✔
9	Solar PPA	✔			✔	✔	✔		✔
10	Combined Heat & Power Unit					✔			

ECM Breakdown by Cost & Savings

HILLSIDE PUBLIC SCHOOLS		INSTALLED COST	ANNUAL ELECTRIC COST SAVINGS	ANNUAL NATURAL GAS COST SAVINGS	ANNUAL Water & Sewer (Gal) COST SAVINGS	ANNUAL ENERGY COST SAVINGS	ANNUAL O&M COST SAVINGS	TOTAL ANNUAL COST SAVINGS	SIMPLE PAYBACK WITHOUT INCENTIVES
ECM #	ENERGY CONSERVATION MEASURE	$	$	$	$	$	$	$	YEARS
1	LED Lighting Replacement	$134,403	$80,886	($3,233)	$0	$77,653	$0	$77,653	1.7
2	Upgrade/Install Control System	$1,426,591	$9,807	$52,089	$0	$61,896	$0	$61,896	23.0
3	Boiler Replacement	$1,020,000	($79)	$2,973	$0	$2,894	$32,046	$34,940	29.2
4	Premium Efficiency Pump Motors and VFDs	$75,000	$2,383	($688)	$0	$1,694	$0	$1,694	44.3
5	Rooftop Unit Replacement	$113,000	$5,126	$295	$0	$5,420	$0	$5,420	20.8
6	Split System AC & AHU Replacement	$4,570	$71	$0	$0	$71	$0	$71	64.8
7	Pipe and Valve Insulation	$3,593	$0	$1,964	$0	$1,964	$0	$1,964	1.8
8	Water Conservation	$604	$0	$495	$1,556	$2,051	$0	$2,051	0.3
9	Solar PPA	$0	$44,964	$0	$0	$44,964	$0	$44,964	0.0
10	Combined Heat & Power Unit	$275,000	$11,043	($3,412)	$0	$7,631	$0	$7,631	36.0
	TOTALS	$3,052,761	$154,200	$50,482	$1,556	$206,237	$32,046	$238,284	12.8

HILLSIDE PUBLIC SCHOOLS		ELECTRIC CONSUMPTION SAVINGS	ELECTRIC DEMAND SAVINGS	NATURAL GAS SAVINGS	New Solar PPA (kWh) SAVINGS	Water & Sewer (Gal) SAVINGS	TOTAL SITE ENERGY SAVINGS	TOTAL SOURCE ENERGY SAVINGS
ECM #	ENERGY CONSERVATION MEASURE	kWh	kW	THERMS	New Solar PPA (kWh)	Water & Sewer (Gal)	MMBTU	MMBTU
1	LED Lighting Replacement	589,222	127	-4,309	0	0	1,579	5,177
2	Upgrade/Install Control System	86,559	-1	69,536	0	0	7,249	8,128
3	Boiler Replacement	-778	0	3,938	0	0	391	406
4	Premium Efficiency Pump Motors and VFDs	25,084	0	-919	0	0	-6	143
5	Rooftop Unit Replacement	27,952	22	396	0	0	135	309
6	Split System AC & AHU Replacement	427	0	0	0	0	1	4
7	Pipe and Valve Insulation	0	0	2,621	0	0	262	275
8	Water Conservation	0	0	655	0	114,750	65	69
9	Solar PPA	397,109	0	0	-397,109	0	0	2,439
10	Combined Heat & Power Unit	78,368	35	-4,600	0	0	-193	266
	TOTALS	1,203,942	183	67,318	-397,109	114,750	9,485	17,215

ECM Breakdown by Greenhouse Gas Reduction

HILLSIDE PUBLIC SCHOOLS		Reduction of CO_2	Reduction of Nox	Reduction of SO_2	Reduction of Hg
ECM #	ENERGY CONSERVATION MEASURE	LBS	LBS	LBS	LBS
1	LED Lighting Replacement	597,725	520	1,302	2,741
2	Upgrade/Install Control System	908,784	722	191	403
3	Boiler Replacement	45,213	35	-2	-4
4	Premium Efficiency Pump Motors and VFDs	16,838	15	55	117
5	Rooftop Unit Replacement	35,385	30	62	130
6	Split System AC & AHU Replacement	469	0	1	2
7	Pipe and Valve Insulation	2,752	24	0	0.0
8	Water Conservation	688	6	0	0.0
9	Solar PPA	436,820	377	878	1,847
10	Combined Heat & Power Unit	32,389	32	173	365
TOTALS		2,077,064	1,763	2,661	5,600

Note: Factors used to calculate Greenhouse Gas Reductions are as follows:

	UTILITIES				
	ELECTRIC	NATURAL GAS	OTHER ENERGY #1	OTHER ENERGY #2	OTHER ENERGY #3
UNITS	kW & kWh	Therms	New Solar PPA (kWh)	Existing Solar PPA (kWh)	Water & Sewer (Gal)
BTU MULTIPLIER	3,412	100,000	3,412	3,412	0
CO2 EMISSION FACTOR (LB CO2/UNIT FUEL)	1.10	11.70	0.00	0.00	0.00
SITE-SOURCE MULTIPLIER	2.80	1.05	1.00	1.00	0.00

- ***NOx = (0.00095*kWh Savings) + (0.0092*Therm Savings)***
- ***SO2 = (0.00221*kWh Savings)***
- ***Hg = (0.00465*kWh Savings)***

ECM Breakdown by Building

Please see Appendix F for an ECM breakdown by building and ECMs evaluated but not included.

ECM Budgeting Narrative

The budgetary costs carried in the project are based on good faith estimates, contractor supplied budgets for similar ECMs on other recent projects and a database of actual installed costs for various ECMs.

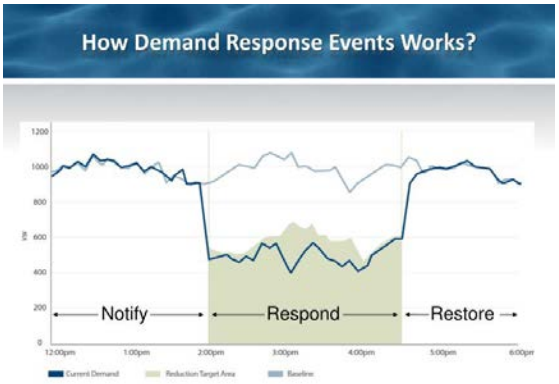
HILLSIDE PUBLIC SCHOOLS		INSTALLED COST
ECM #	ENERGY CONSERVATION MEASURE	$
1	LED Lighting Replacement	$134,403
2	Upgrade/Install Control System	$1,426,591
3	Boiler Replacement	$1,020,000
4	Premium Efficiency Pump Motors and VFDs	$75,000
5	Rooftop Unit Replacement	$113,000
6	Split System AC & AHU Replacement	$4,570
7	Pipe and Valve Insulation	$3,593
8	Water Conservation	$604
9	Solar PPA	$0
10	Combined Heat & Power Unit	$275,000
	TOTALS	$3,052,761

Demand Response & Project Incentives Analysis

Demand Response

Demand Response (DR) is a voluntary Pennsylvania-Jersey-Maryland (PJM) Interconnection program that allows end use customers to reduce their electricity usage during periods of higher power prices. In exchange, end-use customers are compensated through PJM members known as Curtailment Service Providers (CSPs) for decreasing their electricity use when requested by PJM.

Common reduction strategies used in Demand Response include:



- Manual or automatic load drop
- Energy management systems
- Load shedding strategies
- Lighting control strategies
- Backup generation
- Ice storage systems

Benefits of the program include:

- Significant source of new revenue
- Helps to ensure local grid reliability
- Reduces the need for new environmentally taxing energy generation

In the base product, customers commit to reducing their load at the direction of PJM during emergency conditions during the summer months. In the Capacity Performance product, the customer will need to be able to reduce load when directed during the entire year.

Direct Install

Created specifically for existing small to mid-sized facilities, Direct Install is a turnkey project solution that makes it easy and affordable to upgrade to high-efficiency equipment. The programs provides a free energy assessment and a participating contractor will work with you to cut your facility's energy costs by replacing lighting, HVAC and other outdated operational equipment with energy efficient alternatives.

To dramatically improve your payback on the project, the program pays up to 80% of retrofit costs to facilities within an Urban Enterprise Zone, Opportunity Zone, owned or operated by a local government, K-12 public school, or designated as affordable housing. Other types of facilities receive an incentive up to 70% of retrofit costs.

In 2019 the Direct Install program surpassed $200 million in incentives provided since its inception.

Systems and Equipment Addressed by the Program:

- Lighting & Lighting Controls
- Heating, Cooling & Ventilation (HVAC) and HVAC Controls
- Refrigeration
- Motors
- Variable Frequency Drives
- Hot Water Conservation Measures

SmartStart

The SmartStart Buildings Program offers incentives to upgrade many different technologies in your building. Equipment incentives are calculated based on type, efficiency, size, and application and are evaluated on a case-by-case basis. Starting July 1, 2019, enhanced incentives are now available for certain facilities.

SmartStart Buildings Program

Prescriptive Lighting Application

FY20 July 1, 2019 – June 30, 2020

MEASURE DESCRIPTION

Prescriptive Lighting incentives are available for simple, one for one replacements of existing fixtures with most common interior and exterior LED bulbs, retrofit kits and fixtures in commercial and industrial facilities. Incentive rates are pre-determined based on the LED category type as listed by Design Lights Consortium or ENERGY STAR®. Ground up new construction and major renovations of existing buildings are not eligible for Prescriptive Lighting incentives and should pursue incentives using the Performance Lighting application. For fixtures that are ENERGY STAR® or DLC listed under a category not appearing on this application may be provided incentives through the SmartStart Custom application. Please contact us to discuss the Custom application as additional requirements apply.

	Design Lights Consortium® Qualified Products	Measure Code	Incentive Rate
LED TUBES	2′ Linear Replacement Lamps (UL Type A, Type B, Type C)	PL1	$3/tube
	3′ Linear Replacement Lamps (UL Type A, Type B, Type C)	PL2	$5/tube
	4′ Linear Replacement Lamps (UL Type A, Type B, Type C)	PL3	$5/tube
	8′ Linear Replacement Lamps (UL Type A, Type B, Type C)	PL4	$10/tube
	U-Bend Linear Replacement Lamps (UL Type A, Type B, Type C)	PL5	$5/tube

	Design Lights Consortium® Qualified Products	Measure Code	Incentive Rate
EXTERIOR LIGHTING	Architectural Flood and Spot Luminaires	PL27	$75/fixture
	Bollards	PL28	$50/fixture
	Fuel Pump Canopy Luminaires	PL29	$100/fixture
	Outdoor Wall-Mounted Area Luminaires *(Includes Full-Cutoff, Non-Cutoff and Semi-cutoff)*	PL30	$100/fixture
	Outdoor Pole/Arm-Mounted Area and Roadway Luminaires *(Includes Retrofit Kits)*	PL31	$100/fixture
	Outdoor Pole/Arm-Mounted Decorative Luminaires *(Includes Retrofit Kits)*	PL32	$50/fixture
	Parking Garage Luminaires	PL33	$100/fixture
	Retrofit Kits for Large Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	PL34	$150/fixture

Combined Heat & Power

One of the goals of the State of New Jersey is to enhance energy efficiency through on-site power generation with recovery and productive use of waste heat, and to reduce existing and new demands to the electric power grid. The Board of Public Utilities seeks to accomplish this goal by providing generous financial incentives for Combined Heat & Power (CHP) and Fuel Cell (FC) installations.

Eligible CHP or Waste Heat to Power (WHP) projects must achieve an annual system efficiency of at least 60% (Higher Heating Value - HHV), based on total energy input and total utilized energy output. Mechanical energy may be included in the efficiency evaluation.

In order to qualify for incentives, systems must operate a minimum of 5,000 full-load equivalent hours per year (i.e. run at least 5,000 hours per year at full rated kW output). The Office of Clean Energy (OCE) may grant exceptions to this minimum operating hours requirement for Critical Facilities, provided the proposed system operates a minimum of 3,500 full-load equivalent hours per year and is equipped with blackstart and islanding capability. For this program, a Critical Facility is defined as any:

(a) public facility, including any federal, state, county, or municipal facility,

(b) non-profit and/or private facility, including any hospital, police station, fire station, water/wastewater treatment facility, school, multifamily building, or similar facility that:

(A) is determined to be either Tier 1 or critical infrastructure by the New Jersey Office of Emergency Management or the State Office of Homeland Security and Preparedness or

(B) could serve as a Shelter during a power outage. A Shelter is a facility able to provide food, sleeping arrangements, and other amenities to its residents and the community.

The CHP, FC, or WHP system must have a ten (10) year all-inclusive warranty. The warranty must cover the major components of the system eligible for the incentive, to protect against breakdown or degradation in electrical output of more than ten percent from the originally rated electrical output. The warranty shall cover the full cost of repair or replacement of defective components or systems, including coverage for labor costs to remove and reinstall defective components or systems. In the event the system warranty does not meet program requirements, customer must purchase an extended warranty or a ten (10) year maintenance/service contract. The cost of the ten (10) year warranty or service contract may be considered as part of the cost of the project. Notwithstanding the foregoing, public entities that are prohibited from entering into agreements for the full ten (10) years may comply with the 10-year requirement by:

(a) providing an agreement for the longest lawful term,

(b) committing the entity to purchase an agreement for the remaining years, and
(c) either:
(i) providing the vendor's commitment for specific pricing for those remaining years, or
(ii) assuming the pricing for the remaining years will increase by 2.5% each year

Incentive Structure:

Eligible Technologies	Size (Installed Rated Capacity)	Incentive ($/kW)	% of Total Cost Cap per project[3]	$ Cap per project[3]
Powered by non-renewable or renewable fuel source, or combination[4]: Gas Internal Combustion Engine Gas Combustion Turbine Microturbine Fuel Cells with Heat Recovery (FCHR)	≤500 kW	$2,000	30-40%[2]	$2 million
	>500 kW - 1 MW	$1,000		
	> 1 MW - 3 MW	$550	30%	$3 million
	>3 MW	$350		
Fuel Cell without Heat Recover (FCwoHR)	Same as above(1)	Applicable amount above	30%	$1 million
Waste Heat to Power	≤ 1MW	$1,000	30%	$2 million
	> 1MW	$500		$3 million

Footnotes:

(1) Incentives are tiered, which means the incentive levels vary based upon the installed rated capacity, as listed in the chart above. For example, a 4 MW CHP system would receive $2.00/watt for the first 500 kW, $1.00/watt for the second 500 kW, $0.55/watt for the next 2 MW and $0.35/watt for the last 1 MW (up to the caps listed).

(2) The maximum incentive will be limited to 30% of total project. For CHP-FC projects up to 1 MW, this cap will be increased to 40% where a cooling application is used or included with the CHP system (e.g. absorption chiller).

(3) Projects will be eligible for incentives shown above, not to exceed the lesser of % of total project cost per project cap or maximum $ per project cap. Projects installing CHP or FC with WHP will be eligible for incentive shown above, not to exceed the lesser caps of the CHP or FC incentive. Minimum efficiency will be calculated based on annual total electricity generated, utilized waste heat at the host site (i.e. not lost/rejected), and energy input.

(4) Systems fueled by a Class 1 Renewable Fuel Source, as defined by N.J.A.C. 14:8-2.5, are eligible for a 30% incentive bonus. If the fuel is mixed, the bonus will be prorated accordingly. For example, if the mix is 60/40 (60% being a Class 1 renewable), the bonus will be 18%. This bonus will be included in the final performance incentive payment, based on system performance and fuel mix consumption data. Total incentive, inclusive of bonus, shall not exceed above stipulated caps.

(5) CHP or FC systems located at Critical Facility and incorporating blackstart and islanding technology are eligible for a 25% incentive bonus. This bonus incentive will be paid with the second/Installation incentive payment. Total incentive, inclusive of bonus, shall not exceed above stipulated caps.

Incentive Payment Schedule

The total incentive is divided into three partial payments. Each stage of payment requires additional documentation and/or has conditions that must be met. At approval, the maximum incentive partial payment amounts are calculated by multiplying the total incentive by the ratios listed in the following table.

Purchase	Installation	Acceptance of 12 months post-installation performance data
30%	50%	20%

(e.g., for the purpose of calculating a payback period)

Pay for Performance Incentives

The P4P Guidelines require that a building be over the threshold of 200 kW based on the 12 months of utility bills submitted with the application. The program incentive structure is as follows:

NEW JERSEY'S CLEAN ENERGY PROGRAM
P4P
PAY FOR PERFORMANCE

Incentive #1: Energy Reduction Plan			
Incentive Amount:		$0.15	per sq ft
Minimum Incentive:		$7,500	
Maximum Incentive:		$50,000	or 50% of facility annual energy cost
Incentive #2: Installation of Recommended Measures			
Minimum Savings Target:		**15%**	
Electric Incentives	Base Incentive based on 15% savings:	$0.09	per projected kWh saved
	For each % over 15% add:	$0.005	
	Maximum Incentive:	$0.11	
Gas Incentives	Base Incentive based on 15 % savings:	$0.90	per projected Therm saved
	For each % over 15% add:	$0.05	
	Maximum Incentive:	$1.25	
Incentive Cap:		**25%**	**of total project cost**
Incentive #3: Post-Construction Benchmarking Report			
Minimum Savings Target:		**15%**	
Electric Incentives	Base Incentive based on 15% savings:	$0.09	per actual kWh saved
	For each % over 15% add:	$0.005	
	Maximum Incentive:	$0.11	
Gas Incentives	Base Incentive based on 15% savings:	$0.90	per actual Therm saved
	For each % over 15% add:	$0.05	
	Maximum Incentive:	$1.25	
Incentive Cap:		**25%**	**of total project cost**

Enhanced Incentives are available for certain facility types as listed below:

- Commercial and Industrial
- Owned or operated by Municipalities
- Owned or operated by K-12 public schools
- Located within Urban Enterprise Zones (UEZ)
- Located within Opportunity Zones (OZ)

Enhanced incentives are equal to an additional 100% of the incentives #2 and #3 listed above. The incentives are subject to a cap of 80% of the Applicant's cost for the project allocated between Incentive #2 and #3:

Incentive #2: Installation of Recommended Measures			
Enhanced Incentives	Electric Savings Additional Incentive	$0.09-$0.11	per projected kWh saved
	Gas Savings Additional Incentive	$0.90-$1.25	per projected Therm saved
	Incentive Cap:	40%	of total project cost
Incentive #3: Post-Construction Benchmarking Report			
Enhanced Incentives	Electric Savings Additional Incentive	$0.09-$0.11	per actual kWh saved
	Gas Savings Additional Incentive	$0.90-$1.25	per actual Therm saved
	Incentive Cap:	40%	of total project cost

Incentive Calculations

Estimated incentive values were calculated in accordance with the New Jersey Clean Energy Program Guidelines. The total incentive amount was calculated to be $456,764 in rebates and incentives - 100% has been applied to the project financial analysis (See Section 4). Please see below, Appendix E and Appendix F for building-by-building details.

PROJECT SUMMARY (DIRECT INSTALL)				
BUILDING	**% Incentive**	**Total Measure Cost**	**Estimated Incentive Amount**	**Total Cost to Customer**
Hillside High School	80%	$123,217	$98,574	$24,643
A.P. Morris Early Childhood Center	71%	$295,576	$209,013	$86,563
Walter O. Krumbiegel Middle School	80%	$61,404	$49,123	$12,281
Hurden Looker Elementary School	80%	$43,975	$35,180	$8,795
George Washington Elementary School	80%	$47,141	$37,713	$9,428
Calvin Coolidge Elementary School	80%	$15,546	$12,437	$3,109
Saybrook Annex	80%	$10,116	$8,093	$2,023
Administration Building	80%	$8,290	$6,632	$1,658
Total	75%	$605,265	$456,764	$148,501

No implied and/or written guarantee is being made with respective to the receipt of incentives. All incentives estimates carry inherent risks that may jeopardize the receipt of them. Therefore, Hillside Public Schools acknowledges and accepts that any project proposed should not rely on the receipt of incentives as a reason to implement it.

ECM 1 - LED Lighting Replacement

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
1	LED Lighting Replacement	✔	✔	✔	✔	✔	✔	✔	✔

Lighting retrofits can greatly reduce energy consumption and lower energy bills, while maintaining lighting levels and quality by upgrading lighting components to more efficient and advanced technologies. Upgrading technologies can also offer employees greater control over lighting, allowing for additional energy savings

Improvements in lighting technologies have led to increased lifetimes for components that will result in fewer failures and lengthen the time between maintenance activities.

The implementation of a routine maintenance program in addition to the lighting retrofit will greatly simplify the maintenance practices and reduce the operational costs.

Several new LED lighting lamp and fixture products are now available that were not viable a few years ago. While conventional HID fixtures are controlled only by photocell and timer technologies to turn either on and off, the use of LED fixtures and digital technology allows additional trimming and the use of motion/occupancy-based controls to limit the output of exterior fixtures when sufficient natural lighting is present or for periods when the parking lots and authority grounds are unoccupied.

Existing Conditions

Existing interior lighting at Hillside High School and the Administration Building

Scope of Work

- Retrofit the existing fixtures with new LED Bulbs through the NJ Direct Install rebate program – refer to Appendix E for the lighting line-by-line scope

ECM Calculations

Annual lighting run hours were estimated using BPU guidelines. Lighting hours were decreased as required to maintain reasonable lighting percentage of total baseline energy use in the eQuest models. See Section 2 for breakdowns of the baseline model energy consumption. The spreadsheet calculations below were entered into the eQuest models to determine energy savings. eQuest also accounts for HVAC cooling savings and heating increase from the reduction in lighting loads. A 57% coincidence factor was applied to the model demand savings to account for unknowns associated with estimating building peak demand.

LED Lighting										
BUILDING	SQFT	SPACE	kW_{base}	LPD_{base} (W/sf)	kW_{inst}	LPD_{inst} (W/sf)	ΔkW	CF	Annual Run Hours	Demand Savings (kW)
Hillside High School	157,000	INTERIOR	122.1	0.78	56.0	0.36	66.1	0.57	2,305	37.7
		EXTERIOR	4.5		2.3		2.2	0.57	4,380	1.3
A.P. Morris Early Childhood Center	89,000	INTERIOR	87.4	0.98	41.9	0.47	45.4	0.57	2,305	25.9
		EXTERIOR	1.9		1.2		0.6	0.57	4,380	0.4
Walter O. Krumbiegel Middle School	81,000	INTERIOR	78.1	0.96	36.6	0.45	41.6	0.57	2,000	23.7
		EXTERIOR	0.5		0.4		0.1	0.57	4,380	0.1
Hurden Looker Elementary School	65,000	INTERIOR	53.5	0.82	24.8	0.38	28.8	0.57	2,000	16.4
		EXTERIOR	0.2		0.2		0.0	0.57	4,380	0.0
George Washington Elementary School	45,080	INTERIOR	47.8	1.06	23.5	0.52	24.3	0.57	2,305	13.8
		EXTERIOR	1.3		1.1		0.3	0.57	4,380	0.2
Calvin Coolidge Elementary School	26,000	INTERIOR	16.7	0.64	7.3	0.28	9.4	0.57	2,305	5.4
		EXTERIOR	1.0		0.7		0.3	0.57	4,380	0.2
Saybrook Annex	12,000	INTERIOR	14.3	1.19	6.7	0.56	7.6	0.57	1,290	4.3
		EXTERIOR	0.2	0.0	0.2		0.0	0.57	4,380	0.0
Administration Building	11,000	INTERIOR	9.3	0.85	4.2	0.38	5.1	0.57	2,305	2.9
		EXTERIOR	1.0	0.1	0.4		0.6	0.57	4,380	0.3

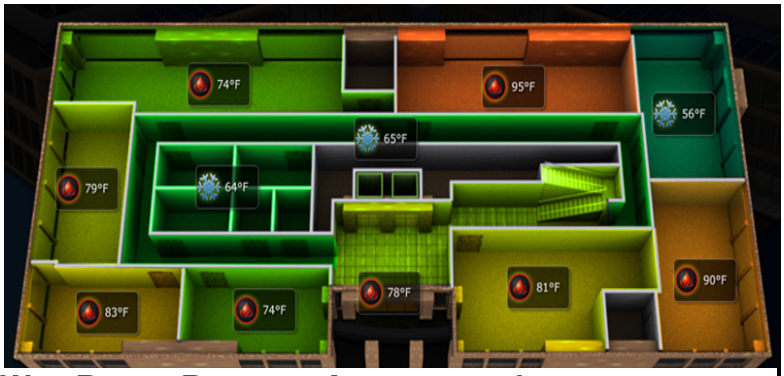
The simulation results from the LED Lighting Replacement are shown below.

LED Lighting Replacement Savings							
BUILDING	MODEL % DEMAND SAVINGS	COINCIDENCE FACTOR	kW Savings	MODEL % ELECTRIC SAVINGS	kWh SAVINGS	MODEL % THERM SAVINGS	THERM SAVINGS
Hillside High School	24.3%	57%	30	27.8%	192,891	-1.4%	(1,365)
A.P. Morris Early Childhood Center	17.4%	57%	21	21.7%	118,860	-2.7%	(920)
Walter O. Krumbiegel Middle School	31.8%	57%	28	32.0%	94,975	-2.2%	(739)
Hurden Looker Elementary School	23.9%	57%	16	31.1%	69,191	-1.3%	(350)
George Washington Elementary School	15.2%	57%	11	17.2%	58,626	-2.1%	(493)
Calvin Coolidge Elementary School	19.4%	57%	5	18.5%	26,337	-1.7%	(254)
Saybrook Annex	22.0%	57%	7	31.1%	10,746	-1.1%	(86)
Administration Building	20.3%	57%	10	30.2%	17,595	-1.4%	(101)

ECM 2 - Energy Management System

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
2	Upgrade/Install Control System	✔	✔	✔	✔	✔	✔		

A direct digital controls (DDC) building automation systems (BAS) is an intelligent network of sensors, operators, processors, and a web-based user interface that controls and monitors electrical and mechanical building systems. Such systems provide automated control and monitoring of the heating, ventilation, lighting and other needs of a building or group of buildings. An effective BAS can provide facilities with monitoring and reporting of all utility consumption data.

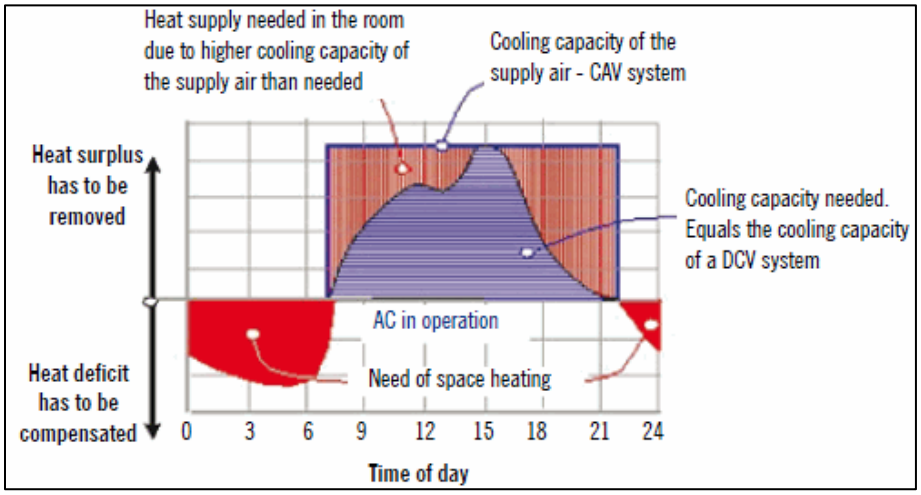


WEB BASED BUILDING AUTOMATION INTERFACE

By being able to monitor building systems from a central location, the operator is able to receive alerts and anticipate problems when a failure or troublesome condition occurs. Also, the data obtained from the BAS can then be used to produce a trend analysis and annual consumption forecasts. From these trends, energy saving strategies can be developed. Consumption can be managed through advanced control strategies such as time scheduling, optimum start and stop, night set-back, demand controlled ventilation, and peak demand limiting. Once trained, Operators are able to use the BAS to diagnose current building system problems as well as tailor specific energy savings strategies that utilize the full capability of the given BAS.

Demand Control Ventilation - Background & Existing Conditions

In most commercial occupancies, ventilation is provided to deal with two types of indoor pollution: (1) odors from people, and (2) off-gassing from building components and furniture. When a space is vacant, it has no people pollution, so the people-related ventilation rate is not needed. Many types of high-occupancy spaces, such as classrooms, multipurpose rooms, theaters, conference rooms, or lobbies have ventilation designed for a high peak occupancy that rarely occurs. Ventilation can be reduced during the many hours of operation when spaces are vacant or at lower than peak occupancy. When ventilation is reduced, building owners or operators save energy because it is not necessary to heat or cool as much outside air. In colder climates, heating for ventilation air is greater and DCV saves the most energy.

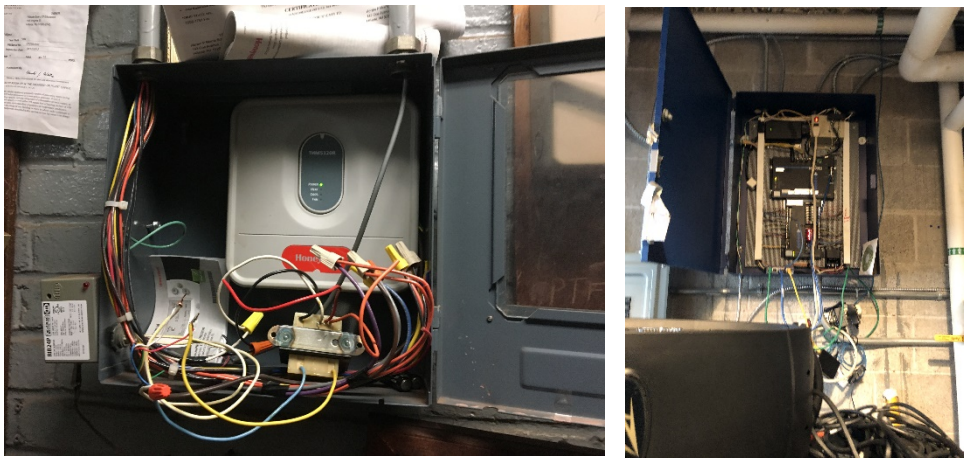


Demand Control Ventilation Operation

The objective of a CO2 control strategy is to modulate ventilation to maintain target cfm/person ventilation rates based on actual occupancy. The strategy should allow for reduced overall ventilation during periods of less than full occupancy which will save energy. Typical control approaches have used a proportional or proportional-integral control algorithm to modulate ventilation between a base ventilation rate established for non-occupant-related sources and the design ventilation rate for the space. Typically, modulation of outside air above base ventilation begins when indoor CO2 is 100 ppm above outside levels and continues until the target CO2 levels are reached and the design ventilation rate is provided.

Duct sensors are best used where a single space or multiple spaces with common occupancy patterns are being ventilated. An example of this approach would be to place a sensor in the return duct of an air handler that serves multiple classrooms, using an upper limit set point of 500 or 600 ppm CO2 above ambient (instead of 700 ppm). Polarized-media electronic air cleaners can allow for the upper CO2 limit to be raised to 1,500 ppm. This approach works best when the AHU system is serving spaces that are occupied with very similar schedules and rates.

Existing Conditions



Existing Conditions at A.P Morris Early Childhood Center and Calvin Coolidge Elementary School

Scope of Work – Web Based, District Wide Energy Management System

This measure involves replacing the existing control system with an open-protocol, web-based Energy Management system. This will include replacing control valves with DDC for heating equipment, outdoor air dampers, start up and shut down of the exhaust fans and sensors for controlling these devices. All new equipment will also be integrated into a District-wide front-end. District assigned operators will have remote access to system

The proposed energy management system will be able to vary the operation of the unit, outdoor air damper, space temperature set points, and air conditioning systems (if applicable). This will include zone scheduling, temperature setback and unoccupied outdoor air shut off. Each building will be provided with electric and natural gas submetering for continuous monitoring and reporting of building energy consumption via Energy Dashboards.

A more specific scope of work includes:

- Building Automation Systems shall be accessible via the Internet.
- User shall have the ability to view the system graphics, change set points, perform overrides, view schedules, change schedules, view alarms, acknowledge alarms, view trend information as well as print, save & e-mail trend information.
- A Secure Internet Connection to the District Network shall be provided and managed by the District IT Department.
- 3-D Graphics Package will be provided for navigating the Building Automation System as well as viewing floor plans, system graphics and equipment graphics.
- An Energy Monitoring Dashboard will be provided to display and report Gas & Electrical Consumption for each building detailed in this proposal.

- The District Facilities and IT Staff will receive full training on the operation of the system.
- Portable tablets will be provided for remote and mobile BAS Interface.
- Pneumatic controls will be replaced with direct digital controls
- If the existing outside air (OA) dampers are currently 2 position, controllers and actuators will be upgraded as required in order to provide modulating damper control

REMOTE ACCESS AND MOBILE INTERFACE

- In addition to adding any CO2 sensors or damper control upgrades for demand control ventilation, re-programming of unit's controller is required. Humidity sensors (RH) are just for monitoring.

ECM Calculations

Energy Savings from the installation of a District Wide Energy Management System were modeled using eQuest. The simulation results are shown below.

Energy Management System Savings						
BUILDING	MODEL % ELECTRIC SAVINGS	kWh SAVINGS	MODEL % DEMAND SAVINGS	kW SAVINGS	MODEL % THERM SAVINGS	THERM SAVINGS
Hillside High School	3.5%	24,239	0.0%	0	31.8%	31,942
A.P. Morris Early Childhood Center	1.4%	7,592	-0.1%	(0)	24.6%	8,503
Walter O. Krumbiegel Middle School	1.4%	4,127	-0.1%	(0)	25.9%	8,693
Hurden Looker Elementary School	4.5%	10,083	-0.5%	(1)	38.7%	10,061
George Washington Elementary School	11.9%	40,702	0.0%	0	26.1%	6,071
Calvin Coolidge Elementary School	-0.1%	(184)	-0.2%	(0)	28.0%	4,266

Note:

- See setback temperatures and schedules below used in eQuest models. In general, pneumatically controlled buildings do not have temperature setbacks and buildings with DDC controls are set back at 5 pm. This ECM sets all buildings back at 5 pm and sets the minimum ventilation to 5% of supply air when the spaces are unoccupied. The existing building temperature set points, setbacks and design ventilation rates are unchanged for those buildings with DDC already.

Baseline Temperature Schedules

Pneumatic Controls (Hillside HS, WOK Middle School, Hurden Looker ES, Saybrook Annex, Admin Bldg.)						
	Heating - 1/1 to 4/30, 10/1 to 12/31			Cooling – 5/1 to 9/30		
	Occ Hrs	Occ Heat Setpoint	Unocc Heat Setpoint	Occ Hrs	Occ Cool Setpoint	Unocc Cool Setpoint
Monday-Thursday	5am-5pm	75F	75F	5am-5pm	75F	75F
Friday	5am-5pm	75F	75F	5am-5pm	75F	75F
Saturday – Sunday	5am-5pm	75F	75F	5am-5pm	75F	75F
Holiday	5am-5pm	75F	75F	5am-5pm	75F	75F

DDC Controls (A.P. Morris ECC, George Washington ES, Calvin Coolidge ES)						
	Heating - 1/1 to 4/30, 10/1 to 12/31			Cooling – 5/1 to 9/30		
	Occ Hrs	Occ Heat Setpoint	Unocc Heat Setpoint	Occ Hrs	Occ Cool Setpoint	Unocc Cool Setpoint
Monday-Thursday	5am-5pm	70F	65F	5am-5pm	73F	76F
Friday	5am-5pm	70F	65F	5am-5pm	73F	76F
Saturday – Sunday	N/A	N/A	65F	N/A	N/A	76F
Holiday	N/A	N/A	65F	N/A	N/A	76F

Proposed Temperature Schedules

DDC Controls (Typical)						
	Heating - 1/1 to 4/30, 10/1 to 12/31			Cooling – 5/1 to 9/30		
	Occ Hrs	Occ Heat Setpoint	Unocc Heat Setpoint	Occ Hrs	Occ Cool Setpoint	Unocc Cool Setpoint
Monday-Thursday	5am-5pm	70F	65F	5am-5pm	73F	76F
Friday	5am-5pm	70F	65F	5am-5pm	73F	76F
Saturday – Sunday	N/A	N/A	65F	N/A	N/A	76F
Holiday	N/A	N/A	65F	N/A	N/A	76F

Proposed Demand Controlled Ventilation Schedules

DCV Schedule - Classroom						
	School Year - 1/1 to 6/19, 9/5 to 12/31			Summer Break– 6/20 to 9/4		
	Occ Hrs	Occ OA	Unocc OA	Occ Hrs	Occ OA	Unocc OA
Monday-Thursday	6am-5pm	Design OA	5% of SA CFM	8am-3pm	Design OA	5% of SA CFM
Friday	6am-5pm	Design OA	5% of SA CFM	8am-3pm	Design OA	5% of SA CFM
Saturday – Sunday	N/A	N/A	5% of SA CFM	N/A	N/A	5% of SA CFM
Holiday	N/A	N/A	5% of SA CFM	N/A	N/A	5% of SA CFM

DCV Schedule - Cafeteria						
	School Year - 1/1 to 6/19, 9/5 to 12/31			Summer Break– 6/20 to 9/4		
	Occ Hrs	Occ OA	Unocc OA	Occ Hrs	Occ OA	Unocc OA
Monday-Thursday	10am-2pm	Design OA	5% of SA CFM	10am-2pm	10% of SA CFM	5% of SA CFM
Friday	10am-2pm	Design OA	5% of SA CFM	10am-2pm	10% of SA CFM	5% of SA CFM
Saturday – Sunday	N/A	N/A	5% of SA CFM	N/A	N/A	5% of SA CFM
Holiday	N/A	N/A	5% of SA CFM	N/A	N/A	5% of SA CFM

DCV Schedule - Gym						
	School Year - 1/1 to 6/19, 9/5 to 12/31			Summer Break– 6/20 to 9/4		
	Occ Hrs	Occ OA	Unocc OA	Occ Hrs	Occ OA	Unocc OA
Monday-Thursday	7am-6pm	20% of SA CFM	5% of SA CFM	7am-3pm	Design OA	5% of SA CFM
Friday	7am-6pm	20% of SA CFM	5% of SA CFM	7am-3pm	Design OA	5% of SA CFM
Saturday – Sunday	7am-4pm	20% of SA CFM	5% of SA CFM	7am-4pm	20% of SA CFM	5% of SA CFM
Holiday	N/A	N/A	5% of SA CFM	N/A	N/A	5% of SA CFM

DCV Schedule- Auditorium						
	School Year - 1/1 to 6/19, 9/5 to 12/31			Summer Break– 6/20 to 9/4		
	Occ Hrs	Occ OA	Unocc OA	Occ Hrs	Occ OA	Unocc OA
Monday-Thursday	7am-6pm	20% of SA CFM	5% of SA CFM	8am-3pm	10% of SA CFM	5% of SA CFM
Friday	7am-6pm	20% of SA CFM	5% of SA CFM	8am-3pm	20% of SA CFM	5% of SA CFM
Saturday – Sunday	7am-4pm	20% of SA CFM	5% of SA CFM	7am-3pm	20% of SA CFM	5% of SA CFM
Holiday	N/A	N/A	5% of SA CFM	N/A	N/A	5% of SA CFM

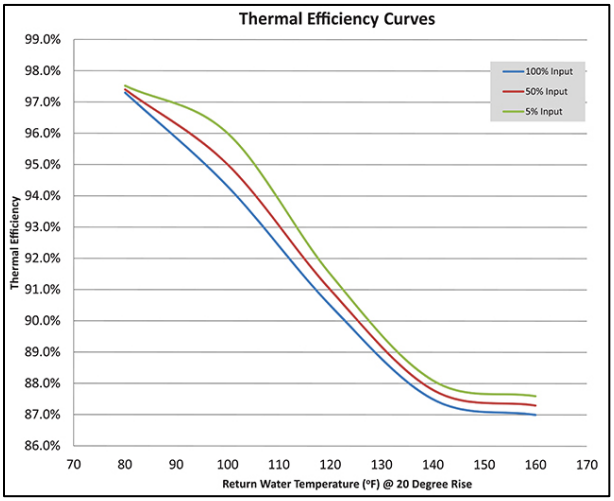
DCO Energy Efficiency Division
100 Lenox Drive
Lawrenceville, NJ 08648

ECM 3 - Boiler Replacement

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
3	Boiler Replacement					✔	✔		

Background & Existing Conditions

Old, oversized boiler systems have efficiencies in the range of 56%–75%. A condensing boiler hot water heating system can achieve efficiencies as high as 97%, converting nearly all the fuel to useful heat. The efficiency of the boiler increases at lower return water temperature. Lower return water temperatures allow more water vapor from the exiting flue gas to condense, allowing its latent heat of vaporization to be recovered.



Existing Conditions

George Washington has (2) 3,608 MBH Weil-McLain steam boilers that feed a steam to hot water heat exchanger. Existing boilers to be replaced with (2) 2,500 MBH condensing hot water boilers.

Calvin Coolidge has (2) 2,092 MBH Cleaver Brooks steam boilers that feed a steam to hot water heat exchanger. Existing boilers to be replaced with (2) 1,500 MBH condensing hot water boilers.

ECM Calculations

Energy Savings from the installation of higher efficiency condensing boilers were modeled using eQuest. The condensing boilers were modeled at 87% efficiency at 160F return water. The default eQuest condensing boiler efficiency curve increases efficiency as return water temperature decreases. The new control system will utilize hot water reset – 180F supply at 20F ambient to 120F supply at 55F ambient. A 15:1 turndown ratio was used to limit cycling losses. A combined heat and power unit is also being installed at George Washington Elementary School which will reduce the hot water load on the boiler by approximately 43%. The simulation results from the higher efficiency units are shown below.

Boiler Replacement					
BUILDING	MODEL % ELECTRIC SAVINGS	kWh SAVINGS	MODEL % THERM SAVINGS	CHP REDUCTION OF BOILER LOAD (%)	THERM SAVINGS
George Washington Elementary School	-0.2%	(702)	12.9%	42.7%	1,718
Calvin Coolidge Elementary School	-0.05%	(76)	14.6%	0.0%	2,220

ECM 4 - Premium Efficiency Pump Motors and VFDs

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
4	Premium Efficiency Pump Motors and VFDs					✔	✔		

Background & Existing Conditions

Premium efficiency electric motors will help optimize fan and pump efficiency, reduce electrical power consumption and improve system reliability. These motors are designed to run cooler, last longer, and require less maintenance than the existing standard efficiency motors. Premium efficiency motors can be as high as 95% efficient (as opposed to standard efficiency motors of 78% to 88%) and are capable of operating at varying speeds allowing Variable Frequency Drive (VFD) installations where applicable.

Existing Conditions

George Washington Elementary School has (2) constant speed, 5 HP hot water pumps and (2) constant speed, 1 HP hot water pumps. Existing equipment to be replaced with variable speed pumps.

Calvin Coolidge Elementary School has (2) constant speed, 5 HP hot water pumps. Existing equipment to be replaced with variable speed pumps.

ECM Calculations

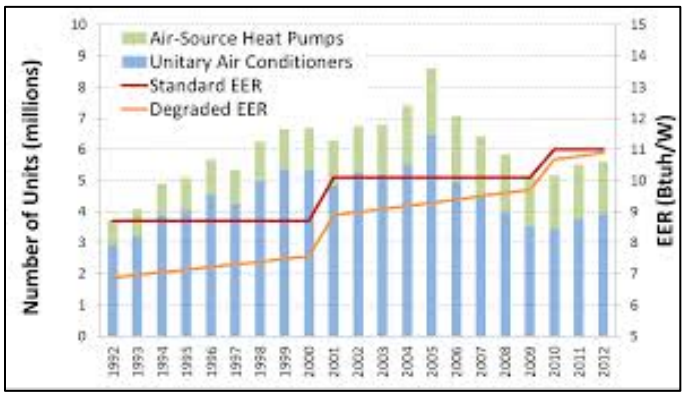
Energy Savings from the installation of variable speed pumps were modeled using eQuest. Pumps were modeled at a minimum speed of 80% to be conservative. The simulation results are shown below.

VFD Savings						
BUILDING	MODEL % ELECTRIC SAVINGS	kWh SAVINGS	MODEL % DEMAND SAVINGS	kW SAVINGS	MODEL % THERM SAVINGS	THERM SAVINGS
George Washington Elementary School	5.2%	17,893	0.0%	0	-2.8%	(639)
Calvin Coolidge Elementary School	5.1%	7,191	0.0%	0	-1.8%	(280)

ECM 5 - Rooftop Unit Replacement

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
5	Rooftop Unit Replacement	✔	✔						

Background & Existing Conditions



Many commercial buildings are operating with older and inefficient HVAC systems. The average life expectancy of commercial HVAC RTU equipment is 10 to 15 years—which means that many commercial buildings are ready for new natural gas rooftop units. Technology improvements and demand have led to greater energy efficiency and more choices in systems. Installing new, higher efficiency units will provide energy savings as well as deliver enhanced technology and controls of the RTUs when compared to the existing units.

The following RTUs will be replaced with high efficiency units:

HVAC Replacement Scope	
BUILDING	**Description**
Hillside High School	Packaged RTU (Electric Only): 7.5-Tons / RTU 1
A.P. Morris Early Childhood Center	Packaged RTU (Gas Heating): 15-Tons / RTU-1
	Packaged RTU (Gas Heating): 15-Tons / RTU-4
	Packaged RTU (Gas Heating): 15-Tons / RTU-5
	Packaged RTU (Gas Heating): 15-Tons / RTU-6
	Packaged RTU (Gas Heating): 12.5-Tons / RTU-3
	Packaged RTU (Gas Heating): 12.5-Tons / RTU-7
	Packaged RTU (Gas Heating): 10-Tons / RTU-10
	Packaged RTU (Gas Heating): 6-Tons / RTU-8
	Packaged RTU (Gas Heating): 6-Tons / RTU-9

Existing Conditions

Existing roof top units at A.P. Morris Early Childhood Center and Hillside High School

ECM Calculations

Energy Savings from the installation of higher efficiency Packaged Rooftop Units were modeled using eQuest. Gas fired furnace and DX cooling efficiency were increased to comply with the minimum efficiency required for new units in the P4P Guidelines. The simulation results from the higher efficiency units are shown below.

RTU Replacement Savings						
BUILDING	MODEL % ELECTRIC SAVINGS	kWh SAVINGS	MODEL % DEMAND SAVINGS	kW SAVINGS	MODEL % THERM SAVINGS	THERMS SAVINGS
Hillside High School	0.5%	3,366	0.9%	2	-0.01%	(11)
A.P. Morris Early Childhood Center	4.5%	24,586	9.7%	20	1.2%	407

ECM 6 - Split System AC/AHU Replacement

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
6	Split System AC & AHU Replacement	✔							

Background & Existing Conditions

Variable speed condensing systems give you precise comfort by running at the exact speed needed to keep your home comfortable. This allows the variable speed compressor, outdoor fan, and indoor fan to vary operating speed and BTU as the temperature outside changes, slowing down or speeding up gradually in as little as 1/10 of 1% increments to keep comfort within 1/2° of the thermostat setting.

The following split system units will be replaced with high efficiency units:

Split System AC Replacement Scope	
BUILDING	**CATEGORY**
Hillside High School	Electric Split System A/C (Single-Phase): 4-Tons / Roof

ECM Calculations

Energy Savings from the installation of new split system units were modeled using eQuest. The cooling efficiency was increased to comply with P4P minimum required efficiencies. The simulation results are shown below.

Split System Replacement Savings						
BUILDING	MODEL % ELECTRIC SAVINGS	kWh SAVINGS	MODEL % DEMAND SAVINGS	kW SAVINGS	MODEL % THERM SAVINGS	THERMS SAVINGS
Hillside High School	0.06%	427	0.14%	0.29	0.00%	0

ECM 7 – Pipe and Valve Insulation

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
7	Pipe and Valve Insulation	✔	✔	✔	✔	✔	✔	✔	

Piping insulation is a critical part of energy management. It controls condensation, pipe freezing, and noise amongst other things. A percentage of heating (or cooling) can be lost through conduction if a pipe is not properly insulated.

Higher operational costs are a direct result of this for both heating and cooling systems. This ECM entails wrapping the existing bare metal pipe with an approved high-performance fiberglass insulation jacketing material.

UNINSULATED HOT WATER PIPING

Existing Conditions

Damaged pipe and valve insulation at WOK Middle School and George Washington Elementary School

Scope of Work

Insulation will be installed on exposed pipes and valves through the NJ Direct Install rebate program – refer to Appendix E for the line-by-line scope.

ECM Calculations

Pipe and Valve Insulation Savings													
BUILDING	LENGTH (FT)	DIAMETER (IN)	SURFACE TEMP	AMBIENT TEMP	OPERATION HOURS/YEAR	HEATING EFFICIENCY (%)	R-VALUE (BARE)	R-VALUE (INSULATED)	BARE HEAT LOSS (BTU/HR/FT)	BARE ENERGY USE (THERM)	INSULATED HEAT LOSS (BTU/HR/FT)	INSULATED ENERGY USE (THERM)	FUEL SAVINGS (THERM)
Hillside High School	149	4	210	80	4,986	78%	2	10	68.03	648.31	13.6	129.7	519
				80	4,986	78%	2	10	0.00	0.00	0.0	0.0	0
				80	4,986	78%	0.5	10	0.00	0.00	0.0	0.0	0
A.P. Morris Early Childhood Center	312	4	210	80	4,986	78%	2	10	68.03	1,357.07	13.6	271.4	1,086
				80	4,986	78%	2	10	0.00	0.00	0.0	0.0	0
				80	4,986	78%	0.5	10	0.00	0.00	0.0	0.0	0
Walter O. Krumbiegel Middle School	118	4	210	80	4,986	78%	2	10	68.03	513.61	13.6	102.7	411
				80	4,986	78%	2	10	0.00	0.00	0.0	0.0	0
				80	4,986	78%	0.5	10	0.00	0.00	0.0	0.0	0
Hurden Looker Elementary School	55	4	210	80	4,986	78%	2	10	68.03	239.19	13.6	47.8	191
				80	4,986	78%	2	10	0.00	0.00	0.0	0.0	0
				80	4,986	78%	0.5	10	0.00	0.00	0.0	0.0	0
George Washington Elementary School	64	4	210	80	4,986	78%	2	10	68.03	279.53	13.6	55.9	224
				80	4,986	78%	2	10	0.00	0.00	0.0	0.0	0
				80	4,986	78%	0.5	10	0.00	0.00	0.0	0.0	0
Calvin Coolidge Elementary School	27	4	210	80	4,986	78%	2	10	68.03	117.42	13.6	23.5	94
				80	4,986	78%	2	10	0.00	0.00	0.0	0.0	0
				80	4,986	78%	0.5	10	0.00	0.00	0.0	0.0	0
Saybrook Annex	28	4	210	80	4,986	78%	2	10	68.03	120.90	13.6	24.2	97
				80	4,986	78%	2	10	0.00	0.00	0.0	0.0	0
				80	4,986	78%	0.5	10	0.00	0.00	0.0	0.0	0

ECM 8 – Water Conservation

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
8	Water Conservation	✔	✔	✔	✔	✔	✔	✔	✔

It takes a considerable amount of energy to deliver and treat the water you use every day. For example, letting your faucet run for five minutes uses about as much energy as letting a 60-watt light bulb run for 22 hours. Pump and water heating energy is required to deliver hot water to the end user. Installing new fixtures and aerators can conserve substantial energy while reducing water consumption as well.

New low flow fixtures are rated at 0.5 gallons per minute and can be fitted with time based automatic shut-offs.

NEW FIXTURE WITH AERATOR

Scope of Work

Existing faucets within the facilities will be replaced with new low flow aerators through the NJ Direct Install rebate program – refer to Appendix E for the line-by-line scope.

Low Flow Aerator Scope		
BUILDING	**CATEGORY**	**QUANTITY**
Hillside High School	Low-Flow Aerators (Lavatory) / Rest Rooms	29
	Low-Flow Aerators (Kitchen) / Kitchen	1
	Low-Flow Showerheads / Locker Rooms	2
	Pre-Rinse Spray Valves / Kitchen	1
A.P. Morris Early Childhood Center	Low-Flow Aerators (Lavatory) / Rest Rooms	34
	Low-Flow Aerators (Kitchen) / Kitchen	28
	Pre-Rinse Spray Valves / Kitchen	1
Walter O. Krumbiegel Middle School	Low-Flow Aerators (Lavatory) / Restroom's	10
	Low-Flow Aerators (Kitchen) / Kitchen	2
	Pre-Rinse Spray Valves / Kitchen	2
Hurden Looker Elementary School	Low-Flow Aerators (Lavatory) / Rest Rooms	26
George Washington Elementary School	Low-Flow Aerators (Kitchen) / kitchen, rm-114, rm-109,	5
	Low-Flow Showerheads / classrooms, locker rooms	8
Calvin Coolidge Elementary School	Low-Flow Aerators (Lavatory) / Rest Rooms	20
Saybrook Annex	Low-Flow Aerators (Lavatory) / Restroom	2
Administration Building	Low-Flow Aerators (Lavatory) / Restroom	5

ECM Calculations

Water conservation from faucet aerators is estimated using occupancy levels and existing versus proposed flow rates. Approximately 75% of the faucet flow is estimated to be hot water. Domestic water heater savings are calculated using 120F supply and 47F inlet temperatures, giving a 73F temperature rise.

Water Conservation												
BUILDING NAME	**Occupancy**			**Restroom Faucets**								**Total Water Usage**
	Qty	**Days/Wk**	**Wk/Yr**	**Existing Daily Use / Person**	**Proposed Daily Use / Person**	**Existing (GPM)**	**Proposed (GPM)**	**Existing Duration (Min)**	**% HW**	**Existing (Gal/Yr)**	**Proposed (Gal/Yr)**	**Savings (Gal/Yr)**
Hillside High School	500	5	40	1	1	2.0	0.5	0.25	75%	50,000	12,500	37,500
A.P. Morris Early Childhood Center	150	5	40	1	1	2.0	0.5	0.25	75%	15,000	3,750	11,250
Walter O. Krumbiegel Middle School	500	5	40	1	1	2.0	0.5	0.25	75%	50,000	12,500	37,500
Hurden Looker Elementary School	150	5	40	1	1	2.0	0.5	0.25	75%	15,000	3,750	11,250
George Washington Elementary School	100	5	40	1	1	2.0	0.5	0.25	75%	10,000	2,500	7,500
Calvin Coolidge Elementary School	100	5	40	1	1	2.0	0.5	0.25	75%	10,000	2,500	7,500
Saybrook Annex	10	5	40	1	1	2.0	0.5	0.25	75%	1,000	250	750
Administration Building	20	5	40	1	1	2.0	0.5	0.25	75%	2,000	500	1,500

Domestic Hot Water Savings from Conservation

BUILDING NAME	Hot Water Usage (Gal/Yr)		Water Temp Rise (F)		Building DHW Demand (MBTU/YR)		Domestic Water Heater Efficiency	Gas Savings (Therms)
	Existing	Proposed	Baseline	Proposed	Baseline	Proposed		
Hillside High School	37,500	9,375	73	73	22,831	5,708	80%	214
A.P. Morris Early Childhood Center	11,250	2,813	73	73	6,849	1,712	80%	64
Walter O. Krumbiegel Middle School	37,500	9,375	73	73	22,831	5,708	80%	214
Hurden Looker Elementary School	11,250	2,813	73	73	6,849	1,712	80%	64
George Washington Elementary School	7,500	1,875	73	73	4,566	1,142	80%	43
Calvin Coolidge Elementary School	7,500	1,875	73	73	4,566	1,142	80%	43
Saybrook Annex	750	188	73	73	457	114	80%	4
Administration Building	1,500	375	73	73	913	228	80%	9

DCO Energy Efficiency Division
100 Lenox Drive
Lawrenceville, NJ 08648

ECM 9 – Solar Power Purchase Agreement

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
9	Solar PPA	✔			✔	✔	✔		✔

The renewable energy industry is one of the fastest growing and evolving components to modern building system design. The ability to capture solar energy will provide long term economic and environmental benefits. Technology improvements are rapidly evolving as well, and the market is flooded with new products with new features that have only been available within the last few years, with promising new technologies and updates on the verge of becoming available to the market.

PHOTOVOLTAIC (PV) SOLAR ARRAY

Clients have the opportunity to purchase power through a Power Purchase Agreement, predetermining fixed low rates for the duration of the agreement, without having to manage any part of the process. This allows the solar provider to manage compliance reporting, filings, and maintenance of the equipment for the entire length of the contract.

A solar PPA makes going green easy. Work takes place around the client's schedule, and a safe and functional environment is maintained throughout installation of the system.

Assessment
A preliminary assessment of your facilities will allow for the design of a system that meets your energy needs and environmental goals.

Agreement
Power Purchase Agreements allow for the sale of the energy produced on a per kWh basis, while a lease agreement allows the solar provider to access the system they own so that they may monitor and maintain the system for you.

Installation
A turnkey system includes the design, construction, commissioning, and interconnection with local utilities.

Monitoring
The solar provider monitors the PV installation to ensure performance and for ease of billing. The client has the capability to track output and environmental benefits online.

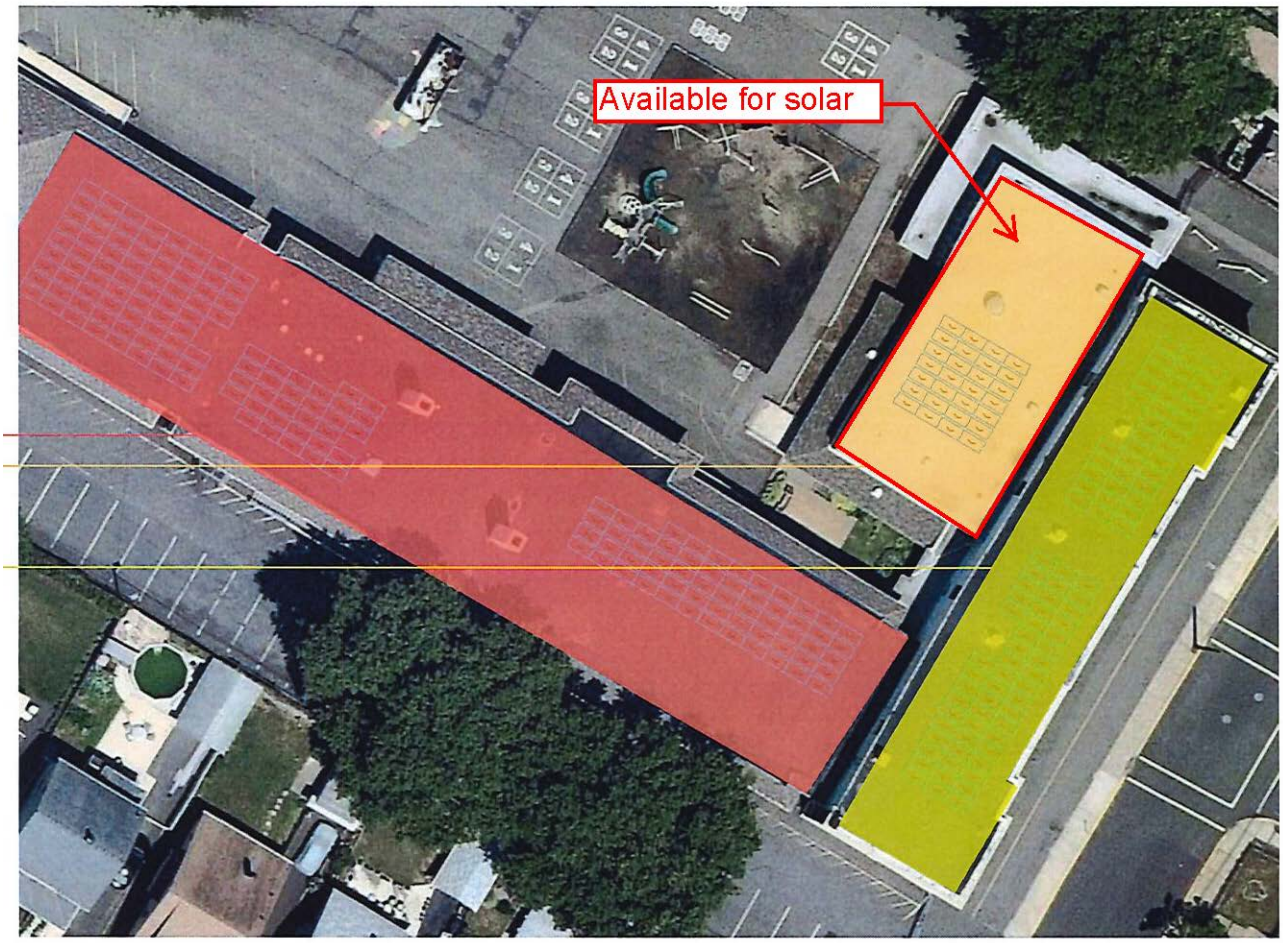
Management
The solar provider handles all compliance and reporting requirements for the client. They will file documentation with federal and state agencies and participate in state and utility REC markets.

Scope of Work

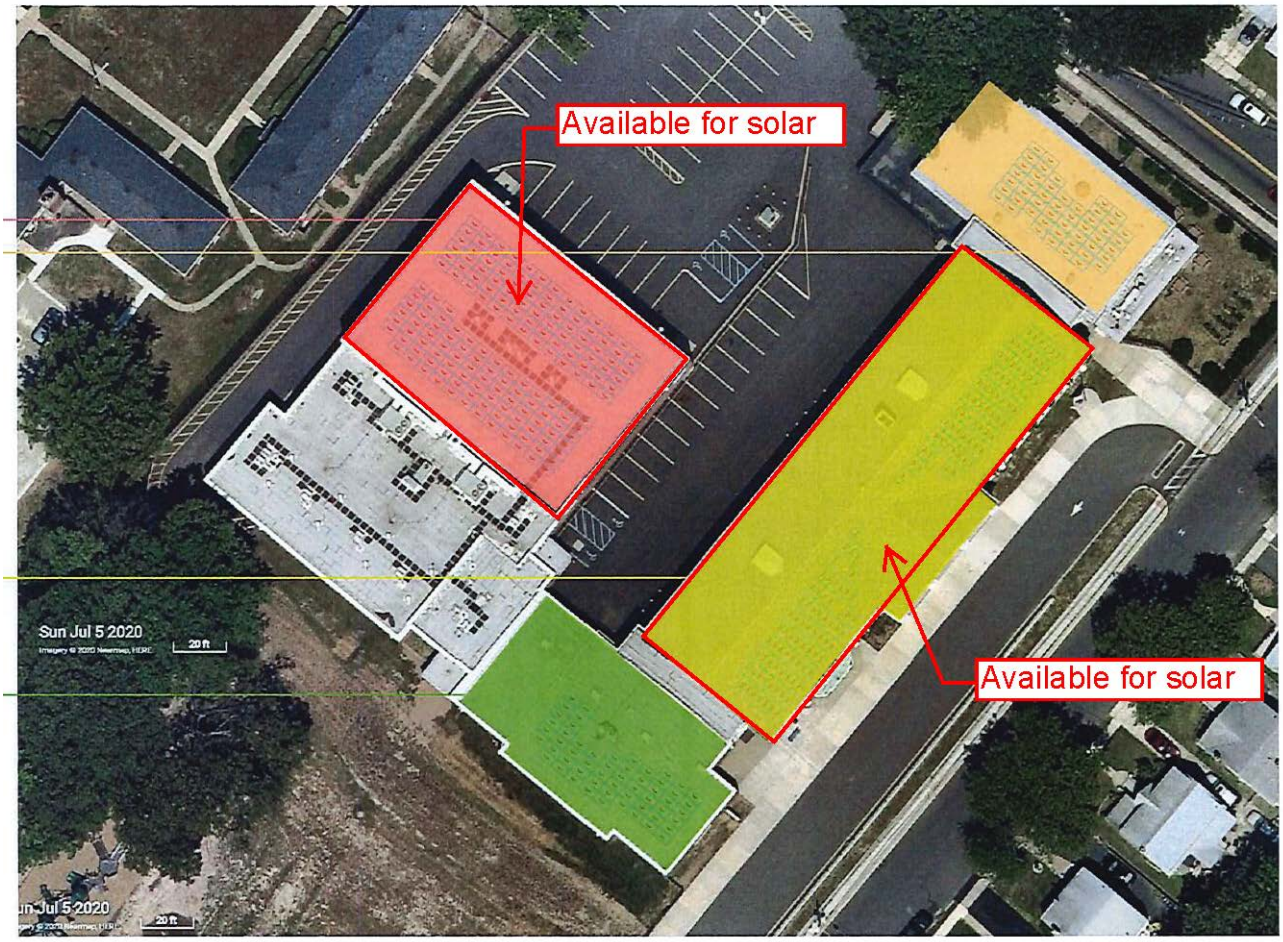
- Savings estimates are calculated from proposals received during the Hillside Public Schools Solar PPA RFP process
- Installation of the Solar PV System shall be in accordance with NFPA 70. NEC 2011. ARTICLE 690.Solar Photovoltaic (PV) Systems.
- PPA Firm will receive any incentives available
- Solar will be installed on newer roofs that do not require upgrades/warranty extensions to host panels

HILLSIDE HIGH SCHOOL

HURDEN LOOKER ELEMENTARY SCHOOL



GEORGE WASHINGTON ELEMENTARY SCHOOL



CALVIN COOLIDGE ELEMENTARY SCHOOL

ADMINISTRATION BUILDING

ECM Calculations

The energy savings shown below are a result of the reduced electrical cost from the PPA for the kWh generated by the solar panels. Actual rates and solar generation estimates were taken from the proposals received during the Hillside Public Schools Solar PPA RFP process. A comparison was done to ensure the generated kWh did not exceed the post-project estimated energy consumption. In cases where the generated kWh exceeded the post-project electrical consumption, the generation numbers were reduced to ensure the site would not generate more electric than it consumes. The PPA term is 15 years.

PPA RATE ($/kWh)	ANNUAL ESCALATION RATE	ANNUAL PANEL DERATING
$0.0000	0.00%	0.50%

INSTALLED CAPACITY (kWdc)	TOTAL ECM YEAR 1 SAVINGS
357	$44,964

BUILDING	ROOF SECTION	INSTALLED ARRAY (kWdc)	ANNUAL YIELD RATIO (kWh/kWdc)	INSTALLED kWh GENERATION	$$/kWh RATES		SAVINGS	TOTAL SAVINGS
					UTILITY	NEW PPA		
Hillside High School	Gym - 2019 (purple)	80.77	1,094	88,395	$0.110	$0.0000	$9,715	$19,430
Hillside High School	Original Classroom Wing - 2020	80.77	1,094	88,395	$0.110	$0.0000	$9,715	
Hurden Looker Elementary School	Gym (orange)	22.96	1,076	24,693	$0.155	$0.0000	$3,827	$3,827
George Washington Elementary School	New Gym - 2017 (red)	66.01	1,085	71,588	$0.105	$0.0000	$7,508	$14,563
George Washington Elementary School	Original Wing - 2017 (yellow)	58.22	1,156	67,279	$0.105	$0.0000	$7,056	
Calvin Coolidge Elementary School	Library - 2018	20.0	1,085	21,708	$0.070	$0.0000	$1,528	$1,528
Administration Building	Pitched Roof	28.70	1,221	35,051	$0.160	$0.0000	$5,615	$5,615

YEAR	PPA kWh PRODUCTION	UTILITY SAVINGS	PPA COST	NET SOLAR SAVINGS
1	375,401	$44,964	$0	$44,964
2	373,524	$45,724	$0	$45,724
3	371,656	$46,496	$0	$46,496
4	369,798	$47,281	$0	$47,281
5	367,949	$48,080	$0	$48,080
6	366,109	$48,892	$0	$48,892
7	364,279	$49,718	$0	$49,718
8	362,457	$50,557	$0	$50,557
9	360,645	$51,411	$0	$51,411
10	358,842	$52,280	$0	$52,280
11	357,048	$53,163	$0	$53,163
12	355,262	$54,061	$0	$54,061
13	353,486	$54,974	$0	$54,974
14	351,719	$55,902	$0	$55,902
15	349,960	$56,846	$0	$56,846
Total	**5,438,136**	**$760,349**	**$0**	**$760,349**

Hillside High School						
YEAR	$$/kWh RATES		SOLAR kWh	UTILITY SAVINGS	PPA COST	TOTAL SAVINGS
	UTILITY	NEW PPA				
1	$0.110	$0.0000	176,790	$19,430	$0	$19,430
2	$0.112	$0.0000	175,906	$19,758	$0	$19,758
3	$0.115	$0.0000	175,027	$20,092	$0	$20,092
4	$0.117	$0.0000	174,151	$20,432	$0	$20,432
5	$0.120	$0.0000	173,281	$20,777	$0	$20,777
6	$0.123	$0.0000	172,414	$21,128	$0	$21,128
7	$0.125	$0.0000	171,552	$21,484	$0	$21,484
8	$0.128	$0.0000	170,694	$21,847	$0	$21,847
9	$0.131	$0.0000	169,841	$22,216	$0	$22,216
10	$0.134	$0.0000	168,992	$22,591	$0	$22,591
11	$0.137	$0.0000	168,147	$22,973	$0	$22,973
12	$0.140	$0.0000	167,306	$23,361	$0	$23,361
13	$0.143	$0.0000	166,469	$23,756	$0	$23,756
14	$0.146	$0.0000	165,637	$24,157	$0	$24,157
15	$0.149	$0.0000	164,809	$24,565	$0	$24,565
			2,561,016	**$328,567**	**$0**	**$328,567**

Hurden Looker Elementary School						
YEAR	$$/kWh RATES		SOLAR kWh	UTILITY SAVINGS	PPA COST	SAVINGS
	UTILITY	SOLAR PPA				
1	$0.155	$0.0000	24,693	$3,827	$0	$3,827
2	$0.158	$0.0000	24,570	$3,892	$0	$3,892
3	$0.162	$0.0000	24,447	$3,958	$0	$3,958
4	$0.165	$0.0000	24,324	$4,024	$0	$4,024
5	$0.169	$0.0000	24,203	$4,092	$0	$4,092
6	$0.173	$0.0000	24,082	$4,162	$0	$4,162
7	$0.177	$0.0000	23,961	$4,232	$0	$4,232
8	$0.180	$0.0000	23,842	$4,303	$0	$4,303
9	$0.184	$0.0000	23,722	$4,376	$0	$4,376
10	$0.189	$0.0000	23,604	$4,450	$0	$4,450
11	$0.193	$0.0000	23,486	$4,525	$0	$4,525
12	$0.197	$0.0000	23,368	$4,601	$0	$4,601
13	$0.201	$0.0000	23,251	$4,679	$0	$4,679
14	$0.206	$0.0000	23,135	$4,758	$0	$4,758
15	$0.210	$0.0000	23,020	$4,839	$0	$4,839
			357,708	**$64,719**	**$0**	**$64,719**

George Washington Elementary School						
YEAR	$$/kWh RATES		SOLAR kWh	UTILITY SAVINGS	PPA COST	SAVINGS
	UTILITY	SOLAR PPA				
1	$0.105	$0.0000	138,867	$14,563	$0	$14,563
2	$0.107	$0.0000	138,173	$14,809	$0	$14,809
3	$0.110	$0.0000	137,482	$15,059	$0	$15,059
4	$0.112	$0.0000	136,794	$15,314	$0	$15,314
5	$0.114	$0.0000	136,110	$15,572	$0	$15,572
6	$0.117	$0.0000	135,430	$15,835	$0	$15,835
7	$0.119	$0.0000	134,753	$16,103	$0	$16,103
8	$0.122	$0.0000	134,079	$16,375	$0	$16,375
9	$0.125	$0.0000	133,409	$16,651	$0	$16,651
10	$0.128	$0.0000	132,742	$16,933	$0	$16,933
11	$0.130	$0.0000	132,078	$17,219	$0	$17,219
12	$0.133	$0.0000	131,417	$17,510	$0	$17,510
13	$0.136	$0.0000	130,760	$17,805	$0	$17,805
14	$0.139	$0.0000	130,107	$18,106	$0	$18,106
15	$0.142	$0.0000	129,456	$18,412	$0	$18,412
			2,011,656	**$246,267**	**$0**	**$246,267**

Calvin Coolidge Elementary School						
YEAR	$$/kWh RATES		SOLAR kWh	UTILITY SAVINGS	PPA COST	TOTAL SAVINGS
	UTILITY	NEW PPA				
1	$0.070	$0.0000	21,708	$1,528	$0	$1,528
2	$0.072	$0.0000	21,599	$1,554	$0	$1,554
3	$0.074	$0.0000	21,491	$1,580	$0	$1,580
4	$0.075	$0.0000	21,384	$1,607	$0	$1,607
5	$0.077	$0.0000	21,277	$1,634	$0	$1,634
6	$0.078	$0.0000	21,171	$1,662	$0	$1,662
7	$0.080	$0.0000	21,065	$1,690	$0	$1,690
8	$0.082	$0.0000	20,960	$1,718	$0	$1,718
9	$0.084	$0.0000	20,855	$1,747	$0	$1,747
10	$0.086	$0.0000	20,750	$1,777	$0	$1,777
11	$0.088	$0.0000	20,647	$1,807	$0	$1,807
12	$0.089	$0.0000	20,543	$1,837	$0	$1,837
13	$0.091	$0.0000	20,441	$1,868	$0	$1,868
14	$0.093	$0.0000	20,339	$1,900	$0	$1,900
15	$0.095	$0.0000	20,237	$1,932	$0	$1,932
			314,467	**$25,840**	**$0**	**$25,840**

Administration Building						
YEAR	$$/kWh RATES		SOLAR kWh	UTILITY SAVINGS	PPA COST	SAVINGS
	UTILITY	SOLAR PPA				
1	$0.160	$0.0000	35,051	$5,615	$0	$5,615
2	$0.164	$0.0000	34,876	$5,710	$0	$5,710
3	$0.167	$0.0000	34,701	$5,807	$0	$5,807
4	$0.171	$0.0000	34,528	$5,905	$0	$5,905
5	$0.175	$0.0000	34,355	$6,004	$0	$6,004
6	$0.179	$0.0000	34,183	$6,106	$0	$6,106
7	$0.183	$0.0000	34,013	$6,209	$0	$6,209
8	$0.187	$0.0000	33,842	$6,314	$0	$6,314
9	$0.191	$0.0000	33,673	$6,421	$0	$6,421
10	$0.195	$0.0000	33,505	$6,529	$0	$6,529
11	$0.199	$0.0000	33,337	$6,639	$0	$6,639
12	$0.204	$0.0000	33,171	$6,751	$0	$6,751
13	$0.208	$0.0000	33,005	$6,865	$0	$6,865
14	$0.213	$0.0000	32,840	$6,981	$0	$6,981
15	$0.217	$0.0000	32,676	$7,099	$0	$7,099
			507,756	**$94,956**	**$0**	**$94,956**

ECM 10 – Combined Heat & Power

HILLSIDE PUBLIC SCHOOLS		Hillside High School	A.P. Morris Early Childhood Center	Walter O. Krumbiegel Middle School	Hurden Looker Elementary School	George Washington Elementary School	Calvin Coolidge Elementary School	Saybrook Annex	Administration Building
ECM	ECM DESCRIPTION								
10	Combined Heat & Power Unit					✔			

CHP offers energy and environmental benefits over electric-only and thermal-only systems in both central and distributed power generation applications. CHP systems have the potential for a wide range of applications and the higher efficiencies result in lower emissions than separate heat and power generation.

The simultaneous production of useful thermal and electrical energy in CHP systems lead to increased fuel efficiency. CHP units can be strategically located at the point of energy use. Such onsite generation avoids the transmission and distribution losses associated with electricity purchased via the grid from central stations. CHP is versatile and can be coupled with existing and planned technologies for many different applications in the industrial, commercial, and residential sectors.

George Washington Elementary School will have steam boilers converted to hot water as part of this ESIP. The CHP will act as the first stage of heating for the hot water boiler plant and domestic hot water loop. The CHP is estimated to run at full load for over 2,200 hours per year. The CHP will shut off when there isn't adequate heating load for combined heating and power. If necessary, heat can be rejected through a radiator when the full heating load is not required.

ECM Calculations

Energy Savings from the installation of a Combined Heat and Power unit were modeled using eQuest. The simulation results are shown below.

CHP Input Data		
Electrical output	35	kW
Thermal output	204,040	BTU/hr
Gas input (HHV)	407,144	Btu/hr
Overall efficiency	79.4%	

Runtime Analysis	
Full load heat and electric hours	2,239
% Boiler load displaced by CHP	43%

		Fuel Usage Without CHP				
Month	Days	Total Gas - Post ECMs (Baseline reduced by 30%)	Proposed Boiler Efficiency	Non-Displaceable Gas Therms (30%)	Displaceable Gas Therms	Displaceable Heat Therms
Jan	31	3,491	87%	1,047	2,444	2,126
Feb	28	3,087	87%	926	2,161	1,880
Mar	31	2,799	87%	840	1,960	1,705
Apr	30	719	87%	216	503	438
May	31	370	87%	111	259	225
Jun	30	81	87%	24	57	49
Jul	31	43	87%	13	30	26
Aug	31	38	87%	11	26	23
Sep	30	47	87%	14	33	29
Oct	31	230	87%	69	161	140
Nov	30	2,464	87%	739	1,725	1,500
Dec	31	2,883	87%	865	2,018	1,756
Total:	**365**	**16,252**		**4,876**	**11,376**	**9,898**

		35 kW Cogen Plant Thermal Operation			Fuel Usage With CHP			Electric Savings With CHP			
Month	Days	Utilized Cogen Heat Therms	Avoided Boiler Gas Therms	System Operating Efficiency	Supplemental Boiler Gas Therms	Cogen Gas Therms	Total Gas	Run Hours	Equivalent Full Load Run Hours	kW Demand Savings	Cogen Electric Generation kWh
Jan	31	973	1,119	75%	1,325	2,100	4,472	606	502	35.00	17,584
Feb	28	816	938	75%	1,223	1,762	3,911	517	420	35.00	14,717
Mar	31	640	736	73%	1,224	1,416	3,479	430	335	35.00	11,724
Apr	30	339	390	69%	113	822	1,150	265	192	35.00	6,712
May	31	0	0	0%	259	0	370	0	0	0.00	0
Jun	30	0	0	0%	57	0	81	0	0	0.00	0
Jul	31	0	0	0%	30	0	43	0	0	0.00	0
Aug	31	0	0	0%	26	0	38	0	0	0.00	0
Sep	30	0	0	0%	33	0	47	0	0	0.00	0
Oct	31	139	160	57%	2	466	537	183	105	35.00	3,659
Nov	30	498	572	73%	1,152	1,103	2,994	332	260	35.00	9,114
Dec	31	819	941	74%	1,077	1,787	3,728	534	425	35.00	14,858
Total:	**365**	**4,224**	**4,855**	**73%**	**6,521**	**9,455**	**20,852**	**2,867**	**2,239**	**20.42**	**78,368**

ENERGY SAVINGS PLAN

SECTION 4 – FINANCIAL ANALYSIS

Form V – ESCO Construction and Service Fees

FORM V		
ESCO's ENERGY SAVINGS PLAN (ESP): ESCOs PROPOSED FINAL PROJECT COST FORM HILLSIDE PUBLIC SCHOOLS ENERGY SAVING IMPROVEMENT PROGRAM		
ESCO Name: DCO Energy PROPOSED CONSTRUCTION FEES:		
Fee Category	**Fees (1) Dollar ($) Value**	**Percentage of Hard Costs**
Estimated Value of Hard Costs (2)	$ 3,052,761	N/A
ECM Contingency	$ 202,703	
Total Value of Hard Costs	$ 3,255,464	
Project Service Fees		
JDC ESCO Fee	$ 553,429	17.00%
Design Engineering Fees	$ 227,882	7.00%
Project Service Fees Sub Total	$ 781,311	24.00%
TOTAL FINANCED PROJECT COSTS:	$ 4,036,775	
PROPOSED ANNUAL SERVICE FEES		
First Year Annual Service Fees	**Fees (1) Dollar ($) Value**	**Percentage of Hard Costs**
SAVINGS GUARANTEE *(OPTION)*	$0	0.00%
Measurement & Verification *(Associated w/ Savings Guarantee Option)*	$12,371	0.38%
ENERGY STAR Services *(optional)*	$0	0.00%
Post Construction Services *(if applicable)*	$0	0.00%
Performance Monitoring	w/ M&V	0.00%
On-going Training Services	w/ M&V	0.00%
Verification Reports	w/ M&V	0.00%
TOTAL FIRST YEAR ANNUAL SERVICES	$0	0.00%

NOTES:
(1) Fees should include all mark-ups, overhead, and profit. Figures stated as a range will NOT be accepted.
(2) The total value of Hard Costs is defined in accordance with standard AIA definitions that include: Labor Costs, Subcontractor Costs, Cost of Materials and Equipment, Temporary Facilities and Related Items, and Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, Mark-ups, Overhead and Profit, etc.

ESCO's proposed interest rate at the time of submission: 5% TO BE USED BY ALL RESPONDING ESCOs FOR PROPOSAL PURPOSES

DCO Energy Efficiency Division
100 Lenox Drive
Lawrenceville, NJ 08648

Form VI – Project Cash Flow Analysis

FORM VI

ESCO's ENERGY SAVINGS PLAN (ESP):
ESCO's ANNUAL CASH FLOW ANALYSIS FORM
HILLSIDE PUBLIC SCHOOLS - ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: DCO Energy

Note: Respondents must use the following assumptions in all financial calculations:
(a) The cost of all types of energy should be assumed to inflate at **2.4% gas, 2.2%** electric per year and
1. Term of Agreement: 20 years
2. Construction Period (2) (months): 12 Months
3. Cash Flow Analysis Format:

Project Cost(1): **$4,036,775**
Additional Fees: **$0**
Financed Amount: **$4,036,775**

Interest Rate: **2.00%**

Year	Annual Energy Savings	Solar PPA Savings	Annual Operational Savings	Energy Rebates / Incentives	Total Annual Savings	Annual Project Costs	Net Cash-Flow to Client	Cumulative Cash Flow
Installation								
Year 1	$ 204,852	$ 44,964	$ 32,046	$ -	$ 281,863	$ (279,441)	$ 2,421	$ 2,421
Year 2	$ 164,888	$ 45,724	$ 32,046	$ -	$ 242,658	$ (240,237)	$ 2,421	$ 4,843
Year 3	$ 168,585	$ 46,496	$ 32,046	$ -	$ 247,127	$ (244,706)	$ 2,421	$ 7,264
Year 4	$ 172,365	$ 47,281	$ 32,046	$ -	$ 251,693	$ (249,271)	$ 2,421	$ 9,685
Year 5	$ 176,231	$ 48,080	$ 32,046		$ 256,357	$ (253,936)	$ 2,421	$ 12,107
Year 6	$ 180,185	$ 48,892			$ 229,077	$ (226,656)	$ 2,421	$ 14,528
Year 7	$ 184,229	$ 49,718			$ 233,946	$ (231,525)	$ 2,421	$ 16,949
Year 8	$ 188,364	$ 50,557			$ 238,921	$ (236,500)	$ 2,421	$ 19,371
Year 9	$ 192,593	$ 51,411			$ 244,004	$ (241,583)	$ 2,421	$ 21,792
Year 10	$ 196,918	$ 52,280			$ 249,198	$ (246,776)	$ 2,421	$ 24,213
Year 11	$ 201,341	$ 53,163			$ 254,504	$ (252,082)	$ 2,421	$ 26,635
Year 12	$ 205,864	$ 54,061			$ 259,925	$ (257,503)	$ 2,421	$ 29,056
Year 13	$ 210,490	$ 54,974			$ 265,464	$ (263,042)	$ 2,421	$ 31,477
Year 14	$ 215,221	$ 55,902			$ 271,123	$ (268,702)	$ 2,421	$ 33,899
Year 15	$ 220,059	$ 56,846			$ 276,905	$ (274,484)	$ 2,421	$ 36,320
Year 16	$ 225,007	$ -			$ 225,007	$ (222,585)	$ 2,421	$ 38,741
Year 17	$ 230,067	$ -			$ 230,067	$ (227,645)	$ 2,421	$ 41,163
Year 18	$ 235,241	$ -			$ 235,241	$ (232,820)	$ 2,421	$ 43,584
Year 19	$ 240,534	$ -			$ 240,534	$ (238,112)	$ 2,421	$ 46,005
Year 20	$ 245,946	$ -			$ 245,946	$ (243,524)	$ 2,421	$ 48,427
Totals	$ 4,058,978	$ 760,349	$ 160,231	$ -	$ 4,979,558	$ (4,931,131)	$ 48,427	

NOTES:
(1) Includes: Hard costs and project service fees defined in ESCO's PROPOSED "FORM V"
(2) No payments are made by Hillside Public Schools during the construction period.
(3) This figure should equal the value indicated on the ESCO's PROPOSED "FORM V". DO NOT include in the Financed Project Cost.

Utility Inflation Details

Per Form VI, the annual inflation rate for electric is 2.2%, natural gas is 2.4% and 0% for solar per PPA bid results. Water/sewer annual inflation is 0%.

Utility Inflation Worksheet					
Year	NET ANNUAL ELECTRIC COST SAVINGS (EXCLUDING SOLAR PPA SAVINGS)	ANNUAL NATURAL GAS COST SAVINGS	Net Solar Savings	ANNUAL Water & Sewer (Gal) COST SAVINGS	Total
2	$111,638.97	$51,693.42	$45,723.69	$1,555.54	$210,611.62
3	$114,095.02	$52,934.06	$46,495.97	$1,555.54	$215,080.60
4	$116,605.12	$54,204.48	$47,281.28	$1,555.54	$219,646.42
5	$119,170.43	$55,505.38	$48,079.87	$1,555.54	$224,311.22
6	$121,792.18	$56,837.51	$48,891.93	$1,555.54	$229,077.17
7	$124,471.61	$58,201.61	$49,717.72	$1,555.54	$233,946.48
8	$127,209.98	$59,598.45	$50,557.45	$1,555.54	$238,921.43
9	$130,008.60	$61,028.82	$51,411.37	$1,555.54	$244,004.33
10	$132,868.79	$62,493.51	$52,279.70	$1,555.54	$249,197.54
11	$135,791.90	$63,993.35	$53,162.71	$1,555.54	$254,503.51
12	$138,779.32	$65,529.19	$54,060.63	$1,555.54	$259,924.69
13	$141,832.47	$67,101.89	$54,973.71	$1,555.54	$265,463.62
14	$144,952.78	$68,712.34	$55,902.22	$1,555.54	$271,122.88
15	$148,141.75	$70,361.43	$56,846.41	$1,555.54	$276,905.13
16	$151,400.86	$72,050.11	$0.00	$1,555.54	$225,006.52
17	$154,731.68	$73,779.31	$0.00	$1,555.54	$230,066.54
18	$158,135.78	$75,550.01	$0.00	$1,555.54	$235,241.34
19	$161,614.77	$77,363.22	$0.00	$1,555.54	$240,533.53
20	$165,170.29	$79,219.93	$0.00	$1,555.54	$245,945.77

ENERGY SAVINGS PLAN

SECTION 5 – RISK, DESIGN, & COMPLIANCE

Assessment of Risks, Design & Compliance Issues

Moving from a conceptual design to engineered documents DCO has identified areas of the project that could change during the detailed design. The table below represents potential conceptual areas of concern that will need to be investigated further with a corresponding party responsible for the compliance of each item.

Issue	Category	Responsible Party
Alteration of expected Maintenance and Operational Savings	Risk	Hillside Public Schools
Disposition of Abandoned Equipment (Steam Piping, Condensate Piping, Oil Tanks, etc.)	Risk	Hillside Public Schools
New Natural Gas Distribution	Risk	Hillside Public Schools
Integrity of re-used Infrastructure	Risk	Hillside Public Schools
Life Safety System Coordination	Risk	Hillside Public Schools
Coordination with Hillside Public Schools Information Technology Department	Risk	Hillside Public Schools
Ventilation Compliance with Code	Compliance	Consulting Engineer
Temperature, Humidity and Air Change Compliance with Code	Compliance	Consulting Engineer
Boiler Capacity and Turndown	Design	Consulting Engineer
Natural Gas Regulator Compliance with Code	Compliance	Consulting Engineer
Undocumented Underground Utilities	Risk	Consulting Engineer
Code Compliance of Existing Electrical Infrastructure	Compliance	Consulting Engineer
Lighting Levels	Compliance	Consulting Engineer
Design Light Consortium rating for bulbs	Compliance	Consulting Engineer

Underwriters Laboratory Testing for retrofitted LED Lighting Systems	Compliance	Consulting Engineer
Lighting Retrofits within hard ceilings for fixtures and occupancy sensors	Risk	Consulting Engineer
Street/Parking Lot Pole Structural Integrity	Risk	Consulting Engineer
Unrealized Energy Savings 1. Energy Modeling 2. Performance Monitoring 3. Capacity of Equipment 4. Efficiency of Equipment 5. Run Hours of Equipment	Risk	DCO/ Consulting Engineer 1. DCO 2. DCO 3. Consulting Engineer / Basis of Design Vendor 4. Consulting Engineer / Basis of Design Vendor 5. Hillside Public Schools
Existing Plumbing Infrastructure with New Low Flow Devices	Design	Consulting Engineer
Adaptation to New RTUs (Curb, Electric, Ductwork, Condensate)	Design	Consulting Engineer / Basis of Design Manufacture
Structural Loads for Rooftop Equipment Replacement	Design	Consulting Engineer
Transformer Loading	Risk	Consulting Engineer
Site Work for Equipment	Design	Consulting Engineer
Condition of Roof Under Units	Risk	Consulting Engineer
Adequate Crane Lifts & Clearances	Design	Consulting Engineer / Rigger
Physical Space Constraints and Clearance for Equipment Replacement	Design	Consulting Engineer
Refrigerant Reclaim / Refrigerant Disposal	Compliance	Contractor
Existing Tie in Locations	Design	Consulting Engineer

Schedule Oversight	Risk	DCO Energy
Impact of Boiler Flue	Design	Consulting Engineer
Impact of Space Usage During Construction	Risk	Consulting Engineer & Hillside Public Schools
Scope changes relating to requests by Authorities Having Jurisdiction.	Risk	Hillside Public Schools (via contingency)
Department of Environmental Protection Permitting	Risk	Consulting Engineer
Modifications of Energy Saving Control Sequences and Setpoints impacting Energy Savings and Incentives	Risk	Hillside Public Schools
Post Construction Calibration of Sensors, Meters, & Safety Devices	Risk	Hillside Public Schools
Adequate time and access for bidding contractor site surveys	Risk	Hillside Public Schools
Utility Interconnection approval for the CHP Unit	Risk	Hillside Public Schools

Measurement & Verification (M&V) Plan

Our approach to M&V of energy savings aligns with the International Performance Measurement & Verification Protocol. More detailed information may be found a. It's most cost-effective to perform M&V using the least costly option that still adequately documents system performance and permits analysis of savings. This approach lowers the total cost of the program leaving more dollars available to perform more facility improvements. Depending upon which ECMs are implemented by Hillside Public Schools, the M&V plan proposed by DCO would incorporate one or more of the following options which outlines the four most common approaches for M&V:

Option A – Retrofit Isolation with Key Parameter Measurement	This option is based on a combination of measured and estimated factors when variations in factors are not expected. Measurements are spot or short-term and are taken at the component or system level, both in the baseline and post-installation cases. Measurements should include the key performance parameter(s) which define the energy use of the ECM. Estimated factors are supported by historical or manufacturer's data. Savings are determined by means of engineering calculations of baseline and post-installation energy use based on measured and estimated values.	Direct measurements and estimated values, engineering calculations and/or component or system models often developed through regression analysis. Adjustments to models are not typically required.
Option B – Retrofit Isolation with Parameter Measurement	This option is based on periodic or continuous measurements of energy use taken at the component or system level when variations in factors are expected. Energy or proxies of energy use are measured continuously. Periodic spot or short-term measurements may suffice when variations in factors are not expected. Savings are determined form analysis of baseline and reporting period energy use of proxies of energy use.	Direct measurements, engineering calculations, and/or component or system models often developed through regression analysis. Adjustments to models may be required.
Option C – Utility Data Analysis	This option is based on long-term, continuous, whole-building utility meter, facility level, or sub-meter energy (or water) data. Savings are determined from analysis of baseline and reporting period energy data. Typically, regression analysis is conducted to correlate with and adjust energy use to independent variables such as weather, but simple comparisons may also be used.	Based on regression analysis of utility meter data to account for factors that drive energy use. Adjustments to models are typically required.
Option D – Calibrated Computer Simulation	Computer simulation software is used to model energy performance of a whole-facility (or sub-facility). Models must be calibrated with actual hourly or monthly billing data from the facility. Implementation of simulation modeling requires engineering expertise. Inputs to the model include facility characteristics; performance specifications of new and existing equipment or systems; engineering estimates, spot-, short-term, or long-term measurements of system components; and long-	Based on computer simulation model calibrated with whole-building or end-use metered data or both. Adjustments to models are required.

	term whole-building utility meter data. After the model has been calibrated, savings are determined by comparing a simulation of the baseline with either a simulation of the performance period or actual utility data	

Each of the options can be used for a wide array of energy efficiency upgrades and each has different costs and complexities associated with it. When selecting an M&V approach, the following general rule of thumb can be applied:

OPTION A

- When magnitude of savings is low for the entire project or a portion of the project
- The risk for not achieving savings is low

OPTION B

- For simple equipment replacement projects
- When energy savings values per individual measure are desired
- When interactive effects are to be ignored or are estimated using estimating methods that do not involve long term measurements
- When sub-meters already exist that record the energy use of subsystems under consideration

OPTION C

- For complex equipment replacement and controls projects
- When predicted energy savings are in excess of 10 to 20 percent as compared with the record energy use
- When energy savings per individual measure are not desired
- When interactive effects are to be included
- When the independent variables that affect energy, use are complex and excessively difficult or expensive

OPTION D

- When new construction projects are involved
- When energy savings values per measure are desired
- When Option C tools cannot cost effectively evaluate particular measures or their interactions with the building when complex baseline adjustments are anticipated

DCO will perform measurement and verification of the energy units savings at the conclusion of each month in the first year of the energy units guarantee. After the first year, M&V will be performed and presented within 30 days of year end. Hillside Public Schools will work with DCO to provide necessary information and provide access to any buildings to allow DCO to properly verify and measure energy savings. DCO's energy guarantee will be based on units of energy saved as determined from the baseline provided in the RFP, or adjusted baseline if original baseline is determined by both parties to be inaccurate.

Adjustments to the baseline and associated savings will be taken for weather, hours of operation, building usage, utility rate increases, code or statute changes, requirements listed in Table 1, and any other actions that adversely affect the savings beyond the control of DCO. Any savings discrepancies will be resolved to the satisfaction of both the Hillside Public Schools and DCO in a timely manner.

As part of the optional energy guarantee, DCO uses weather normalization procedures to correct for the effect of weather variance on energy savings in subsequent years. Baseline energy and weather data are used to establish an algorithm to predict how the baseline building uses energy as a function of weather. The algorithm is then applied to subsequent years to correct for the impact weather may have on future building energy use. The weather normalization procedure and algorithms will be covered in detail as part of the optional energy guarantee contract provided to Hillside Public Schools.

Maintenance Plan

Owner Tasks and Responsibilities:

As a general statement, Hillside Public Schools or its 3rd party service providers shall be responsible for providing ongoing maintenance through the duration of the M&V period. DCO will review operational procedures and schedules associated with such things as the building automation/control upgrades as well as the manufacturers' published requirements for all installed equipment be it: quarterly, semi-annually or annually. In most cases, Hillside Public Schools is already aware of or self-implementing similar maintenance practices on campus or has contracted a 3rd party for such services. Failure to properly maintain the equipment may cause energy savings goals to fall short.

Specific Areas of Consideration:

In order to sustain energy savings, Hillside Public Schools' staff will be required to implement new maintenance tasks and even modify existing policies and practices. Outlined are two examples of specific instances.

Example 1. Advanced Building Operations Programming:

Hillside Public Schools will be given specific training on the changes and advancements in the environmental operations and energy savings strategies. Hillside Public Schools will be responsible for following the agreed upon guidelines associated with programmed schedules and any use of override functions.

Example 2. Verification of Proper Operations: Mechanical Equipment

Hillside Public Schools will be required to assure that proper mechanical maintenance continues to be implemented on its mechanical equipment. Example: outside air dampers will require proper operation with the appropriate seals in order to maintain ECM(s) such as demand ventilation. DCO will periodically spot check system operations to verify the Owner or its 3rd party representative is implementing proper maintenance. Any deficiencies that may be identified will be brought to Hillside Public Schools' attention for correction.

ENERGY SAVINGS PLAN

SECTION 6 – OPERATION & MAINTENANCE

It is critical to the success of achieving continued energy savings that Hillside Public Schools develop and implement an Operation and Maintenance Plan. In this section are some recommendations for maintenance tasks for various pieces of equipment and systems to assist Hillside Public Schools and/or 3rd party maintenance contractors.

Air Handling Units

Comprehensive Annual Inspection

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly
   a) Inspect the unit for cleanliness.
   b) Inspect the fan wheel and shaft for wear and clearance.
   c) Check the sheaves and pulleys for wear and alignment.
   d) Check the belts for tension, wear, cracks, and glazing.
   e) Verify tight bolts, set screws, and locking collars.
   f) Check dampers for wear, security and linkage adjustment.
   g) Verify clean condensate pan.
   h) Verify proper operation of the condensate drain.
   i) Verify clean air filters.
   j) Verify clean coils.
   k) Verify proper operation of the spray pump, if applicable.
   l) Verify smooth fan operation.
   m) Log operating conditions after system has stabilized.
   n) Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.
4. Lubrication
   a) Lubricate the fan shaft bearings, if applicable.
   b) Lubricate the motor bearings, if applicable.
5. Controls and Safeties

a) Test the operation of the low temperature safety device, if applicable.

b) Test the operation of the high static pressure safety device, if applicable.

c) Test the operation of the low static pressure safety device, if applicable.

d) Check the thermal cutout on electric heaters, if applicable.

e) Check the step controller, if applicable.

f) Check and record supply air and control air pressure, if applicable.

g) Verify the operation of the control system and dampers while the fan is operating.

6. Motor and Starter

a) Clean the starter and cabinet.

b) Inspect the wiring and connections for tightness and signs of overheating and discoloration. This includes wiring to the electric heat, if applicable.

c) Check the condition of the contacts for wear and pitting.

d) Check the contactors for free and smooth operation.

e) Meg the motor and record readings.

Heating Inspection

1. Gas Heat Option

a) Visually inspect the heat exchanger.

b) Inspect the combustion air blower fan, and clean, if required.

c) Lubricate the combustion air blower fan motor, if applicable.

d) Verify the operation of the combustion air flow-proving device.

e) Test the operation of the high gas pressure safety device, if applicable. Calibrate, if necessary.

f) Test the operation of the low gas pressure safety device, if applicable. Calibrate, if necessary.

g) Verify the operation of the flame detection device.

h) Test the operation of the high temperature limit switch.

i) Verify the integrity of the flue system.

j) Verify the operation of the operating controls.

k) Verify the burner sequence of operation.

l) Verify proper gas pressure to the unit and/or at the manifold, if applicable.

m) Perform combustion test. Make adjustments as necessary.

2. Electric Heat Option

a) Inspect wiring and connections for tightness and signs of overheating and discoloration.

b) Check and calibrate operating and safety controls, if applicable.

c) Verify the operation of the heating elements.

d) Check voltage and amperage and compare readings with the watt rating on the heater.

3. Hot Water / Steam Heat Option

a) Inspect control valves and traps.

b) Check and calibrate all operating and safety controls.

c) Verify the operation of the heating coils.

d) Verify the operation of the unit low temperature safety device.

Scheduled Running Inspection

1. Check the general condition of the fan.
2. Verify smooth fan operation.
3. Check and record supply and control air pressure, if applicable.
4. Verify the operation of the control system.
5. Log the operating conditions after the system has stabilized.
6. Review operating procedures with operating personnel.
7. Provide a written report of completed work, operating log, and indicate uncorrected deficiencies detected.

Oil Sample/Spectrographic Analysis

1. Pull oil sample for spectrographic analysis

Refrigerant Sample/Analysis

1. Pull refrigerant sample for spectrographic analysis for contaminants (oil, water, and acid), using approved containers

Boilers

Comprehensive Annual Inspection

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly
   a) Secure and drain the boiler.
   b) Open the fire and water side for cleaning and inspection.
   c) Check heating surfaces and water side for corrosion, pitting, scale, blisters, bulges, and soot.
   d) Inspect refractory.
   e) Clean fire inspection glass.
   f) Check blow-down valve packing, and lubricate.
   g) Check and test boiler blow-down valve.
   h) Perform hydrostatic test, if required.
   i) Verify proper operation of the level float.
   j) Gas Train Burner Assembly
      1. Check the gas train isolation valves for leaks.
      2. Check the gas supply piping for leaks.
      3. Check the gas pilot solenoid valve for wear and leaks.
      4. Check the main gas and the pilot gas regulators for wear and leaks.
      5. Test the low gas pressure switch. Calibrate and record setting.
      6. Test the high gas pressure switch. Calibrate and record setting.
      7. Verify the operation of the burner fan air flow switch.
      8. Inspect and clean the burner assembly.
      9. Inspect and clean the pilot igniter assembly.
      10. Inspect and clean the burner fan.
      11. Run the fan and check for vibration.

12. Inspect the flue and flue damper.
13. Burner Control Panel:
    a) Inspect the panel for cleanliness.
    b) Inspect wiring and connections for tightness and signs of overheating and discoloration.

k) Clean burner fan wheel and air dampers. Check fan for vibration.
l) Verify tightness on linkage set screws.
m) Check gas valves for leakage (where test cocks are provided).
n) Verify proper operation of the feed water pump.
o) Verify proper operation of the feed water treating equipment.

4. Controls and Safeties
   a) Disassemble and inspect low water cutoff safety device.
   b) Reassemble boiler low water cutoff safety device with new gaskets.
   c) Clean contacts in program timer, if applicable.
   d) Check the operation of the low water cutoff safety device and feed controls.
   e) Verify the setting and test the operation of the operating and limit controls.
   f) Verify the operation of the water level control.

Startup/Checkout Procedure

1. Verify proper water level in the boiler
2. Test the safety/relief valve after startup (full pressure test).
3. Clean or replace fuel filters.
4. Clean fuel nozzles.
5. Inspect clean, and functionally test the flame scanner and flame safeguard relay.
6. Clean and adjust the ignition electrode.
7. Replace the vacuum tube in the flame safeguard control, if applicable.
8. Perform pilot turn down test.
9. Verify proper steam pressure.

10. Perform combustion test and adjust the burner for maximum efficiency.
11. Test the following items:
    a) Firing rate
    b) Fuel/air ratio
    c) CO2
    d) CO
    e) NOX
    f) Perform smoke test.
12. Review operating procedures
13. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Mid-Season Running Inspection

1. Check the general condition of the unit.
2. Inspect the burner.
3. Adjust the burner controls to obtain proper combustion.
4. Check the operation of the pressure relief valve.
5. Check the operation of the low water cutoff and feed controls.
6. Check the setting and test the operation of the operating and limit controls.
7. Check the operation of the modulating motor.
8. Lift the safety/relief valves with at least 70% of rated pressure.
9. Blow down and try gauge cocks to confirm glass water level.
10. Check and test boiler blow down valve.
11. Log operating conditions after the system has stabilized.
12. Review operating procedures
13. Provide a written report of completed work, operating log, and indicate uncorrected deficiencies detected.

Seasonal Shut-down Procedure

1. Shut down boiler at boiler controls.
2. Shut off fuel lines at main valves.
3. Review operating procedures
4. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Cooling Towers

Startup/Checkout Procedure

1. Fill the basin and verify the float level.
2. Verify the operation of the basin heaters
3. Verify the operation, setpoint, and sensitivity of the basin heater temperature control device.
4. Start the condenser water pumps.
5. Verify the balance of the return water through the distribution boxes.
6. Verify proper operation of the bypass valve(s), if applicable.
7. Operate fan and verify smooth operation.
8. Log operation after system has stabilized.
9. Review operating procedures
10. Provide a written report of completed work, operating log, and indicate uncorrected deficiencies detected.

Comprehensive Annual Inspection

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly
   a) Structure
      1. Disassemble all screens and access panels for inspection.
      2. Inspect the conditions of the slats, if applicable.
      3. Inspect the condition of the tower fill.

4. Inspect the condition of the support structure.
5. Inspect the condition of the basins (upper and lower) and/or spray nozzles.
6. Verify clean basins and strainer(s).
7. Verify the condition and operation of the basin fill valve system.

b) Mechanical

1. Inspect belts for wear, cracks, and glazing.
2. Verify correct belt tension. Adjust the tension as necessary.
3. Inspect sheaves and pulleys for wear, condition, and alignment.
4. Inspect fan shaft and bearings for condition.
5. Inspect fan assembly for condition, security, and clearances. (e.g. blade tip clearance).

4. Lubrication System

a) Lubricate motor bearings.

b) Lubricate fan shaft bearings.

5. Motor And Starter

a) Clean the starter and cabinet.

b) Inspect wiring and connections for tightness and signs of overheating and discoloration.

c) Check the condition of the contacts for wear and pitting.

d) Check the contactor(s) for free and smooth operation.

e) Meg the motor(s) and record readings.

f) Check disconnect terminal block for wear, tightness and signs of overheating and discoloration.

g) Check the condition and operation of the basin heater contactor(s).

Shut-Down Procedure

1. Check the general condition of the tower.
2. Turn off electrical power to basin heaters, tower fans, and pipe heaters as necessary.
3. Drain tower and condenser water piping.
4. Review operating procedures

5. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Burners

Gas Train

1. Check the gas train isolation valves for leaks.
2. Check the gas supply piping for leaks.
3. Check the gas pilot solenoid valve for wear and leaks.
4. Check the main gas and the pilot gas regulators for wear and leaks.
5. Test the low gas pressure switch. Calibrate and record setting.
6. Test the high gas pressure switch. Calibrate and record setting.
7. Verify the operation of the burner fan air flow switch.
8. Inspect and clean the burner assembly.
9. Inspect and clean the pilot ignitor assembly.
10. Inspect and clean the burner fan.
11. Run the fan and check for vibration.
12. Inspect the flue and flue damper.
13. Burner Control Panel:
    a) Inspect the panel for cleanliness.
    b) Inspect wiring and connections for tightness and signs of overheating.
14. Clean burner fan wheel and air dampers. Check the fan for vibration.
15. Verify tightness of the linkage set screws.
16. Check the gas valves against leakage (where test cocks are provided

Oil Train

1. Check the gas train isolation valves for leaks.
2. Check the gas supply piping for leaks.
3. Check the gas pilot solenoid valve for wear and leaks.
4. Check the main gas and the pilot gas regulators for wear and leaks.

5. Test the low gas pressure switch. Calibrate and record setting.
6. Test the high gas pressure switch. Calibrate and record setting.
7. Verify the operation of the burner fan air flow switch.
8. Inspect and clean the burner assembly.
9. Inspect and clean the pilot ignitor assembly.
10. Inspect and clean the burner fan.
11. Run the fan and check for vibration.
12. Inspect the flue and flue damper.
13. Burner Control Panel:
    a) Inspect the panel for cleanliness.
    b) Inspect wiring and connections for tightness and signs of overheating.
14. Clean burner fan wheel and air dampers. Check the fan for vibration.
15. Verify tightness of the linkage set screws.
16. Check the gas valves against leakage (where test cocks are provided).

Dual Fuel Train

1. Check the gas train isolation valves for leaks.
2. Check the gas supply piping for leaks.
3. Check the gas pilot solenoid valve for wear and leaks.
4. Check the main gas and the pilot gas regulators for wear and leaks.
5. Test the low gas pressure switch. Calibrate and record setting.
6. Test the high gas pressure switch. Calibrate and record setting.
7. Verify the operation of the burner fan air flow switch.
8. Inspect and clean the burner assembly.
9. Inspect and clean the pilot ignitor assembly.
10. Inspect and clean the burner fan.
11. Run the fan and check for vibration.
12. Inspect the flue and flue damper.

13. Burner Control Panel:
    a) Inspect the panel for cleanliness.
    b) Inspect wiring and connections for tightness and signs of overheating.
14. Clean burner fan wheel and air dampers. Check the fan for vibration.
15. Verify tightness of the linkage set screws.
16. Check the gas valves against leakage (where test cocks are provided)

Energy Management System

Maintenance Inspection

1. Review reports for operational problems and trends.
2. Make a back-up copy of the BAS program.
3. Check for loose or damaged parts or wiring.
4. Check for any accumulation of dirt or moisture. Clean if required.
5. Verify proper electrical grounding.
6. Verify control panel power supplies for proper output voltages.
7. Inspect interconnecting cables and electrical connections.
8. Verify that manual override switches are in the desired positions.
9. Check the operation of all binary and analog outputs, if applicable.
10. Calibrate control devices, if applicable.
11. Verify the correct time and date.
12. Check and update the holiday schedules and daylight savings time.
13. Via terminal mode, view the event log and input/output points for any unusual status or override conditions.
14. Clean the external surfaces of the panel enclosure.
15. Review operating program and parameters.
16. Check cable connections for security.
17. Review operating procedures

18. Provide a written report of completed work, and indicate any uncorrected deficiencies detected.

Maintenance Inspection (Control Panels)

1. Control Panel
   a) Verify secure connections on all internal wiring, LAN, and communication links.
   b) Check for loose or damaged parts or wiring.
   c) Check for any accumulation of dirt or moisture. Clean if required.
   d) Remove excessive dust from heat sink surfaces
   e) Verify proper system electrical grounding.
   f) Verify proper output voltages on control panel power supplies.
   g) Check LED Indications to verify proper operation
   h) Verify LAN communications
   i) Verify that cards are seated and secured.
   j) Check wiring trunks and check for possible Error Code Indications
   k) Check voltage level of
   l) Verify the proper operation of critical control processes and points associated with this unit an make adjustments if necessary.
   m) Check Volatile memory available
   n) Cheek Non volatile memory available
   o) Check Processor idle time
   p) Clean external surfaces of the panel enclosure.
   q) Check modem operation, if applicable.
   r) View the event log and input/output points for any unusual status or override conditions.
   s) Verify correct time and date.
   t) Check and update holiday schedules, if applicable, and daylight savings time.
   u) Review operating procedures with operating personnel.
   v) Provide a written report of completed work, and indicate any uncorrected deficiencies detected.

Maintenance Inspection (EMS - Sequence of Operations)

Central Plant

In order to assure effective environmental conditioning while minimizing the cost to operate the equipment, technicians will review operating sequences and practices for the chiller plant. An initial survey of current equipment operating parameters will be conducted within the first 60 days of the contract term during cooling season. This survey will include:

1. Chiller(s) operation
2. Cooling tower(s) operation
3. Pump(s) operation
4. Economizer operation (where applicable)
5. Environmental safety

A detailed report of findings and recommendations for changes, if any, will be made. Agreed upon operational changes which require only adjustment of controls or programming will be made during regularly scheduled maintenance visits as part of this agreement at no additional cost. Any recommended alterations that require addition of devices or equipment will be accompanied by a guaranteed cost proposal reflecting the applicable discounts determined by this agreement.

Building Systems

In order to assure effective environmental conditioning while minimizing the cost to operate the equipment, technicians will review operating sequences and practices for covered airside systems. An initial survey of current systems operating parameters will be conducted within the first 60 days of the contract term, except seasonally operated systems, which will be surveyed during the appropriate operating season. This survey will include:

1. Time schedule(s)
2. Reset schedule(s)
3. Economizer changeover (where applicable)
4. Setpoints

5. Energy Management routines

A detailed report of findings and recommendations for changes, if any, will be made. Agreed upon operational changes which require only adjustment of controls or programming will be made during regularly scheduled maintenance visits as part of this agreement at no additional cost. Any recommended alterations that require addition of devices or equipment will be accompanied by a guaranteed cost proposal reflecting the applicable discounts determined by this agreement.

Fans

Maintenance Procedure

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly
   a) Check the general condition of the unit.
   b) Verify tightness of the fan, fan guards, louvers, etc.
   c) Verify clean burner assembly.
   d) Check sheaves and pulleys for wear and alignment, if applicable.
   e) Check belts for tension, wear, cracks, and/or glazing.
4. Lubrication
   a) Lubricate the fan motor, if applicable.
   b) Lubricate the fan bearings as necessary.
5. Controls and Safeties
   a) Verify proper operation of the temperature control device.
   b) Verify proper operation of the high temperature control device.
   c) Verify proper operation of the fan switch.
   d) Verify proper operation of the pilot safety device, if applicable.
6. Electrical
   a) Inspect wiring and connections for tightness and signs of overheating and discoloration.

7. Startup and Checkout
    a) Start the unit.
    b) Verify proper combustion air to the burner.
    c) Verify proper gas pressure to the burner.
    d) Check the flame for proper combustion.

Comprehensive Annual Inspection

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly
    a) Disassemble all screens and panels necessary to gain access to the fan mechanism.
    b) Disassemble the control mechanism (AVPB only).
    c) Clean all accessible rotor components to include control pitch mechanism (AVPB only).
    d) Inspect blades for wear.
    e) Inspect blade arms for wear (AVPB only).
    f) Check blade tip clearance.
    g) Check for oil leak on the blade bearing housing (AVPB only).
    h) Clean motor and fan housing.
    i) Reassemble all removed screens and plates.
4. Lubrication
    a) Lubricate the motor bearings.
    b) Lubricate the shaft bearings (AVPA only).
5. Controls and Safeties
    a) Test the operation of the high static safety device. Calibrate and record setting.
    b) Test the operation of the low static safety device. Calibrate and record setting.
    c) Test the operation of the vibration safety device. Calibrate and record setting.
    d) Verify the operation of the phase monitor, if applicable.
    e) Inspect pneumatic and electrical controls for condition and calibration.

f) Verify proper operation.

6. Motor and Starter
   a) Clean the starter and cabinet.
   b) Clean the disconnect switch and cabinet at the fan, if applicable.
   c) Inspect the wiring and connections for tightness and signs of overheating and discoloration.
   d) Check the condition of the contacts for wear and pitting.
   e) Check the contactors for free and smooth operation.
   f) Meg the motor and record readings.
7. Startup / Checkout Procedure
   a) Start the fan.
   b) Verify the operation of the starter.
   c) Check and record supply and control air pressure.
   d) Verify the operation of the control system while the fan is operating.
   e) Log the operating conditions after the system has stabilized.
   f) Review operating procedures with operating personnel.
   g) Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Scheduled Running Inspection (fans)

1. Check the general operation of the fan.
2. Check and record supply and control air pressure.
3. Verify the operation of the control system.
4. Log the operating conditions after the system has stabilized.
5. Review operating procedures with operating personnel.
6. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Comprehensive Annual Inspection (fans)

1. Record and report abnormal conditions, measurements taken, etc.

2. Review logs for operational problems and trends.
3. General Assembly
    a) Verify tight bolts, set screws, and locking collars.
    b) Inspect sheaves and pulleys for wear and alignment.
    c) Inspect belts for tension, wear, cracks, and glazing.
    d) Inspect dampers for wear, security, and clearances, if applicable.
    e) Verify clean air filters.
    f) Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.
4. Lubrication
    a) Lubricate fan bearings.
    b) Lubricate motor bearings, if applicable.
5. Controls and Safeties
    a) Verify the operation of the control system while the fan is operating.
    b) Verify the setting of the low temperature safety device, if applicable.
    c) Verify the operation of the pre-heat control device, if applicable.
    d) Verify the operation of the cooling control device, if applicable.
    e) Verify the operation of the re-heat control device, if applicable.
    f) Verify the operation of the humidity control device, if applicable.
6. Motor and Starter
    a) Clean the starter and cabinet.
    b) Inspect the wiring and connections for tightness and signs of overheating and discoloration.
    c) Check the condition of the contacts for wear and pitting.
    d) Check the contactors for free and smooth operation.
    e) Meg the motor and record readings.
    f) Check volts and amps of the motor.

Lubricate/Grease Bearings

1. Lubricate and/or grease bearings according to manufacturer's specifications

MEG Motor

1. Check the integrity of the insulation on the motor windings and the motor leads, using a megohm meter.

Coils

Maintenance Procedure

1. Record and report abnormal conditions.
2. Visually inspect the coil for leaks.
3. Inspect the coil for cleanliness.

Pumps

Annual Inspection

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly
   a) Check motor shaft and pump shaft for alignment, if applicable.
   b) Inspect the coupling for wear.
   c) Verify that the shaft guard is in place and tight, if applicable.
   d) Verify water flow through the pump.
   e) Check for leaks on the mechanical pump seals, if applicable.
   f) Verify proper drip rate on the pump seal packing, if applicable.
   g) Verify smooth operation of the pump.
   h) Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.
4. Lubrication
   a) Lubricate the motor bearings as necessary.

b) Lubricate the pump bearings as necessary.

5. Motor and Starter
   a) Clean the starter and cabinet.
   b) Inspect wiring and connections for tightness and signs of overheating and discoloration.
   c) Meg the motor.
   d) Verify tight connections on the motor terminals.
   e) Check the condition of the contacts for wear and pitting, if applicable.
   f) Check the contactors for free and smooth operation.
   g) Verify proper volts and amps.

Pump Run Inspection

1. Verify smooth operation of the pump.
2. Check for leaks on the mechanical pump seals, if applicable.
3. Verify proper drip rate on the pump seal packing, if applicable.
4. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Mechanical Starters with Electronic Controls

Comprehensive Annual Maintenance

1. Clean the starter and cabinet.
2. Inspect wiring and connections for tightness and signs of overheating and discoloration.
3. Check condition of the contacts for wear and pitting.
4. Check contactors for free and smooth operation.
5. Check the mechanical linkages for wear, security, and clearances.
6. Verify the overload settings.

VFD Starters

Comprehensive Annual Maintenance

1. Clean the starter and cabinet.

2. Inspect wiring and connections for tightness and signs of overheating and discoloration.
3. Check the tightness of the motor terminal connections.
4. Verify the operation of the cooling loop.
5. Verify proper operation of the frequency drive.

Rooftop Units

Comprehensive Annual Maintenance

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly
   a) Inspect for leaks and report results.
   b) Calculate refrigerant loss rate and report to the customer.
   c) Repair minor leaks as required (e.g. valve packing, flare nuts).
   d) Visually inspect condenser tubes for cleanliness.
4. Controls and Safeties
   a) Inspect the control panel for cleanliness.
   b) Inspect wiring and connections for tightness and signs of overheating and discoloration.
   c) Verify the working condition of all indicator/alarm lights, if applicable.
   d) Test the low water temperature control device. Calibrate and record setting.
   e) Test the low evaporator pressure safety device. Calibrate and record setting.
   f) Test the oil pressure safety device. Calibrate and record setting, if applicable.
   g) Check programmed parameters of RCM control, if applicable.
5. Lubrication System
   a) Check oil level in the compressor.
   b) Test oil for acid content and discoloration. Make recommendations to the customer based on the results of the test.
   c) Verify the operation of the oil heater. Measure amps and compare reading with the watt rating of the heater.

6. Motor and Starter
    a) Clean the starter and cabinet.
    b) Inspect wiring and connections for tightness and signs of overheating and discoloration.
    c) Check condition of the contacts for wear and pitting.
    d) Check the contactors for free and smooth operation.
    e) Check the tightness of the motor terminal connections.
    f) Meg the motor and record readings.
    g) Verify the operation of the electrical interlocks.
    h) Measure voltage and record. Voltage should be nominal voltage ± 10%.

Comprehensive Maintenance Inspection (RTU Heating Cycle)

1. Perform heating inspection/maintenance applicable to the unit (steam/hot water, gas, electric).
2. Verify smooth operation of the fans.
3. Check the belts for tension, wear, cracks, and glazing.
4. Verify clean air filters.
5. Gas Heat Option
    a) Visually inspect the heat exchanger.
    b) Inspect the combustion air blower fan, and clean, if required.
    c) Lubricate the combustion air blower fan motor, if applicable.
    d) Verify the operation of the combustion air flow-proving device.
    e) Test the operation of the high gas pressure safety device, if applicable. Calibrate, if necessary.
    f) Test the operation of the low gas pressure safety device, if applicable. Calibrate, if necessary.
    g) Verify the operation of the flame detection device.
    h) Test the operation of the high temperature limit switch. i.. Verify the integrity of the flue system.

i) Verify the operation of the operating controls.

j) Verify the burner sequence of operation.

k) Verify proper gas pressure to the unit and/or at the manifold, if applicable.

l) Perform combustion test. Make adjustments as necessary.

6. Electric Heat Option
   a) Inspect wiring and connections for tightness and signs of overheating and discoloration.
   b) Check and calibrate operating and safety controls, if applicable.
   c) Verify the operation of the heating elements.
   d) Check voltage and amperage and compare readings with the watt rating on the heater.

7. Hot Water / Steam Heat Option
   a) Inspect control valves and traps.
   b) Check and calibrate all operating and safety controls.
   c) Verify the operation of the heating coils.
   d) Verify the operation of the unit low temperature safety device.

Mid-Season Cooling Inspection (RTU)

1. Check the general condition of the unit.
2. Log the operating condition after system has stabilized.
3. Verify the operation of the control circuits.
4. Analyze the recorded data. Compare the data to the original design conditions.
5. Review operating procedures with operating personnel.
6. Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Comprehensive Maintenance Inspection (RTU - Cooling Cycle)

1. Record and report abnormal conditions, measurements taken, etc.
2. Review logs for operational problems and trends.
3. General Assembly

a) Inspect for leaks and report results.
b) Calculate refrigerant loss rate and report to the customer.
c) Repair minor leaks as required (e.g. valve packing, flare nuts).
d) Check pulleys and sheaves for wear and alignment.
e) Check belts for tension, wear, cracks, and glazing.
f) Verify clean evaporator coil, blower wheel, and condensate pan.
g) Verify clean air filters.
h) Verify proper operation of the condensate drain.
i) Verify proper operation of the dampers and/or inlet guide vanes, if applicable.

4. Controls and Safeties
   a) Inspect the control panel for cleanliness.
   b) Inspect wiring and connections for tightness and signs of overheating and discoloration.
   c) Verify the working condition of all indicator/alarm lights, if applicable.
   d) Test the low evaporator pressure safety device. Calibrate and record setting, if applicable.
   e) Test the high condenser pressure safety device. Calibrate and record setting, applicable.
   f) Test the oil pressure safety device, if applicable. Calibrate and record setting.
   g) Test the high static pressure safety device, if applicable. Calibrate and record setting.
   h) Verify the operation of the static pressure control device, if applicable.
5. Lubrication
   a) Verify the operation of the oil heater, if applicable.
   b) Lubricate the fan bearings as required.
   c) Lubricate the fan motor bearings as required.
   d) Lubricate the damper bearings, if applicable.
6. Motor and Starter
   a) Clean the starter and cabinet.
   b) Inspect wiring and connections for tightness and signs of overheating and discoloration.

c) Check the condition of the contacts for wear and pitting.

d) Check the contactors for free and smooth operation.

7. Startup /Checkout Procedure

a) Verify the operation of the oil heater.

b) Verify full water system, including the cooling tower and the condenser.

c) Verify clean cooling tower and strainers.

d) Test all flow-proving devices on the condenser water circuit.

e) Start the condenser water pump and the cooling tower fan(s).

f) Verify flow rate through the condenser.

g) Start the unit.

h) Verify smooth operation of the compressor(s) and fan(s).

i) Check the setpoint and sensitivity of the temperature control device.

j) Verify the operation of the condenser water temperature control device.

k) Verify clean condenser using pressure and temperature.

l) Check operation and setup of the Unit Control Module.

m) Check the superheat and subcooling on the refrigeration circuit(s).

n) Log the operating conditions after the system has stabilized.

o) Review operating procedures with operating personnel.

p) Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

ENERGY SAVINGS PLAN

SECTION 7 – OPTIONAL ENERGY GUARANTEE

OPTIONAL ENERGY GUARANTEE OVERVIEW

NOTE: *The following is meant only to serve as a description of an optional energy guarantee and does not constitute any contractual obligations between Hillside Public Schools and DCO. If Hillside Public Schools chooses to implement an energy guarantee contract, a separate document will be used based on mutual agreement and acceptance of all parties of its terms and conditions.*

A successful energy project consists of a partnership between an ESCO and Owner. Both parties have defined roles and accept their individual responsibilities as well as support any joint initiatives of the program as defined in the RFP and this document. Both DCO and the Hillside Public Schools will have a role in ongoing maintenance and operations as defined in the agreed-upon energy guarantee contractual documents. Both parties will be required to meet their obligations for the guaranteed energy units savings (referred to as “guarantee or savings”) to be achieved and to ensure the guarantee stays intact.

DCO will guarantee Hillside Public Schools will achieve 100% of the total energy units savings per the provisions of the agreed-upon energy guarantee contractual documents based on the final selection of ECMs and their associated energy savings as measured and verified by the Owner’s third-party, independent firm. The energy savings will be in energy units, not dollars as DCO has no control over the costs of utilities. The energy units guarantee contract shall commence thirty (30) days after the start-up and commissioning of the last Energy Conservation Measure (ECM) and be enforced for a period of one (1) year or until terminated by Hillside Public Schools. The one (1) Year Guarantee is provided by DCO for a cost of $0. The Measurement & Verification required by ESIP Legislation in association with the acceptance of an Energy Savings Guarantee will be provided by DCO Energy at a cost of 0.38% of the Hard Costs of the ECMs as outlined in Form V of the RFP Response (also shown Section 4 of this document).

SAVINGS VERIFICATION

There are events that cause energy savings to change. Hillside Public Schools and DCO will agree to baseline energy consumption that represents the facility’s energy use and cost prior to the date of any Agreement (the “Base Year”) and parameters, which affect the energy usage and cost of the facility, including but not limited to, utility rates, local weather profile, facility square footage, environmental conditions, schedules (e.g., lighting, HVAC) and an inventory of equipment in the facility. Energy savings are determined by comparing measured energy use or demand before and after implementation of an energy savings program.

ECM ENERGY SAVINGS = BASELINE ENERGY USE – POST INSTALLATION ENERGY USE +/- ADJUSTMENTS

Changes in estimated energy savings fall into two categories. These categories are Routine Adjustments and Non-Routine Adjustments. Routine Adjustments are expected changes during the savings reporting period to energy governing factors (e.g. weather). DCO uses IPMVP approved mathematical techniques to determine adjustments. Non-Routine Adjustments include energy-governing factors which are not usually expected to change, such as the facility size, the design and operation of installed equipment, occupancy and the type of occupants or any physical changes to the building or equipment that impact the facilities' utility use. These factors will be monitored for change throughout the reporting period.

DCO will perform monthly utility bill analysis and audit reports which compare the current year with base year energy consumption and costs. DCO will perform periodic on-site analysis to determine whether mechanical and electrical systems are operating at optimal efficiency and to assess the occupancy and operational schedules of the buildings.

As part of the optional energy guarantee, DCO uses weather normalization procedures to correct for the effect of weather variance on energy savings in subsequent years. Baseline energy and weather data are used to establish an algorithm to predict how the baseline building uses energy as a function of weather. The algorithm is then applied to subsequent years to correct for the impact weather may have on future building energy use. The weather normalization procedure and algorithms will be covered in detail as part of the optional energy guarantee contract provided to Hillside Public Schools.

ENERGY SAVINGS PLAN

APPENDICIES

APPENDIX LIST	
APPENDIX A	Construction Contingency Allowance
APPENDIX B	Design Bid Build Procedures
APPENDIX C	Operations & Maintenance Savings
APPENDIX D	Project Changes in Financing
APPENDIX E	Incentives in Debt Service
APPENDIX F	ECM Breakdown by Building
APPENDIX G	Local Government Energy Audits

ENERGY SAVINGS PLAN

APPENDIX A – CONSTRUCTION CONTINGENCY ALLOWANCE

Appendix A – Construction Contingency Allowance

Experience shows that during the construction phase there are four major categories of potential change of scope issues that benefit from having an appropriate Construction Contingency Allowance (CCA).

- Unknown conditions
- Building inspector's modifications
- Project owner requested changes
- Design clarifications or modifications

Unknown Conditions

Renovations to older facilities have greater potential for revealing unknown. Missing or inaccurate Blueprints, deviations from the original blue prints by the original builder and unknown or undocumented modifications during the life of the facility.

Areas such as behind a wall/roof/equipment or under the slab can bring unforeseen conditions which can delay the new construction and change the anticipated scope of the work. Therefore, it is advisable to dedicate a CCA that is higher than that for new construction.

Building Inspection Modifications

A plan review for the local building jurisdiction reviews the construction documents prior to issuing a building permit. However, there remains the likelihood that the building inspector will request modifications to the plans based upon experience and their interpretation of the applicable building code.

While we can ask for code review and documentation, if you hope to get a Certificate of Occupancy under a tight schedule from this same inspector requested modifications will need to be implemented as successfully appeals take time.

Whether it is adding an extra exit sign, smoke detector or fire extinguisher, or whether it is something more significant, it may require more work from the contractor, thus added expense. The CCA is intended to be the source of funds necessary for these requested modifications.

Project Owner Requested Changes

It is nearly impossible to express your every desire during the design phase. You will always see something during construction that you would like to change.

There is nothing necessarily wrong with that.

The CCA is intended to be the source of funds necessary for these requested changes.

Design Clarifications or Modifications

No designer has ever developed the perfect set of construction documents.

There are always items that can be detailed better or more clearly. The design intent should be adequately reflected in the drawings and specifications so that the contractor can bid and build the ECM to meet the design intent.

However, there will be times during construction when the builder will not be readily able to identify the exact intent of particular details or systems. At that time the builder will submit a Request for Information (RFI) to the designer for clarification or more information. The designer will issue clarifications or directives so that the builder can continue to meet the design intent.

On occasion, the RFI will reveal that something more than was shown in the construction documents is necessary to fulfill the design intent. The clarification or modification may impact the scope of the work to a degree that additional construction costs become necessary.

As long as the design omission is not negligent, the CCA is intended to be the source of funds necessary for these design clarifications or modifications.

Allowance Method

Detailed plans, schematics and specifications for Hillside Public Schools were not available to deliver a cost estimate for each ECM. The budgetary costs carried in the project are based on good faith estimates, contractor supplied budgets for similar ECMs on other recent projects and a database of actual installed costs for various ECMs.

a. Allowance Amount (6.64% of Hard Costs)

BID PACKAGE ALLOWANCE SCHEDULE	
ECM	CONTINGENCY AMOUNT
LED Lighting Replacement	$8,924
Boiler Replacement	$67,728
Upgrade/Install Control System	$94,726
Solar PPA	$0
Combined Heat & Power Unit	$18,260
Rooftop Unit Replacement	$7,503
Premium Efficiency Pump Motors and VFDs	$4,980
Split System AC & AHU Replacement	$303
Pipe and Valve Insulation	$239
Water Conservation	$40

Project total construction contingency allowance amount is 6.64% of estimated hard costs and is agreed upon.

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ENERGY SAVINGS PLAN

APPENDIX B – DESIGN BID BUILD

Appendix B – Design Bid Build Procedures

Design–bid–build (or **design/bid/build**, and abbreviated **D–B–B** or **D/B/B** accordingly), also known as **Design–tender** (or "design/tender") **traditional method** or **hard bid** is the method of delivery for this project.

Design–bid–build is the traditional method for project delivery and differs in several substantial aspects from design–build.

There are three main sequential phases to the design–bid–build delivery method:

- The design phase
- The bidding (or tender) phase
- The construction phase

Design Phase

In this phase DCO will design and produce bid documents, including construction drawings and technical specifications, on which various contractors will in turn bid to construct the project.

The Energy Savings Plan (ESP) is intended to document owner's project requirements and provide a conceptual and/or schematic design and good faith estimates.

With the ESP DCO will bring in other design professionals including mechanical, electrical, and plumbing engineers (MEP specifications engineers), a fire protection engineer, structural engineer, sometimes a civil engineer and a landscape architect to help complete the construction drawings and technical.

The design document should reflect the intent of the energy savings plan for scope, price, savings, operations & maintenance savings, incentive, and schedule.

The finished bid documents are coordinated by the DCO and owner for issuance to contractors during the bid phase.

Bid (or tender) phase

Bidding is according to NJ Public Bid Law and is "open", in which any qualified bidder may participate.

The various contractors bidding obtain bid documents, and then put them out to multiple subcontractors for bids on sub-components of the project.

Questions may arise during the bid period, and DCO will issue clarifications or corrections to the bid documents in the form of addenda.

From these elements, the contractor compiles a complete bid for submission by the established closing date and time bid date.

Bids are to be based on a base bid lump sum plus alternates, bid requirements and alternates are elucidated within the bid documents.

Once bids are received, DCO reviews the bids, seeks any clarifications required of the bidders, investigates contractor qualifications, ensures all documentation is in order (including bonding if required), and advises the owner as to the ranking of the bids.

If the bids fall in a range acceptable to the owner, the project is awarded to the contractor with the lowest reasonable bid.

In the event that all of the bids do not satisfy the needs of the owner the following options become available to DCO:

- Re-bid the construction of the project on a future when monies become available and/or construction costs go down.
- Revise the design of that ECM (at no cost to the client) so as to make the project smaller or reduce features or elements of the project to bring the cost down. The revised bid documents can then be issued again for bid.
    - DCO will provide guidance on energy savings, operation and maintenance savings and incentives to ensure the project is self-funding.
- Revise the design of future ECM(s) (at no cost to the client) so as to make the project smaller or reduce features or elements of the project to bring the cost down. The current bid package can then be contracted
    - DCO will provide guidance on energy savings, operation and maintenance savings and incentives to ensure the project is self-funding.

Construction phase

Once the construction of the project has been awarded to the contractor, the bid documents (e.g., approved construction drawings and technical specifications) may not be altered.

The necessary permits (for example, a building permit) must be achieved from all jurisdictional authorities in order for the construction process to begin.

Should design changes be necessary during construction, whether initiated by the contractor, owner, or as discovered by the architect, DCO will issue sketches or written clarifications and handle the project through allowance (See Appendix A).

The contractor may be required to document "as built" conditions to the owner.

Bidding Method

1. To achieve energy savings and fund debt service payments as rapidly as possible the bid packages will be bid in the following order:

BID METHOD SCHEDULE		
ECM	COST + ALLOWANCE	SAVINGS
LED Lighting Replacement	$143,327	$77,653
Boiler Replacement	$1,087,728	$2,894
Upgrade/Install Control System	$1,521,317	$61,896
Solar PPA	$0	$44,964
Combined Heat & Power Unit	$293,260	$7,631
Rooftop Unit Replacement	$120,503	$5,420
Premium Efficiency Pump Motors and VFDs	$79,980	$1,694
Split System AC & AHU Replacement	$4,874	$71
Pipe and Valve Insulation	$3,831	$1,964
Water Conservation	$644	$2,051

2. Bids in group 1 (Green) are within 15% of budget value they will be awarded.
3. Bids in group 2 (Yellow) may be value engineered from the project to meet budget
    a. DCO will provide the impact of ECMs value engineered:
        i. Energy Savings
        ii. Operations and Maintenance Savings
        iii. Incentive
4. Bids in group 3 (Red) may be value engineered **or removed** from the project to meet budget
    a. DCO will provide the impact of ECMs value engineered or removed:
        i. Energy Savings
        ii. Operations and Maintenance Savings
        iii. Incentive
5. As per ESIP law DCO fee will be applied to the ECM hard cost.
    a. DCO will receive no compensation for bids that are under budget
    b. DCO will receive no penalty for bids that are over budget
6. If the budget overruns make savings unachievable at the current budget, DCO will provide additional ECMs above the budget to meet the required energy savings

Project bidding strategy is agreed upon.

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ENERGY SAVINGS PLAN

APPENDIX C – OPERATIONS AND MAINTENANCE SAVINGS

Appendix C – Operation & Maintenance Savings

Operations and Maintenance and other non-energy-related cost savings are allowable in NJ ESIPs, and are defined as reduction in expenses (other than energy cost savings) related to energy and water consuming equipment:

Energy-related cost savings can result from avoided expenditures for operations, maintenance, equipment repair, or equipment replacement due to the ESIP project.

Sources of O&M savings include:

- Termination of service personnel
- Lower maintenance service contract costs
- Decrease in repair costs
    - Avoided repair and replacement costs as a result of replacing old and unreliable equipment
    - Material savings due to new equipment warranties
    - Material savings due to the longer life items not needing replacement
        - In particular, reduction in florescent bulbs due to LED

Termination of service personnel

As a result of the ESIP, a number of the client's maintenance staff members may no longer be required. If there will be a reduction in the government's maintenance staff, O&M savings can be claimed.

A problem could arise if the maintenance staff is not reduced. Then it would be necessary to determine what new O&M responsibilities the facility has taken on, or savings should not be claimed. For example, it could be that a new building was constructed. During the performance period, it is important to establish that any increased maintenance was not due to the equipment installed under the ESIP

Lower maintenance service contract costs

Prior to the implementation of the ESIP mechanical and electrical equipment was maintained by a third party under a maintenance contract. The ESIP replaces the aging equipment with newer, more efficient equipment, which can reduce the service costs to the client.

Decrease in repair costs

The client is responsible for maintenance both before and after the equipment installation. Although there is no reduction in staff for which to claim labor savings, there will be cost savings on replacement materials.

Material-related savings frequently result from lighting and lighting controls projects.

For this project, lighting maintenance savings will result from the following:

1. Reduced material requirements (e.g., lamps)
2. Reduced operating time — Control measures increase equipment life by reducing the burn time of lamps and ballasts
3. Warranty-related savings — newly installed lamps, and fixtures come with a manufacturer warranty of 10 years.

O&M Savings

Project total O&M savings to fund debt service amount:

- Boiler Replacement: $32,046 per year = $160,231 over years 1 thru 5
    - Annual savings calculated using maintenance invoices provided by Hillside Public Schools

Project O&M Savings strategy is agreed upon.

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ENERGY SAVINGS PLAN

APPENDIX D – PROJECT CHANGES IN FINANCING

Appendix D – Project Changes in Financing

The Energy savings plan has been approved using:

Interest rate of: 2.0%
Term: ..... 20 Years
Construction Term ..... 1 Year
Construction Interest Only Payment of ..... TBD by financial advisor
Annual Surplus of no less than $2,421

During financing DCO will provide assistance but does not guarantee the timing of savings or incentives.

While beneficial to the client financing changes are the responsibility of the client, bond counsel and/or financial advisor. DCO represents in no way advice on these financial items

Financial items may include but are not limited to:

- Timing of payments
- Splitting payments into bi-annual, tri-annual, etc.
- Coordination with the client's fiscal year
- Local finance board material, forms and presentations
- Multiple tiered interest rates

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ENERGY SAVINGS PLAN

APPENDIX E – INCENTIVES IN DEBT SERVICE

Appendix E – Incentives in Debt Service

Estimated incentive values were calculated in accordance with the New Jersey Clean Energy Program Guidelines. The total incentive amount was calculated to be $456,764 in rebates and incentives - 100% has been applied to the project financial analysis (See Section 4). Please see below and Appendix F for building-by-building details.

PROJECT SUMMARY (DIRECT INSTALL)				
BUILDING	**% Incentive**	**Total Measure Cost**	**Estimated Incentive Amount**	**Total Cost to Customer**
Hillside High School	80%	$123,217	$98,574	$24,643
A.P. Morris Early Childhood Center	71%	$295,576	$209,013	$86,563
Walter O. Krumbiegel Middle School	80%	$61,404	$49,123	$12,281
Hurden Looker Elementary School	80%	$43,975	$35,180	$8,795
George Washington Elementary School	80%	$47,141	$37,713	$9,428
Calvin Coolidge Elementary School	80%	$15,546	$12,437	$3,109
Saybrook Annex	80%	$10,116	$8,093	$2,023
Administration Building	80%	$8,290	$6,632	$1,658
Total	75%	$605,265	$456,764	$148,501

No implied and/or written guarantee is being made with respective to the receipt of incentives. All incentives estimates carry inherent risks that may jeopardize the receipt of them. Therefore, Hillside Public Schools acknowledges and accepts that any project proposed should not rely on the receipt of incentives as a reason to implement it.

DCO

- Josh Costell
- Executive Vice President and General Manager
- DCO Energy Efficiency Division
- 100 Lenox Drive
- Lawrenceville, NJ 08648

Hillside Public Schools

- Hillside Public Schools

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V4.0D)

General Project Information

Participating Customer:	Hillside BOE		**Facility Type:**	Education – Primary School	
Contractor / Project #:	Willdan	10929	**HVAC Type:**	AC & Gas Heat	
Facility Name:	Abram Morris School		**Total Facility Square Footage:**	88,000	
Street Address:	143 Coe Ave		**Avg Weekly Hrs of Operation:**	50	
City / Zip Code:	Hillside	07205	**# of Full-Time Employees:**	30	
Is this facility publicly owned?:	Y		**Year Constructed:**	1975	
BOE, MUA or other public entity property?	Y		**Tax Exempt?:**	Y	
			Project Permitting Costs:		

Enhanced Incentive Eligibility

Project in UEZ?	N	**K-12 School?**	Y
Project in OZ?	N	**Municipality?**	N
Affordable Housing Development?	N	**County Facility?**	N

Electric Utility Information

Electric Provider:	PSE&G
Service Class:	LPLS
Account #:	4249650502
Billing Period Start Date:	06/27/19
Billing Period End Date:	07/26/19
Billing Period kWh Consumption:	34,574
Billing Period Total Cost:	$6,422.56
Total Taxes + Fees on Bill:	$1,040.21
Electric - Average Cost ($/kWh):	**$0.156**

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ETG
Account #:	8792254390
Billing Period Start Date:	01/30/20
Billing Period End Date:	03/02/20
Billing Period Therm Consumption:	7,049
Billing Period Total Cost:	$5,610.08
Total Taxes + Fees on Bill:	$427.58
Gas - Average Cost ($/Therm):	**$0.735**

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	**$0.000**

Propane Information

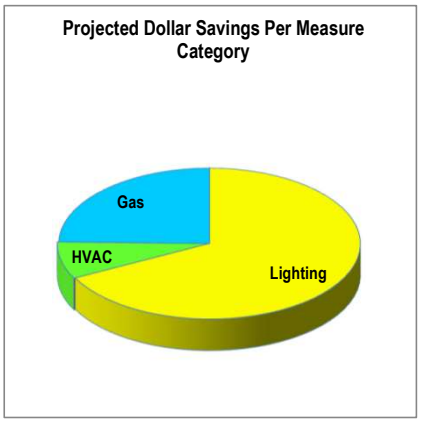
Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	**$0.000**

Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	133,248	kWh	$20,743.51	$83,392.27	$58,969.75	$24,422.52
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	15,577	kWh	$2,424.92	$198,237.44	$140,181.00	$58,056.44
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**148,825**	**kWh**	**$23,168.43**	**$281,629.71**	**$199,150.74**	**$82,478.97**
GAS MEASURES:	**10,320**	**Therms**	**$7,587.42**	**$13,946.55**	**$9,862.12**	**$4,084.43**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$30,755.84**	**$295,576.26**	**$209,012.86**	**$86,563.40**

SIMPLE PAYBACK (YEARS): **2.81**

PROJECT TRC TEST: **1.34**



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Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F3 - Girls Room	3	$ 195.21	$ 57.17	$ 138.04
Relamp: LED - A-Lamp (3 - 25W): 17 W / F3 - Utility Room	1	$ 28.26	$ 8.28	$ 19.98
Relamp: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / F3 - Nurse RR	1	$ 45.92	$ 13.45	$ 32.47
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Nurse A	3	$ 252.87	$ 74.06	$ 178.81
Relamp: LED - A-Lamp (3 - 25W): 12 W / F3 - Storage	4	$ 100.48	$ 29.43	$ 71.05
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - ESL Rm. 19	22	$ 1,854.38	$ 543.08	$ 1,311.30
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 20	9	$ 758.61	$ 222.17	$ 536.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 20	1	$ 61.78	$ 18.09	$ 43.69
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 20	1	$ 61.78	$ 18.09	$ 43.69
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 21	3	$ 185.34	$ 54.28	$ 131.06
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 21	4	$ 337.16	$ 98.74	$ 238.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 22	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 22	3	$ 185.34	$ 54.28	$ 131.06
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 17	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F3 - Boys RR	3	$ 195.21	$ 57.17	$ 138.04
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 16	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 15	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 14	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 13	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Rm. 12	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3 - Hall	11	$ 679.58	$ 199.02	$ 480.56
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3.5 - Tower - Room 1	1	$ 61.78	$ 18.09	$ 43.69
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F3.5 - Tower - Storage	1	$ 84.29	$ 24.69	$ 59.60
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F2 - Girls RR	3	$ 195.21	$ 57.17	$ 138.04
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Speech 9A	2	$ 168.58	$ 49.37	$ 119.21
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Speech 9A	2	$ 123.56	$ 36.19	$ 87.37
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Speech 9A	2	$ 123.56	$ 36.19	$ 87.37
Relamp: LED - A-Lamp (3 - 25W): 12 W / F2 - Speech 9A	2	$ 50.24	$ 14.71	$ 35.53
Relamp: LED - A-Lamp (3 - 25W): 12 W / F2 - Storage	1	$ 25.12	$ 7.36	$ 17.76
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 8	8	$ 674.32	$ 197.48	$ 476.84
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 8	6	$ 370.68	$ 108.56	$ 262.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 9	8	$ 674.32	$ 197.48	$ 476.84
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 10	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 7	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 11	9	$ 758.61	$ 222.17	$ 536.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 11	4	$ 247.12	$ 72.37	$ 174.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 6	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F2 - Boys RR	3	$ 195.21	$ 57.17	$ 138.04
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 5	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 4	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 3	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 2	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Rm. 1	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hall	10	$ 617.80	$ 180.93	$ 436.87

Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hall	3	$ 185.34	$ 54.28	$ 131.06
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Adult RR	2	$ 154.30	$ 45.19	$ 109.11
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Storage (Gas Meter)	3	$ 185.34	$ 54.28	$ 131.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Storage (Gas Meter)	1	$ 61.78	$ 18.09	$ 43.69
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - APM Office A	1	$ 61.78	$ 18.09	$ 43.69
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - APM Office A	6	$ 370.68	$ 108.56	$ 262.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Copy Room	2	$ 123.56	$ 36.19	$ 87.37
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F1 - Copy Room (Storage)	1	$ 65.07	$ 19.06	$ 46.01
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - APM Office B	1	$ 61.78	$ 18.09	$ 43.69
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - APM Office B	1	$ 84.29	$ 24.69	$ 59.60
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F1 - Sensory Room A & B	3	$ 195.21	$ 57.17	$ 138.04
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Sensory Room A & B	6	$ 370.68	$ 108.56	$ 262.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 1A	4	$ 337.16	$ 98.74	$ 238.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Therapy Room	9	$ 758.61	$ 222.17	$ 536.44
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Rm. 1A (Closet)	1	$ 25.12	$ 7.36	$ 17.76
Relamp: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / F1 - Girls RR	3	$ 137.76	$ 40.34	$ 97.42
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - 6R Utility Room	1	$ 25.12	$ 7.36	$ 17.76
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - 6R Utility Room	1	$ 25.12	$ 7.36	$ 17.76
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Boys RR	2	$ 154.30	$ 45.19	$ 109.11
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hall Old	11	$ 679.58	$ 199.02	$ 480.56
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Vestibule	1	$ 61.78	$ 18.09	$ 43.69
Relamp: LED - A-Lamp (3 - 25W): 12 W / B - Boiler Room	5	$ 125.60	$ 36.78	$ 88.82
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Auditorium	3	$ 185.34	$ 54.28	$ 131.06
Relamp: LED - A-Lamp (3 - 25W): 17 W / F1 - Stage	1	$ 28.26	$ 8.28	$ 19.98
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Storage Under Stage	4	$ 337.16	$ 98.74	$ 238.42
Relamp: LED - A-Lamp (3 - 25W): 17 W / B - Storage Under Stage	1	$ 28.26	$ 8.28	$ 19.98
Relamp: LED - A-Lamp (3 - 25W): 17 W / B - Storage Under Stage	15	$ 423.90	$ 124.14	$ 299.76
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F1 - Stage Exit	2	$ 130.14	$ 38.11	$ 92.03
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Stage Exit Closet	2	$ 50.24	$ 14.71	$ 35.53
Relamp/Reballast: Plug & Play LED - 4-Lamp - 4-Foot T5HO / F1 - Gym	16	$ 2,318.56	$ 679.02	$ 1,639.54
Relamp: LED - A-Lamp (3 - 25W): 9 W / F1 - Gym Storage A	1	$ 20.76	$ 6.08	$ 14.68
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Gym Office	1	$ 84.29	$ 24.69	$ 59.60
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Gym Office - Closet	1	$ 25.12	$ 7.36	$ 17.76
Relamp: LED - A-Lamp (3 - 25W): 9 W / F1 - Gym Storage B	1	$ 20.76	$ 6.08	$ 14.68
Relamp: LED - A-Lamp (3 - 25W): 17 W / F1 - Gym Stairs	1	$ 28.26	$ 8.28	$ 19.98
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Gym Mech Room	10	$ 617.80	$ 180.93	$ 436.87
Relamp: LED - A-Lamp (3 - 25W): 12 W / G - Gym B	3	$ 75.36	$ 22.07	$ 53.29
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Boiler Room B	4	$ 247.12	$ 72.37	$ 174.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Cafeteria Mech A	4	$ 247.12	$ 72.37	$ 174.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Kitchen	10	$ 771.50	$ 225.94	$ 545.56
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Kitchen Closet	2	$ 50.24	$ 14.71	$ 35.53
Relamp: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / F1 - Kitchen	2	$ 91.84	$ 26.90	$ 64.94
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Cafeteria	29	$ 2,444.41	$ 715.88	$ 1,728.53
Relamp: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / F1 - RR Hall	1	$ 45.92	$ 13.45	$ 32.47
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Link Hall	11	$ 927.19	$ 271.54	$ 655.65
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Link Hall	10	$ 617.80	$ 180.93	$ 436.87
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Link Hall	2	$ 154.30	$ 45.19	$ 109.11
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Janitor Office	3	$ 185.34	$ 54.28	$ 131.06
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 159	10	$ 771.50	$ 225.94	$ 545.56
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 162	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 162 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 162 RR	1	$ 156.10	$ 45.72	$ 110.38

Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 156 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 156 Storage	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 156	10	$ 771.50	$ 225.94	$ 545.56
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 153	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 153 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 153 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 177	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 177 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 177 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 174 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 174 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 174	10	$ 771.50	$ 225.94	$ 545.56
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 150	9	$ 694.35	$ 203.35	$ 491.00
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 150 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 150 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 147 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 147 Storage	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 147	9	$ 694.35	$ 203.35	$ 491.00
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 144	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 144 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 144 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 141 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 141 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 141	10	$ 771.50	$ 225.94	$ 545.56
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 137	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 138 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 138 Storage	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 135	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 135 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 135 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 132 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 132 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 132	9	$ 694.35	$ 203.35	$ 491.00
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 129	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 129 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 129 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 126 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 126 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 126	9	$ 694.35	$ 203.35	$ 491.00
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 123	9	$ 694.35	$ 203.35	$ 491.00
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 123 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 123 Storage	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 171	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 171 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 171 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 168 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 168 Storage	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 168	10	$ 771.50	$ 225.94	$ 545.56
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 120	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 120 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 120 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 117 Storage	1	$ 156.10	$ 45.72	$ 110.38

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 117 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 117	10	$ 771.50	$ 225.94	$ 545.56
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 165	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 165 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 165 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 114 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 114 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 114	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Main Office	9	$ 1,404.90	$ 411.44	$ 993.46
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Main Office - Conference Rm	4	$ 624.40	$ 182.86	$ 441.54
Relamp: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / F1 - Principals Office	6	$ 275.52	$ 80.69	$ 194.83
Relamp: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / F1 - Nurse B	4	$ 183.68	$ 53.79	$ 129.89
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Nurse Sprinkler	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Main Office RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Speech	5	$ 780.50	$ 228.58	$ 551.92
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 104	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 104 RR	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 104 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 101 Storage	1	$ 156.10	$ 45.72	$ 110.38
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Rm. 101 RR	1	$ 156.10	$ 45.72	$ 110.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Rm. 101	10	$ 771.50	$ 225.94	$ 545.56
Fixture Replacement: LED Interior Ambient Luminaire - 2x2: 35 W / F1 - Hall	51	$ 7,961.10	$ 2,331.51	$ 5,629.59
Relamp/Reballast: LED 1-Lamp PL 4-Pin / F1 - Hall	65	$ 3,474.90	$ 1,017.67	$ 2,457.23
Fixture Replacement: LED Outdoor Wall Mount (14 - 60W): 27 W / exterior	2	$ 393.86	$ 115.35	$ 278.51
Fixture Replacement: LED Pole Mount (70 - 260W): 200 W / exterior	6	$ 5,043.24	$ 1,476.98	$ 3,566.26
Packaged RTU (Gas Heating): 15-Tons / RTU-1	1	$ 24,848.50	$ 7,277.21	$ 17,571.29
Packaged RTU (Gas Heating): 15-Tons / RTU-4	1	$ 24,848.50	$ 7,277.21	$ 17,571.29
Packaged RTU (Gas Heating): 15-Tons / RTU-5	1	$ 24,848.50	$ 7,277.21	$ 17,571.29
Packaged RTU (Gas Heating): 15-Tons / RTU-6	1	$ 24,848.50	$ 7,277.21	$ 17,571.29
Packaged RTU (Gas Heating): 12.5-Tons / RTU-3	1	$ 19,803.00	$ 5,799.57	$ 14,003.43
Packaged RTU (Gas Heating): 12.5-Tons / RTU-7	1	$ 19,803.00	$ 5,799.57	$ 14,003.43
Packaged RTU (Gas Heating): 10-Tons / RTU-10	1	$ 17,689.00	$ 5,180.46	$ 12,508.54
Packaged RTU (Gas Heating): 6-Tons / RTU-8	1	$ 13,101.00	$ 3,836.80	$ 9,264.20
Packaged RTU (Gas Heating): 6-Tons / RTU-9	1	$ 13,101.00	$ 3,836.80	$ 9,264.20
Dual Enthalpy Economizers / RTU-1	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-4	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-5	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-6	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-3	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-7	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-10	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-8	1	$ 1,705.16	$ 499.38	$ 1,205.78
Dual Enthalpy Economizers / RTU-9	1	$ 1,705.16	$ 499.38	$ 1,205.78
Electronic Fuel-Use Economizers (for Forced Air Heat) / RTU-1 & 4	2	$ 1,082.00	$ 316.88	$ 765.12
Electronic Fuel-Use Economizers (for Forced Air Heat) / RTU-5 & 6	2	$ 1,082.00	$ 316.88	$ 765.12
Electronic Fuel-Use Economizers (for Forced Air Heat) / RTU-3 & 7	2	$ 1,082.00	$ 316.88	$ 765.12
Electronic Fuel-Use Economizers (for Forced Air Heat) / RTU-10	1	$ 541.00	$ 158.44	$ 382.56
Electronic Fuel-Use Economizers (for Forced Air Heat) / RTU-8 & 9	2	$ 1,082.00	$ 316.88	$ 765.12
Programmable Thermostats / Office	9	$ 1,989.00	$ 582.50	$ 1,406.50
Low-Flow Aerators (Lavatory) / Rest Rooms	34	$ 404.60	$ 118.49	$ 286.11
Low-Flow Aerators (Kitchen) / Kitchen	28	$ 347.20	$ 101.68	$ 245.52
Pre-Rinse Spray Valves / Kitchen	1	$ 95.75	$ 28.04	$ 67.71

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Pipe Wrap Insulation / Boiler Room	1	$ 1,080.00	$ 316.29	$ 763.71
Pipe Wrap Insulation / Boiler Room	1	$ 1,251.00	$ 366.37	$ 884.63
Pipe Wrap Insulation / Boiler Room	1	$ 1,100.00	$ 322.15	$ 777.85
Pipe Wrap Insulation / Boiler Room	1	$ 1,462.50	$ 428.31	$ 1,034.19
Pipe Wrap Insulation / Boiler Room	1	$ 1,347.50	$ 394.63	$ 952.87
TOTALS**		$ 295,576.26	$ 86,563.40	$ 209,012.86

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V4.0D)

General Project Information

Participating Customer:	Hillside Board of Education		Facility Type:	Office - Small	
Contractor / Project #:	Willdan	10930	HVAC Type:	AC & Gas Heat	
Facility Name:	Administration Building		Total Facility Square Footage:	15,000	
Street Address:	195 Virginia St.		Avg Weekly Hrs of Operation:	40	
City / Zip Code:	Hillside	07205	# of Full-Time Employees:	10	
Is this facility publicly owned?:	Y		Year Constructed:	1970	
BOE, MUA or other public entity property?	Y		Tax Exempt?:	Y	
			Project Permitting Costs:	$500.00	

Enhanced Incentive Eligibility

Project in UEZ?	N	K-12 School?	Y
Project in OZ?	N	Municipality?	N
Affordable Housing Development?	N	County Facility?	N

Electric Utility Information

Electric Provider:	PSE&G
Service Class:	GLP
Account #:	73 974 256 07
Billing Period Start Date:	05/28/19
Billing Period End Date:	08/26/19
Billing Period kWh Consumption:	16,800
Billing Period Total Cost:	$2,064.45
Total Taxes + Fees on Bill:	$142.58
Electric - Average Cost ($/kWh):	$0.114

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ETG
Account #:	6072292781
Billing Period Start Date:	12/30/19
Billing Period End Date:	01/28/20
Billing Period Therm Consumption:	1,220
Billing Period Total Cost:	$1,035.58
Total Taxes + Fees on Bill:	$37.50
Gas - Average Cost ($/Therm):	$0.818

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	$0.000

Propane Information

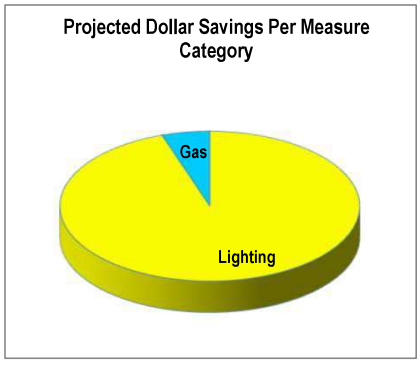
Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	$0.000

Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	16,835	kWh	$1,925.90	$8,230.44	$6,584.35	$1,646.09
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**16,835**	**kWh**	**$1,925.90**	**$8,230.44**	**$6,584.35**	**$1,646.09**
GAS MEASURES:	**128**	**Therms**	**$105.07**	**$59.50**	**$47.60**	**$11.90**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$2,030.97**	**$8,289.94**	**$6,631.95**	**$1,657.99**

SIMPLE PAYBACK (YEARS): 0.82

PROJECT TRC TEST: 1.45



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Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F1 - Vestibule - 1	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F1 - Reception Area - 2	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Reception Area - 2	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Suprintendent - 4	9	$ 694.35	$ 138.87	$ 555.48
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Conference Room - 5	9	$ 694.35	$ 138.87	$ 555.48
Relamp: LED - A-Lamp (3 - 25W): 9 W / F1 - Conference Room RR - 5A	3	$ 62.28	$ 12.46	$ 49.82
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Ladies RR - 6	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Mail Room - 7	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Men's RR - 8	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Curriculam Lab - 9	3	$ 252.87	$ 50.57	$ 202.30
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Lab Office - 9A	3	$ 252.87	$ 50.57	$ 202.30
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Board Room - 10	9	$ 694.35	$ 138.87	$ 555.48
Relamp: LED - A-Lamp (3 - 25W): 9 W / F1 - Storage Closet - 11	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Stairs - 12	1	$ 75.71	$ 15.14	$ 60.57
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Stairs - 12	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Open Space - 13	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 9 W / F2 - Storage - 14	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hallway - 15	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 9 W / F2 - Secretary - 16	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Secretary RR - 16A	3	$ 252.87	$ 50.57	$ 202.30
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Bus Administrator - 17	5	$ 308.90	$ 61.78	$ 247.12
Relamp: LED - A-Lamp (3 - 25W): 9 W / F2 - Bus Closet - 17A	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Offices - 18	4	$ 247.12	$ 49.42	$ 197.70
Relamp: LED - A-Lamp (3 - 25W): 9 W / F2 - Closet - 19	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Copy Room - 20	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Staff RR - 21	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Payroll Dept. - 22	7	$ 540.05	$ 108.01	$ 432.04
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Payroll Dept. - 22	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Book Keeping Dept. - 23	9	$ 694.35	$ 138.87	$ 555.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Book Keeping Dept. - 23	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Storage Closet - 24	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Electric / Workshop - 26	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Electric / Workshop - 26	8	$ 494.24	$ 98.85	$ 395.39
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Electric / Workshop - 26	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Electric / Workshop - 26	3	$ 62.28	$ 12.46	$ 49.82
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Closet 1 - 27	1	$ 20.76	$ 4.15	$ 16.61
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Boiler Room - 29	1	$ 20.76	$ 4.15	$ 16.61
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Boiler Room - 29	1	$ 20.76	$ 4.15	$ 16.61
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Boiler Room - 29	2	$ 41.52	$ 8.30	$ 33.22
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Storage 3 - 30	8	$ 166.08	$ 33.22	$ 132.86
Relamp: LED - A-Lamp (3 - 25W): 9 W / Exterior "B"	1	$ 25.41	$ 5.08	$ 20.33
Relamp/Reballast: LED 1-Lamp PL 4-Pin / Exterior "C"	8	$ 588.80	$ 117.76	$ 471.04
Fixture Replacement: LED Architectural Flood/Spot (25 - 150W): 31 W / Exterior "D"	1	$ 218.81	$ 43.76	$ 175.05

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Low-Flow Aerators (Lavatory) / Restroom	5	$ 59.50	$ 11.90	$ 47.60
TOTALS**		$ 8,289.94	$ 1,657.99	$ 6,631.95

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

New Jersey Office of Clean Energy
Direct Install Program
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General Project Information

Participating Customer:	Hillside BOE		**Facility Type:**	Education – Primary School	
Contractor / Project #:	Willdan	10931	**HVAC Type:**	AC & Gas Heat	
Facility Name:	George Washington Elementary School		**Total Facility Square Footage:**	45,080	
Street Address:	1530 Leslie Street		**Avg Weekly Hrs of Operation:**	32	
City / Zip Code:	Hillside	07205	**# of Full-Time Employees:**	30	
Is this facility publicly owned?:		Y	**Year Constructed:**	1937	
BOE, MUA or other public entity property?		Y	**Tax Exempt?:**	Y	
			Project Permitting Costs:		

Enhanced Incentive Eligibility

Project in UEZ?	N	**K-12 School?**	Y
Project in OZ?	N	**Municipality?**	N
Affordable Housing Development?	N	**County Facility?**	N

Electric Utility Information

Electric Provider:	PSE&G
Service Class:	LPLS
Account #:	4242151918
Billing Period Start Date:	11/23/19
Billing Period End Date:	12/26/19
Billing Period kWh Consumption:	35,097
Billing Period Total Cost:	$3,913.68
Total Taxes + Fees on Bill:	$871.94
Electric - Average Cost ($/kWh):	**$0.087**

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ET-GDS
Account #:	0527272420
Billing Period Start Date:	12/02/19
Billing Period End Date:	12/30/19
Billing Period Therm Consumption:	4,118
Billing Period Total Cost:	$3,521.62
Total Taxes + Fees on Bill:	$281.39
Gas - Average Cost ($/Therm):	**$0.787**

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	**$0.000**

Propane Information

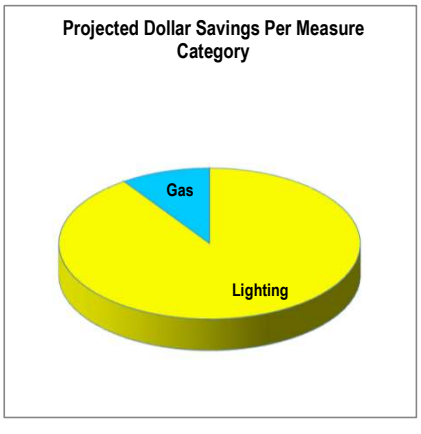
Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	**$0.000**

Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	78,789	kWh	$6,828.36	$45,555.51	$36,444.41	$9,111.10
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**78,789**	**kWh**	**$6,828.36**	**$45,555.51**	**$36,444.41**	**$9,111.10**
GAS MEASURES:	**923**	**Therms**	**$726.15**	**$1,585.50**	**$1,268.40**	**$317.10**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$7,554.52**	**$47,141.01**	**$37,712.81**	**$9,428.20**

SIMPLE PAYBACK (YEARS): **1.25**

PROJECT TRC TEST: **1.21**



Page 2
Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Kitchen	3	$ 185.34	$ 37.07	$ 148.27
Relamp/Reballast: Plug & Play LED - 4-Lamp - 4-Foot T5HO / 1st Floor, Cafeteria/Gym	15	$ 2,173.65	$ 434.73	$ 1,738.92
Fixture Replacement: Linear Ambient Luminaire - 8' (60 - 100W): 75 W / 1st Floor, Stage	2	$ 757.10	$ 151.42	$ 605.68
Relamp: LED - A-Lamp (3 - 25W): 9 W / 1st Floor, Stage	1	$ 25.41	$ 5.08	$ 20.33
Fixture Replacement: LED Exit Sign: 2.3 W / 1st Floor, Stage	1	$ 72.90	$ 14.58	$ 58.32
Relamp: LED - A-Lamp (3 - 25W): 9 W / 1st Floor, Stoarge A (Old Locker)	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Stoarge A (Old Locker)	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Office 1A	1	$ 65.07	$ 13.01	$ 52.06
Relamp/Reballast: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / 1st Floor, Boys Room	1	$ 85.18	$ 17.04	$ 68.14
Relamp/Reballast: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / 1st Floor, Girls Room	1	$ 85.18	$ 17.04	$ 68.14
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Custodial Closet	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Small Hall	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Small Hall	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Small Hall	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 9 W / Basement, Stairs	1	$ 20.76	$ 4.15	$ 16.61
Relamp: LED - A-Lamp (3 - 25W): 10 W / Basement, Boiler Room	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / Basement, Boiler Room	10	$ 757.10	$ 151.42	$ 605.68
Fixture Replacement: LED Exit Sign: 2.3 W / Basement, Boiler Room	1	$ 72.90	$ 14.58	$ 58.32
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / Basement, Storage A/Hall	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, Room X	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 201	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 210	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 202	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 209	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 203A	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 203B	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, Girls Room	3	$ 231.45	$ 46.29	$ 185.16
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 2nd Floor, Custodial Closet A	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, Teachers Lounge	6	$ 462.90	$ 92.58	$ 370.32
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 2nd Floor, Custodial Closet B	1	$ 65.07	$ 13.01	$ 52.06
Relamp: LED - A-Lamp (3 - 25W): 9 W / 2nd Floor, Custodial Closet C	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 204	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, Boys Room	3	$ 185.34	$ 37.07	$ 148.27
Relamp/Reballast: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / 2nd Floor, Boys Room	1	$ 85.18	$ 17.04	$ 68.14
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 208	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 205	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 207	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 206	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, 206	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, Vice Presidents Office	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, Hallway	8	$ 494.24	$ 98.85	$ 395.39
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2nd Floor, Hallway	9	$ 556.02	$ 111.20	$ 444.82
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 101	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 116	11	$ 927.19	$ 185.44	$ 741.75

Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 102	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 115A	6	$ 462.90	$ 92.58	$ 370.32
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 115B	6	$ 462.90	$ 92.58	$ 370.32
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Girls Room	1	$ 77.15	$ 15.43	$ 61.72
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Custodial Closet A	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Principals Office	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Principals Office, Restroom	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Main Office	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Main Office, Restroom	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Nurse	1	$ 77.15	$ 15.43	$ 61.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Nurse, Restroom	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Office 2A	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Office 2A, Restroom	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Conference Room	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Conference Room	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Conference Room, Restroom	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1st Floor, Custodial Closet B	1	$ 65.07	$ 13.01	$ 52.06
Relamp: LED - A-Lamp (3 - 25W): 9 W / 1st Floor, Custodial Closet C	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Boys Room	3	$ 185.34	$ 37.07	$ 148.27
Relamp/Reballast: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / 1st Floor, Boys Room	1	$ 85.18	$ 17.04	$ 68.14
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 114	9	$ 758.61	$ 151.72	$ 606.89
Relamp: LED - PAR30 (10 - 20W): 14 W / 1st Floor, 114	5	$ 156.40	$ 31.28	$ 125.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Library (103)	16	$ 988.48	$ 197.70	$ 790.78
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 113	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Hallway (Old)	19	$ 1,173.82	$ 234.76	$ 939.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Hallway (Old)	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / stair A(OLD)	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / stair A(OLD)	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / stair B(OLD)	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / stair B(OLD)	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, book storage	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 104	24	$ 1,482.72	$ 296.54	$ 1,186.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 105	24	$ 1,482.72	$ 296.54	$ 1,186.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 106	24	$ 1,482.72	$ 296.54	$ 1,186.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 107	24	$ 1,482.72	$ 296.54	$ 1,186.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, hall(1977)	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 108	6	$ 462.90	$ 92.58	$ 370.32
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor,108 restroom	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Custodial Closet D	1	$ 77.15	$ 15.43	$ 61.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 109	16	$ 988.48	$ 197.70	$ 790.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 110	16	$ 988.48	$ 197.70	$ 790.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 111	16	$ 988.48	$ 197.70	$ 790.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 112	16	$ 988.48	$ 197.70	$ 790.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Boys Room B	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Boys Locker Room	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Girls room B	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Girls Locker Room	5	$ 308.90	$ 61.78	$ 247.12
Relamp/Reballast: Plug & Play LED - 6-Lamp - 4-Foot T5HO / 1st Floor, GYM	18	$ 3,801.60	$ 760.32	$ 3,041.28
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, GYM	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, GYM storage A	3	$ 231.45	$ 46.29	$ 185.16
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Mech Room A	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Girls PE Office	4	$ 247.12	$ 49.42	$ 197.70

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, GYM Storage B	3	$ 231.45	$ 46.29	$ 185.16
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Mech Room B	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, 5th Grade Title Class	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1st Floor, Hall	19	$ 1,173.82	$ 234.76	$ 939.06
Fixture Replacement: LED Outdoor Wall Mount (14 - 60W): 15 W / Exterior	2	$ 358.90	$ 71.78	$ 287.12
Relamp: LED - PAR30 (10 - 20W): 12 W / Exterior	4	$ 120.32	$ 24.06	$ 96.26
Relamp: LED - A-Lamp (3 - 25W): 9 W / Exterior	2	$ 41.52	$ 8.30	$ 33.22
Low-Flow Aerators (Kitchen) / kitchen, rm-114, rm-109,	5	$ 62.00	$ 12.40	$ 49.60
Low-Flow Showerheads / classrooms, locker rooms	8	$ 238.00	$ 47.60	$ 190.40
Pipe Wrap Insulation / Boiler Room	1	$ 519.00	$ 103.80	$ 415.20
Pipe Wrap Insulation / Boiler Room	1	$ 405.00	$ 81.00	$ 324.00
Pipe Wrap Insulation / Boiler Room	1	$ 361.50	$ 72.30	$ 289.20
TOTALS**		$ 47,141.01	$ 9,428.20	$ 37,712.81

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V4.0D)

General Project Information

Participating Customer:	Hillside Board of Education		**Facility Type:**	Education – Secondary School	
Contractor / Project #:	Willdan	WD10932	**HVAC Type:**	AC & Gas Heat	
Facility Name:	Hillside High School		**Total Facility Square Footage:**	90,000	
Street Address:	1085 Liberty Avenue		**Avg Weekly Hrs of Operation:**	50	
City / Zip Code:	Hillside	07205	**# of Full-Time Employees:**	77	
Is this facility publicly owned?:		Y	**Year Constructed:**	1939	
BOE, MUA or other public entity property?		Y	**Tax Exempt?:**	Y	
			Project Permitting Costs:	$500.00	

Enhanced Incentive Eligibility

Project in UEZ?	N	**K-12 School?**	Y
Project in OZ?	N	**Municipality?**	N
Affordable Housing Development?	N	**County Facility?**	N

Electric Utility Information

Electric Provider:	PSEG
Service Class:	LPLS, GLP
Account #:	4249650405, 7397425801
Billing Period Start Date:	07/27/19
Billing Period End Date:	08/26/19
Billing Period kWh Consumption:	60,946
Billing Period Total Cost:	$8,127.93
Total Taxes + Fees on Bill:	$0.00
Electric - Average Cost ($/kWh):	**$0.133**

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ETG
Account #:	6895765390
Billing Period Start Date:	12/27/19
Billing Period End Date:	01/27/20
Billing Period Therm Consumption:	20,275
Billing Period Total Cost:	$15,484.16
Total Taxes + Fees on Bill:	$0.00
Gas - Average Cost ($/Therm):	**$0.764**

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	**$0.000**

Propane Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	**$0.000**

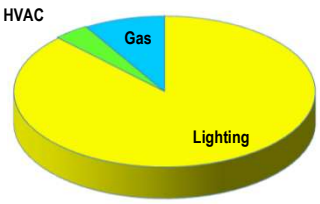
Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	168,523	kWh	$22,474.69	$99,127.23	$79,301.78	$19,825.45
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	7,270	kWh	$969.57	$20,595.55	$16,476.44	$4,119.11
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**175,793**	**kWh**	**$23,444.25**	**$119,722.78**	**$95,778.22**	**$23,944.56**
GAS MEASURES:	**2,914**	**Therms**	**$2,225.57**	**$3,494.25**	**$2,795.40**	**$698.85**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$25,669.82**	**$123,217.03**	**$98,573.62**	**$24,643.41**

SIMPLE PAYBACK (YEARS): **0.96**

PROJECT TRC TEST: **1.24**

Projected Dollar Savings Per Measure Category



Page 2
Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Special Services	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F Stairwell C	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Hallway	22	$ 1,359.16	$ 271.83	$ 1,087.33
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-308	4	$ 247.12	$ 49.42	$ 197.70
Relamp: LED - A-Lamp (3 - 25W): 10 W / 3F - CR-308	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Girls RR	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-307	10	$ 617.80	$ 123.56	$ 494.24
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-309	18	$ 1,388.70	$ 277.74	$ 1,110.96
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Prep Room	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-310	12	$ 741.36	$ 148.27	$ 593.09
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-305	9	$ 556.02	$ 111.20	$ 444.82
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-304	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-304	3	$ 185.34	$ 37.07	$ 148.27
Relamp: LED - A-Lamp (3 - 25W): 10 W / 3F - CR-304 Storage	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Office D11	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Stairs B	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-311	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 3F - CR-311 RR	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - CR-303, 312, 302, 313, 301	45	$ 2,780.10	$ 556.02	$ 2,224.08
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Boys RR	2	$ 154.30	$ 30.86	$ 123.44
Relamp: LED - A-Lamp (3 - 25W): 10 W / 3F - Slop Sink	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Storage	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Office D1	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 3F - Stairs D	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Hallway	28	$ 1,729.84	$ 345.97	$ 1,383.87
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Storage	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 10 W / 2F - Custodian Closet	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Boys RR	2	$ 154.30	$ 30.86	$ 123.44
Fixture Replacement: Linear Ambient Luminaire - 4' (20 - 50W): 25 W / 2F - Storage B3	1	$ 197.66	$ 39.53	$ 158.13
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-201,202, 215, 212, 211, 207, 208	65	$ 4,015.70	$ 803.14	$ 3,212.56
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-213	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-213	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-204, 205, 206	18	$ 1,517.22	$ 303.44	$ 1,213.78
Relamp: LED - A-Lamp (3 - 25W): 10 W / 2F - CR-208 Closet	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-210	12	$ 1,011.48	$ 202.30	$ 809.18
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Girls RR	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Hallway	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Room 219	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 10 W / 2F - Custodian Closet	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Hallway	12	$ 925.80	$ 185.16	$ 740.64
Fixture Replacement: LED Exit Sign: 2.3 W / 2F - Hallway	2	$ 145.80	$ 29.16	$ 116.64
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-220	9	$ 556.02	$ 111.20	$ 444.82
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-228	15	$ 926.70	$ 185.34	$ 741.36
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-221	9	$ 556.02	$ 111.20	$ 444.82

Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-222	16	$ 988.48	$ 197.70	$ 790.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-227	12	$ 741.36	$ 148.27	$ 593.09
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-223	9	$ 556.02	$ 111.20	$ 444.82
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-225	15	$ 926.70	$ 185.34	$ 741.36
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-224	9	$ 556.02	$ 111.20	$ 444.82
Relamp: LED - A-Lamp (3 - 25W): 10 W / 2F - Prep 225A/B	8	$ 164.80	$ 32.96	$ 131.84
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Hallway	19	$ 1,173.82	$ 234.76	$ 939.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Stairs	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-237	12	$ 741.36	$ 148.27	$ 593.09
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-237	3	$ 185.34	$ 37.07	$ 148.27
Relamp: LED - A-Lamp (3 - 25W): 10 W / 2F - Storage	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Faculty	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-236/235	18	$ 1,112.04	$ 222.41	$ 889.63
Relamp: LED - A-Lamp (3 - 25W): 10 W / 2F - Slop Sink	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Boys RR/Girls RR	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - CR-230, 234,231,232,233	102	$ 6,301.56	$ 1,260.31	$ 5,041.25
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Display Case	1	$ 54.65	$ 10.93	$ 43.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Stairwell	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Stairs A	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Library	35	$ 3,494.40	$ 698.88	$ 2,795.52
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Library Vestibule	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Library Vestibule	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Storage	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - HSPT Resource/Dance	36	$ 3,034.44	$ 606.89	$ 2,427.55
Fixture Replacement: LED Exit Sign: 2.3 W / 1F - HSPT Resource/Dance	3	$ 218.70	$ 43.74	$ 174.96
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Custodian	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Boys RR	2	$ 154.30	$ 30.86	$ 123.44
Relamp/Reballast: Plug & Play LED - 2-Lamp - 2-Foot T8 / 1F - Stairs	2	$ 140.54	$ 28.11	$ 112.43
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall to Cafeteria	3	$ 252.87	$ 50.57	$ 202.30
Fixture Replacement: LED Exit Sign: 2.3 W / 1F - Hall to Cafeteria	1	$ 72.90	$ 14.58	$ 58.32
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Cafeteria	50	$ 3,089.00	$ 617.80	$ 2,471.20
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Kitchen	12	$ 1,011.48	$ 202.30	$ 809.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Kitchen	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Kitchen	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Smart Snacks	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Kitchen Office	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Storage, Locker Rm, Slop Sink. Cooler, Freezer	6	$ 123.60	$ 24.72	$ 98.88
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Child Study/Attendance Hall	10	$ 842.90	$ 168.58	$ 674.32
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Child Study/Attendance Hall	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Child Study/Attendance Hall	4	$ 337.16	$ 67.43	$ 269.73
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Nurse/Main Office/Conf 112	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Nurse/Main Office/Conf 112	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Nurse/Main Office/Conf 112	39	$ 2,409.42	$ 481.88	$ 1,927.54
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Nurse/Main Office/Conf 112	2	$ 130.14	$ 26.03	$ 104.11
Relamp: Plug & Play LED - 2-Lamp - U-Bend (U6): 15W / 1F - Nurse/Main Office/Conf 112	1	$ 45.92	$ 9.18	$ 36.74
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Nurse/Main Office/Conf 112	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Vestibule	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Vestibule	1	$ 54.65	$ 10.93	$ 43.72
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Display Case	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall Main	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Principal	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Main Office	12	$ 741.36	$ 148.27	$ 593.09

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Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Main Office RR	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Safe	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Bookkeeping	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Mail Room	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Copy Room	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Attendance Office	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - VP Office	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - VP Office	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Office	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Classroom	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Classroom	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Closet	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Display Case	1	$ 54.65	$ 10.93	$ 43.72
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - CR-109	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Girls RR	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Vestibule	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall by Door 20	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hallway	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Music Room	37	$ 2,854.55	$ 570.91	$ 2,283.64
Fixture Replacement: LED Exit Sign: 2.3 W / 1F - Music Room	2	$ 145.80	$ 29.16	$ 116.64
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Vestibule/Girls RR/ Storage	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Music Office 1	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Music Equipment Storage	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Custodian	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Restrooms	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Gym Wing Hallway	4	$ 247.12	$ 49.42	$ 197.70
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Balcony Stairs	2	$ 41.20	$ 8.24	$ 32.96
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Vestibule	1	$ 61.78	$ 12.36	$ 49.42
Relamp/Reballast: Plug & Play LED - 2-Lamp - U-Bend (U6): 12W / 1F - Gym Lobby	6	$ 511.08	$ 102.22	$ 408.86
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Women's RR	1	$ 65.07	$ 13.01	$ 52.06
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Custodian	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Men's RR	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Locker Room	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Locker Room	7	$ 590.03	$ 118.01	$ 472.02
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Locker Room	2	$ 41.20	$ 8.24	$ 32.96
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Locker Room RR	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Coach Office	1	$ 61.78	$ 12.36	$ 49.42
Fixture Replacement: LED Interior Ambient Luminaire - 2x4: 60 W / 1F - Gymnasium	24	$ 4,606.80	$ 921.36	$ 3,685.44
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Athletic Director	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Athletic Director	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Storage	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Sports Medicine Office	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Sports Medicine Office	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Sports Medicine Office	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Sports Medicine Office	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Locker Room	8	$ 494.24	$ 98.85	$ 395.39
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall Door 26	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Hall Door 26	1	$ 65.07	$ 13.01	$ 52.06
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Equipment Storage	2	$ 41.20	$ 8.24	$ 32.96
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - RR	2	$ 41.20	$ 8.24	$ 32.96
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Locker/Laundry	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Shower RR	1	$ 61.78	$ 12.36	$ 49.42

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Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Locker Room	13	$ 803.14	$ 160.63	$ 642.51
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Hall	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Office Coach	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - RR/Shower	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Trophy Case by Gym	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Main Gym Hall	7	$ 432.46	$ 86.49	$ 345.97
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Fan Room/Slop Sink/Vestibule	3	$ 61.80	$ 12.36	$ 49.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Weight Room	15	$ 926.70	$ 185.34	$ 741.36
Relamp: LED - Globe (0.5 - 8W): 6 W / 1F - Auditorium	9	$ 206.91	$ 41.38	$ 165.53
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Auditorium	32	$ 2,697.28	$ 539.46	$ 2,157.82
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Balcony	6	$ 123.60	$ 24.72	$ 98.88
Relamp: LED - BR40 (9 - 30W): 12 W / 1F - Balcony	4	$ 106.76	$ 21.35	$ 85.41
Relamp: LED - Globe (0.5 - 8W): 6 W / 1F - Side Stage	5	$ 114.95	$ 22.99	$ 91.96
Relamp: LED - A-Lamp (3 - 25W): 10 W / 1F - Side Stage	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway	5	$ 308.90	$ 61.78	$ 247.12
Fixture Replacement: LED Exit Sign: 2.3 W / BF - Hallway	2	$ 145.80	$ 29.16	$ 116.64
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Boiler Room	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / BF - Boiler Room	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Supply/Electrical Closet	5	$ 308.90	$ 61.78	$ 247.12
Relamp: LED - A-Lamp (3 - 25W): 10 W / BF - Telephone Room	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Office Maintenance	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 10 W / BF - Maintenance RR	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - JROTC Hall	12	$ 741.36	$ 148.27	$ 593.09
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - JROTC Hall	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Closet	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Shoe Supply	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Supply Room	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 10 W / BF - Closet	1	$ 20.60	$ 4.12	$ 16.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hall/Office	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Office/RR/Closet	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / BF - Boys/Girls RR, Vestibule, RR Hall	4	$ 260.28	$ 52.06	$ 208.22
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Main Hall	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Detention 003	6	$ 505.74	$ 101.15	$ 404.59
Relamp: LED - A-Lamp (3 - 25W): 10 W / BF - Supply/Storage/Paper Storage	6	$ 123.60	$ 24.72	$ 98.88
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Center Wing Hall	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hallway	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall to Door 19	1	$ 54.65	$ 10.93	$ 43.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Office/Break Fridge	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Class 121/128	27	$ 2,275.83	$ 455.17	$ 1,820.66
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall Full	12	$ 741.36	$ 148.27	$ 593.09
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - RR	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Suite 125	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Photo 122	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Editing Room	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Office	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Classroom/Office/Restricted	16	$ 988.48	$ 197.70	$ 790.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Server Room	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Office	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Display Case	1	$ 54.65	$ 10.93	$ 43.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Room 124	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall	18	$ 1,112.04	$ 222.41	$ 889.63
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Stairs	2	$ 123.56	$ 24.71	$ 98.85

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Stairs	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Class 129	12	$ 1,011.48	$ 202.30	$ 809.18
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Book Storage	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Class 137	12	$ 1,011.48	$ 202.30	$ 809.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Class 137	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Restroom	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Restroom	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - RR	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - CAD Robotics	31	$ 1,915.18	$ 383.04	$ 1,532.14
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Supply Closet	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Boys RR	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Girls RR	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Class 130	9	$ 556.02	$ 111.20	$ 444.82
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Class 135,131,134,132,133	45	$ 2,780.10	$ 556.02	$ 2,224.08
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / Stairs E	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / Stairs E	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / Stairs B	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / Stairs B	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / Stairs C	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / Stairs A	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / Stairs A	1	$ 84.29	$ 16.86	$ 67.43
Relamp: LED - PAR38 (13 - 23W): 17 W / Exterior Front	1	$ 32.07	$ 6.41	$ 25.66
Relamp: LED - A-Lamp (3 - 25W): 10 W / Exterior Front	1	$ 20.60	$ 4.12	$ 16.48
Fixture Replacement: LED Pole Mount (70 - 260W): 70 W / Exterior Front	1	$ 558.53	$ 111.71	$ 446.82
Relamp/Reballast: LED 1-Lamp PL 4-Pin / Door #30	1	$ 53.46	$ 10.69	$ 42.77
Fixture Replacement: LED Outdoor Wall Mount (14 - 60W): 22 W / Side Entrance Door #5	1	$ 191.98	$ 38.40	$ 153.58
Fixture Replacement: LED Outdoor Wall Mount (14 - 60W): 22 W / Side Door #6	1	$ 191.98	$ 38.40	$ 153.58
Fixture Replacement: LED Outdoor Wall Mount (14 - 60W): 22 W / Side Door #7	1	$ 191.98	$ 38.40	$ 153.58
Relamp/Reballast: LED 1-Lamp PL 4-Pin / Door #9	1	$ 53.46	$ 10.69	$ 42.77
Fixture Replacement: LED Outdoor Wall Mount (14 - 60W): 22 W / Door #11	1	$ 191.98	$ 38.40	$ 153.58
Relamp: LED - PAR38 (13 - 23W): 17 W / Door #20	1	$ 32.07	$ 6.41	$ 25.66
Relamp: LED - PAR38 (13 - 23W): 17 W / Door #22	1	$ 32.07	$ 6.41	$ 25.66
Relamp: LED - PAR38 (13 - 23W): 17 W / Door #23	1	$ 32.07	$ 6.41	$ 25.66
Relamp/Reballast: LED 1-Lamp PL 4-Pin / Livingston St Side #26	1	$ 53.46	$ 10.69	$ 42.77
Relamp: LED - PAR38 (13 - 23W): 17 W / Livingston St Side #27	1	$ 32.07	$ 6.41	$ 25.66
Packaged RTU (Electric Only): 7.5-Tons / RTU 1	1	$ 12,540.00	$ 2,508.00	$ 10,032.00
Electric Split System A/C (Single-Phase): 4-Tons / Roof	1	$ 7,613.55	$ 1,522.71	$ 6,090.84
Programmable Thermostats / Office	2	$ 442.00	$ 88.40	$ 353.60
Low-Flow Aerators (Lavatory) / Rest Rooms	29	$ 345.10	$ 69.02	$ 276.08
Low-Flow Aerators (Kitchen) / Kitchen	1	$ 12.40	$ 2.48	$ 9.92
Low-Flow Showerheads / Locker Rooms	2	$ 59.50	$ 11.90	$ 47.60
Pre-Rinse Spray Valves / Kitchen	1	$ 95.75	$ 19.15	$ 76.60
Pipe Wrap Insulation / Mechanical Room	1	$ 880.00	$ 176.00	$ 704.00
Pipe Wrap Insulation / Mechanical Room	1	$ 843.50	$ 168.70	$ 674.80
Pipe Wrap Insulation / Mechanical Room	1	$ 980.00	$ 196.00	$ 784.00
Pipe Wrap Insulation / Mechanical Room	1	$ 278.00	$ 55.60	$ 222.40
TOTALS**		$ 123,217.03	$ 24,643.41	$ 98,573.62

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V4.0D)

General Project Information

Participating Customer:	Hillside BOE		**Facility Type:**	Education – Primary School	
Contractor / Project #:	Willdan	10933	**HVAC Type:**	AC & Gas Heat	
Facility Name:	Hurden Looker School		**Total Facility Square Footage:**	35,000	
Street Address:	1261 Liberty Ave		**Avg Weekly Hrs of Operation:**	50	
City / Zip Code:	Hillside	07205	**# of Full-Time Employees:**	35	
Is this facility publicly owned?:	Y		**Year Constructed:**	1926	
BOE, MUA or other public entity property?	Y		**Tax Exempt?:**	Y	
			Project Permitting Costs:		

Enhanced Incentive Eligibility

Project in UEZ?	N	**K-12 School?**	Y
Project in OZ?	N	**Municipality?**	N
Affordable Housing Development?	N	**County Facility?**	N

Electric Utility Information

Electric Provider:	PSE&G
Service Class:	GLP
Account #:	7397426808
Billing Period Start Date:	08/27/19
Billing Period End Date:	09/25/19
Billing Period kWh Consumption:	21,864
Billing Period Total Cost:	$4,334.13
Total Taxes + Fees on Bill:	$465.28
Electric - Average Cost ($/kWh):	**$0.177**

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ET-GDS
Account #:	0314236390
Billing Period Start Date:	12/30/19
Billing Period End Date:	01/28/20
Billing Period Therm Consumption:	5,193
Billing Period Total Cost:	$4,242.31
Total Taxes + Fees on Bill:	$331.84
Gas - Average Cost ($/Therm):	**$0.753**

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	**$0.000**

Propane Information

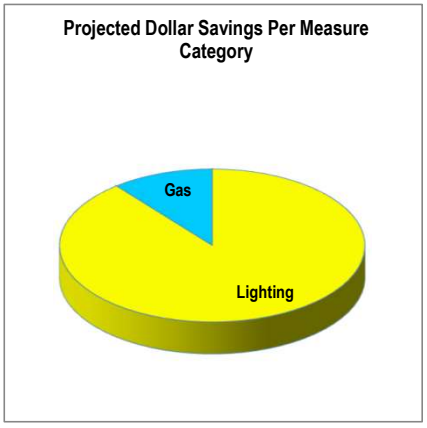
Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	**$0.000**

Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	71,559	kWh	$12,662.45	$42,565.12	$34,052.10	$8,513.02
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**71,559**	**kWh**	**$12,662.45**	**$42,565.12**	**$34,052.10**	**$8,513.02**
GAS MEASURES:	**2,034**	**Therms**	**$1,531.98**	**$1,409.40**	**$1,127.52**	**$281.88**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$14,194.44**	**$43,974.52**	**$35,179.62**	**$8,794.90**

SIMPLE PAYBACK (YEARS): **0.62**

PROJECT TRC TEST: **1.35**



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Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 21 - Closet	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 21	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 20	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 19	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 18	11	$ 927.19	$ 185.44	$ 741.75
Relamp: LED - A-Lamp (3 - 25W): 11 W / 1F - Rm 17 - Closet	1	$ 25.43	$ 5.09	$ 20.34
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 17	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Hall	3	$ 252.87	$ 50.57	$ 202.30
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Gym Girls RR	2	$ 130.14	$ 26.03	$ 104.11
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Gym Boys RR	1	$ 65.07	$ 13.01	$ 52.06
Relamp: LED - A-Lamp (3 - 25W): 17 W / 1F - CC-A	1	$ 28.26	$ 5.65	$ 22.61
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Gym Exit	4	$ 308.60	$ 61.72	$ 246.88
Relamp/Reballast: Plug & Play LED - 3-Lamp - 4-Foot T5HO / 1F - Gym	15	$ 1,953.60	$ 390.72	$ 1,562.88
Relamp: LED - A-Lamp (3 - 25W): 15 W / 1F - Gym BathRoom	1	$ 28.17	$ 5.63	$ 22.54
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 1F - Gym Office	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Gym Office	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Gym Storage A	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Stage	4	$ 247.12	$ 49.42	$ 197.70
Relamp: LED - A-Lamp (3 - 25W): 15 W / 1F - Stage	1	$ 28.17	$ 5.63	$ 22.54
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Gym Walkway	9	$ 556.02	$ 111.20	$ 444.82
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Gym Hall	4	$ 308.60	$ 61.72	$ 246.88
Relamp: LED - A-Lamp (3 - 25W): 9 W / B - Storage B	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - ESL Rm 29	5	$ 421.45	$ 84.29	$ 337.16
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Rm 30	5	$ 308.90	$ 61.78	$ 247.12
Relamp: LED - A-Lamp (3 - 25W): 11 W / B - Storage	1	$ 25.43	$ 5.09	$ 20.34
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Boys Rm	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - CL-A	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Girls Rm	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Hall A	7	$ 432.46	$ 86.49	$ 345.97
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / B - Hall A	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Staircase J	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Staircase H	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Staircase F	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Staircase G	5	$ 378.55	$ 75.71	$ 302.84
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Cafeteria	4	$ 308.60	$ 61.72	$ 246.88
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Cafeteria	18	$ 1,797.12	$ 359.42	$ 1,437.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Cafeteria	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Kitchen	18	$ 1,517.22	$ 303.44	$ 1,213.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Hall A to Cafeteria	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Hall A to Cafeteria	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Custodial Office	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Teachers Room	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / B - Teachers Room	1	$ 65.07	$ 13.01	$ 52.06

Relamp: LED - A-Lamp (3 - 25W): 11 W / B - Storage - Electric Meter	2	$ 50.86	$ 10.17	$ 40.69
Relamp: LED - A-Lamp (3 - 25W): 9 W / B - Storage - Electric Meter	1	$ 20.76	$ 4.15	$ 16.61
Relamp: LED - A-Lamp (3 - 25W): 17 W / B - Boys Rm	3	$ 84.78	$ 16.96	$ 67.82
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Boys Rm	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / B - Boys Rm	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / B - Girls Rm	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Girls Rm	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Electric Meter B	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Boiler Room	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Art Room	18	$ 1,517.22	$ 303.44	$ 1,213.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Hall B	7	$ 432.46	$ 86.49	$ 345.97
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Hall B	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 11 W / B - Hall B - Closet	2	$ 50.86	$ 10.17	$ 40.69
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Hall B	1	$ 54.65	$ 10.93	$ 43.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / B - Staircase E	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 15	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 16	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Library	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 14	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 13	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 12	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Library	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 12	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 9	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 9	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 8	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 7	3	$ 252.87	$ 50.57	$ 202.30
Relamp: LED - A-Lamp (3 - 25W): 11 W / 1F - CC-A	1	$ 25.43	$ 5.09	$ 20.34
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Boys Rm	2	$ 154.30	$ 30.86	$ 123.44
Relamp: LED - A-Lamp (3 - 25W): 9 W / 1F - Boys Rm	2	$ 41.52	$ 8.30	$ 33.22
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Boys Rm	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Girls Rm	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 9 W / 1F - Girls Rm	2	$ 41.52	$ 8.30	$ 33.22
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Girls Rm	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Nurse	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Nurse Storage	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Nurse Hall	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 5	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 6	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 3	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 4	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - VP Office	3	$ 252.87	$ 50.57	$ 202.30
Relamp: LED - A-Lamp (3 - 25W): 11 W / 1F - VP Office rest room	1	$ 25.43	$ 5.09	$ 20.34
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Principal	2	$ 168.58	$ 33.72	$ 134.86
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Main Office	8	$ 674.32	$ 134.86	$ 539.46
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Main Office	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Main Office	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 2	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Rm 2	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Staircase A/Hall B	7	$ 432.46	$ 86.49	$ 345.97
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Staircase A/Hall B	5	$ 421.45	$ 84.29	$ 337.16
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Staircase A/Hall B	8	$ 617.20	$ 123.44	$ 493.76

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Staircase A	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 1F - Staircase B	1	$ 61.78	$ 12.36	$ 49.42
Fixture Replacement: LED Outdoor Wall Mount (14 - 60W): 22 W / Exterior A	3	$ 640.44	$ 128.09	$ 512.35
Relamp: LED - A-Lamp (3 - 25W): 11 W / 2F - Utility Closet	2	$ 50.86	$ 10.17	$ 40.69
Relamp: LED - A-Lamp (3 - 25W): 11 W / 2F - Rm. 26 Closet	1	$ 25.43	$ 5.09	$ 20.34
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Rm. 26	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 2F - Rm. 28 Speech	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Rm. 25	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Rm. 24	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Rm. 23	11	$ 927.19	$ 185.44	$ 741.75
Relamp: LED - A-Lamp (3 - 25W): 11 W / 2F - Rm. 23 RestRoom	2	$ 50.86	$ 10.17	$ 40.69
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Rm. 22	11	$ 927.19	$ 185.44	$ 741.75
Relamp: LED - A-Lamp (3 - 25W): 11 W / 2F - Rm. 22 Closet	1	$ 25.43	$ 5.09	$ 20.34
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Hall	3	$ 252.87	$ 50.57	$ 202.30
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / 2F - Hall	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / 2F - Storage Rm. 27	1	$ 65.07	$ 13.01	$ 52.06
Low-Flow Aerators (Lavatory) / Rest Rooms	26	$ 309.40	$ 61.88	$ 247.52
Pipe Wrap Insulation / Mech Room	1	$ 1,100.00	$ 220.00	$ 880.00
TOTALS**		$ 43,974.52	$ 8,794.90	$ 35,179.62

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V4.0D)

General Project Information

Participating Customer:	Hillside BOE		**Facility Type:**	Education – Primary School	
Contractor / Project #:	Willdan	10934	**HVAC Type:**	AC & Gas Heat	
Facility Name:	Walter O. Krumbiegel Middle School		**Total Facility Square Footage:**	32,000	
Street Address:	141 Hillside Ave		**Avg Weekly Hrs of Operation:**	40	
City / Zip Code:	Hillside	07205	**# of Full-Time Employees:**	25	
Is this facility publicly owned?:	Y		**Year Constructed:**	1960	
BOE, MUA or other public entity property?	Y		**Tax Exempt?:**	Y	
			Project Permitting Costs:		

Enhanced Incentive Eligibility

Project in UEZ?	N	**K-12 School?**	Y
Project in OZ?	N	**Municipality?**	N
Affordable Housing Development?	N	**County Facility?**	N

Electric Utility Information

Electric Provider:	PSE&G
Service Class:	LPLS, GLP
Account #:	4227807018, 7097084901
Billing Period Start Date:	08/30/19
Billing Period End Date:	09/30/19
Billing Period kWh Consumption:	32,345
Billing Period Total Cost:	$5,473.25
Total Taxes + Fees on Bill:	$965.63
Electric - Average Cost ($/kWh):	**$0.139**

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ETG
Account #:	3126092450
Billing Period Start Date:	01/28/20
Billing Period End Date:	02/28/20
Billing Period Therm Consumption:	5,870
Billing Period Total Cost:	$4,753.97
Total Taxes + Fees on Bill:	$367.65
Gas - Average Cost ($/Therm):	**$0.747**

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	**$0.000**

Propane Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	**$0.000**

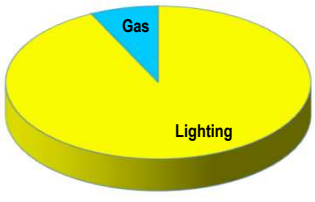
Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	101,839	kWh	$14,192.38	$58,706.42	$46,965.14	$11,741.28
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**101,839**	**kWh**	**$14,192.38**	**$58,706.42**	**$46,965.14**	**$11,741.28**
GAS MEASURES:	**1,481**	**Therms**	**$1,106.36**	**$2,697.30**	**$2,157.84**	**$539.46**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$15,298.74**	**$61,403.72**	**$49,122.98**	**$12,280.74**

SIMPLE PAYBACK (YEARS): **0.80**

PROJECT TRC TEST: **1.22**

Projected Dollar Savings Per Measure Category



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Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs A - 1	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs A - 1	1	$ 75.71	$ 15.14	$ 60.57
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs A - 1	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-32 - 2	11	$ 927.19	$ 185.44	$ 741.75
Relamp: LED - A-Lamp (3 - 25W): 12 W / F2 - Balcony - 3	3	$ 75.36	$ 15.07	$ 60.29
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-31 - 4	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-30 - 5	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hallway 1 - 6	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hallway 1 - 6	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs D - 7	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs D - 7	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Storage - 8	1	$ 54.65	$ 10.93	$ 43.72
Relamp: LED - A-Lamp (3 - 25W): 12 W / F2 - Custodian Closet - 9	4	$ 100.48	$ 20.10	$ 80.38
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Boys RR - 10	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Boys RR - 10	11	$ 848.65	$ 169.73	$ 678.92
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-29 - 11	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-28 - 12	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-27 - 13	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-26 - 14	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs C - 15	3	$ 231.45	$ 46.29	$ 185.16
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs C - 15	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs C - 15	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs C - 15	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 12 W / BF2 - Stairs C - 15	1	$ 25.12	$ 5.02	$ 20.10
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-25 - 16	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-24 - 17	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-23 - 18	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-22 - 19	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-21 - 20	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Girls RR - 21	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Girls RR - 21	1	$ 77.15	$ 15.43	$ 61.72
Relamp: LED - A-Lamp (3 - 25W): 12 W / F2 - Custodian Closet - 22	4	$ 100.48	$ 20.10	$ 80.38
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs B - 23	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs B - 23	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-20 - 24	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - CR-19 - 25	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hallway 2 - 26	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hallway 2 - 26	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hallway 3 - 27	27	$ 1,668.06	$ 333.61	$ 1,334.45
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 -CR-18 - 28	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 -CR-17 - 29	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 -CR- 33 - 30	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Teacher's Lounge - 31	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Teacher's Lounge RR - 32	1	$ 84.29	$ 16.86	$ 67.43

Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Hallway 4 - 33	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs A - 34	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF2 - Stairs A - 34	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-1 - 35	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-2 - 36	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hallway 1 - 37	6	$ 462.90	$ 92.58	$ 370.32
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hallway 1 - 37	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-15 - 38	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-15 - 38	4	$ 337.16	$ 67.43	$ 269.73
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Mail Room - 39	4	$ 337.16	$ 67.43	$ 269.73
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Mail Room - 39	1	$ 25.12	$ 5.02	$ 20.10
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Main Office - 40	16	$ 1,234.40	$ 246.88	$ 987.52
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Main Office - 40	1	$ 25.12	$ 5.02	$ 20.10
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Main Office - 40	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Auditorium - 41	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hallway 2 - 43	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hallway 2 - 43	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Library & Media Center - 44	24	$ 1,482.72	$ 296.54	$ 1,186.18
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Storage - 45	1	$ 54.65	$ 10.93	$ 43.72
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Custodial Closet - 46	1	$ 25.12	$ 5.02	$ 20.10
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Boys RR - 47	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Boys RR - 47	1	$ 77.15	$ 15.43	$ 61.72
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-12 - 48	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-11 - 49	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-10 - 50	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-9 - 51	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-8 - 52	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-7 - 53	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-6 - 54	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-5 - 55	17	$ 1,311.55	$ 262.31	$ 1,049.24
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / F1 - CR-5 - 55	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-4 Storage - 56	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - CR-3 - 57	12	$ 925.80	$ 185.16	$ 740.64
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hallway 3 - 58	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hallway 3 - 58	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Girls RR - 59	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Girls RR - 59	1	$ 77.15	$ 15.43	$ 61.72
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Hallway 4 - 60	27	$ 2,083.05	$ 416.61	$ 1,666.44
Relamp: LED - A-Lamp (3 - 25W): 12 W / F1 - Custodian Closet - 61	1	$ 25.12	$ 5.02	$ 20.10
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Custodian Office - 62	2	$ 109.30	$ 21.86	$ 87.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Boiler Room - 63	4	$ 247.12	$ 49.42	$ 197.70
Relamp: LED - A-Lamp (3 - 25W): 12 W / BF - Boiler Room - 63	4	$ 100.48	$ 20.10	$ 80.38
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-34B - 64	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-34B - 64	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-34B - 64	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 1 - 65	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 1 - 65	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 1 - 65	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Guidance 1 - 66	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Guidance 2 - 67	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Counselor - 68	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR NR Boiler Room - 69	5	$ 308.90	$ 61.78	$ 247.12

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Relamp: LED - A-Lamp (3 - 25W): 12 W / BF - CR NR Boiler Room - 69	1	$ 25.12	$ 5.02	$ 20.10
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Girls RR - 70	5	$ 308.90	$ 61.78	$ 247.12
Relamp: LED - A-Lamp (3 - 25W): 12 W / BF - Girls RR - 70	3	$ 75.36	$ 15.07	$ 60.29
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-35B - 71	12	$ 1,011.48	$ 202.30	$ 809.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-35B - 71	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-35B - 71	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Boys Change Room - 73	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-36 - 74	8	$ 494.24	$ 98.85	$ 395.39
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / BF - CR-36 - 74	1	$ 65.07	$ 13.01	$ 52.06
Relamp: LED - A-Lamp (3 - 25W): 12 W / BF - CR-36 - 74	4	$ 100.48	$ 20.10	$ 80.38
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-37 - 76	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-37 - 76	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-37 - 76	4	$ 337.16	$ 67.43	$ 269.73
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-38 - 77	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-39B - 78	9	$ 694.35	$ 138.87	$ 555.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-39B - 78	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Cafeteria - 79	12	$ 1,011.48	$ 202.30	$ 809.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Cafeteria - 79	20	$ 1,235.60	$ 247.12	$ 988.48
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Cafeteria - 79	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / BF - Cafeteria - 79	1	$ 65.07	$ 13.01	$ 52.06
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Food Storage - 80	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 12 W / BF - Food Storage - 80	1	$ 25.12	$ 5.02	$ 20.10
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 2 - 81	28	$ 1,729.84	$ 345.97	$ 1,383.87
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 2 - 81	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 2 - 81	4	$ 337.16	$ 67.43	$ 269.73
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 3 - 82	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Hallway 3 - 82	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-40B - 83	12	$ 1,011.48	$ 202.30	$ 809.18
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-40B - 83	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - CR-40B - 83	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Child Study - 85	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Language Supervisor - 86	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Math Supervisor - 87	2	$ 154.30	$ 30.86	$ 123.44
Relamp: LED - PAR38 (13 - 23W): 17 W / Exterior B	1	$ 32.07	$ 6.41	$ 25.66
Relamp: LED - PAR38 (13 - 23W): 17 W / Exterior C	2	$ 73.44	$ 14.69	$ 58.75
Low-Flow Aerators (Lavatory) / RestRooms	10	$ 119.00	$ 23.80	$ 95.20
Low-Flow Aerators (Kitchen) / Kitchen	2	$ 24.80	$ 4.96	$ 19.84
Pre-Rinse Spray Valves / Kitchen	2	$ 191.50	$ 38.30	$ 153.20
Pipe Wrap Insulation / Boiler Room	1	$ 990.00	$ 198.00	$ 792.00
Pipe Wrap Insulation / Boiler Room	1	$ 764.50	$ 152.90	$ 611.60
Pipe Wrap Insulation / Boiler Room	1	$ 607.50	$ 121.50	$ 486.00
TOTALS**		$ 61,403.72	$ 12,280.74	$ 49,122.98

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V4.0D)

General Project Information

Participating Customer:	Hillside Board of Education		**Facility Type:**	Office - Small
Contractor / Project #:	Willdan	10935	**HVAC Type:**	AC & Gas Heat
Facility Name:	Saybrook Annex		**Total Facility Square Footage:**	15,000
Street Address:	1100 Woodruff Ave		**Avg Weekly Hrs of Operation:**	40
City / Zip Code:	Hillside	07205	**# of Full-Time Employees:**	8
Is this facility publicly owned?:		Y	**Year Constructed:**	1970
BOE, MUA or other public entity property?		Y	**Tax Exempt?:**	Y
			Project Permitting Costs:	$500.00

Enhanced Incentive Eligibility

Project in UEZ?	N	**K-12 School?**	Y
Project in OZ?	N	**Municipality?**	N
Affordable Housing Development?	N	**County Facility?**	N

Electric Utility Information

Electric Provider:	PSE&G
Service Class:	GLP
Account #:	7397426107
Billing Period Start Date:	06/26/19
Billing Period End Date:	07/25/19
Billing Period kWh Consumption:	4,322
Billing Period Total Cost:	$851.76
Total Taxes + Fees on Bill:	$81.89
Electric - Average Cost ($/kWh):	**$0.178**

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ET-GDS
Account #:	2002792781
Billing Period Start Date:	01/28/19
Billing Period End Date:	02/28/19
Billing Period Therm Consumption:	1,297
Billing Period Total Cost:	$1,051.51
Total Taxes + Fees on Bill:	$108.48
Gas - Average Cost ($/Therm):	**$0.727**

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	**$0.000**

Propane Information

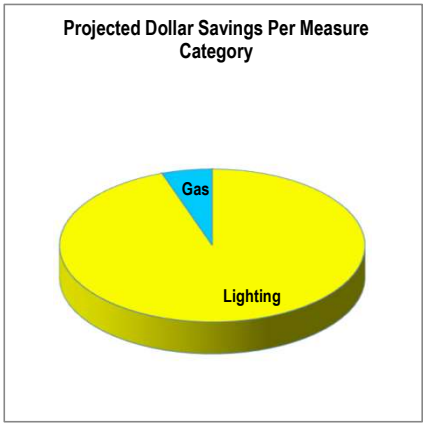
Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	**$0.000**

Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	19,396	kWh	$3,454.98	$9,536.30	$7,629.04	$1,907.26
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**19,396**	**kWh**	**$3,454.98**	**$9,536.30**	**$7,629.04**	**$1,907.26**
GAS MEASURES:	**268**	**Therms**	**$194.94**	**$579.80**	**$463.84**	**$115.96**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$3,649.92**	**$10,116.10**	**$8,092.88**	**$2,023.22**

SIMPLE PAYBACK (YEARS): **0.55**

PROJECT TRC TEST: **1.49**



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Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Stairs "B" - 1	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Stairs "B" - 1	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Open Space - 2	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Office 1 - 3	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Office 2 - 4	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Office 2 - 4	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Main Office - 5	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Director Spl. Service - 6	9	$ 758.61	$ 151.72	$ 606.89
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Director Spl. Service - 6	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Stairs "A" - 7	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F2 - Stairs "A" - 7	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Open Space - 8	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Room 3 - 9	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Room 4 - 10	6	$ 505.74	$ 101.15	$ 404.59
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Room 4 - 10	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Room 4 - 10	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Room 4 - 10	3	$ 252.87	$ 50.57	$ 202.30
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Board Room - 11	18	$ 1,517.22	$ 303.44	$ 1,213.78
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Board Room - 11	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / F1 - Board Room RR - 11A	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Open Space - 12	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Office 1 - 13	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Girls RR - 14	2	$ 109.30	$ 21.86	$ 87.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Girls RR - 14	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Boy's RR - 15	2	$ 109.30	$ 21.86	$ 87.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Boy's RR - 15	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Multipurpose Room - 16	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Boiler Room - 17	6	$ 370.68	$ 74.14	$ 296.54
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Storage - 18	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF - Faculty RR - 19	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 9 W / BF - Faculty RR - 19	1	$ 20.76	$ 4.15	$ 16.61
Low-Flow Aerators (Lavatory) / Restroom	2	$ 23.80	$ 4.76	$ 19.04
Pipe Wrap Insulation / Boiler Room	1	$ 556.00	$ 111.20	$ 444.80
TOTALS**		$ 10,116.10	$ 2,023.22	$ 8,092.88

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V4.0D)

General Project Information

Participating Customer:	Hillside Board of Education		**Facility Type:**	Education – Primary School	
Contractor / Project #:	Willdan	10936	**HVAC Type:**	AC & Gas Heat	
Facility Name:	Calvin Coolidge Elementary School		**Total Facility Square Footage:**	35,000	
Street Address:	614 Tillman Street		**Avg Weekly Hrs of Operation:**	50	
City / Zip Code:	Hillside	07205	**# of Full-Time Employees:**	50	
Is this facility publicly owned?:	Y		**Year Constructed:**	1990	
BOE, MUA or other public entity property?	Y		**Tax Exempt?:**	Y	
			Project Permitting Costs:		

Enhanced Incentive Eligibility

Project in UEZ?	N	**K-12 School?**	Y
Project in OZ?	N	**Municipality?**	N
Affordable Housing Development?	N	**County Facility?**	N

Electric Utility Information

Electric Provider:	PSE&G
Service Class:	GLP
Account #:	7397426905
Billing Period Start Date:	11/23/19
Billing Period End Date:	12/26/19
Billing Period kWh Consumption:	12,280
Billing Period Total Cost:	$993.57
Total Taxes + Fees on Bill:	$0.00
Electric - Average Cost ($/kWh):	**$0.081**

Gas Utility Information

Gas Provider:	Elizabethtown Gas
Service Class:	ET-GDS
Account #:	1846267320
Billing Period Start Date:	12/30/19
Billing Period End Date:	01/28/20
Billing Period Therm Consumption:	2,672
Billing Period Total Cost:	$2,214.02
Total Taxes + Fees on Bill:	$0.00
Gas - Average Cost ($/Therm):	**$0.829**

Oil Information

Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Oil - Average Cost ($/Gallon):	**$0.000**

Propane Information

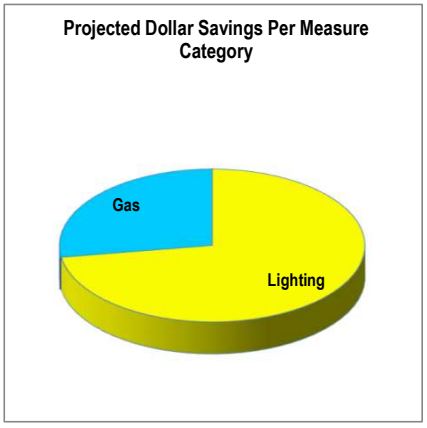
Annual Consumption (Gallons):	
Annual Cost:	
Annual Taxes + Fees on Bill:	
Propane - Average Cost ($/Gallon):	**$0.000**

Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	26,757	kWh	$2,164.86	$14,768.40	$11,814.72	$2,953.68
Motors & VFD Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
HVAC Electric Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
Refrigeration Measures Total:	0	kWh	$0.00	$0.00	$0.00	$0.00
ELECTRIC MEASURES:	**26,757**	**kWh**	**$2,164.86**	**$14,768.40**	**$11,814.72**	**$2,953.68**
GAS MEASURES:	**990**	**Therms**	**$820.77**	**$778.00**	**$622.40**	**$155.60**
OIL MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
TOTAL PROPANE MEASURES:	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES (OIL):	**0**	**Gallons**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
CONVERSION MEASURES GAS:	**0**	**Therms**				
COMBINED PROJECT TOTALS:			**$2,985.63**	**$15,546.40**	**$12,437.12**	**$3,109.28**

SIMPLE PAYBACK (YEARS): **1.04**

PROJECT TRC TEST: **1.62**



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Scope of Work

The work to be performed by the Participating Contractor in connection with the Project shall be comprised of the below listed Measures in the estimated quantities listed:

Measure Description / Location	Quantity To Be Installed	Total Measure Cost	Estimated Customer Total Cost	Estimated Incentive Amount
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF- Boiler Room - RM1	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Plug & Play LED - 4-Lamp - 4-Foot T5HO / BF- Boiler Room - RM1	1	$ 64.84	$ 12.97	$ 51.87
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / BF- Storage - RM2	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 9 W / FL1- Boiler Rm Stairs - RM3	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Storage - RM4	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Boys RR - RM5	1	$ 77.15	$ 15.43	$ 61.72
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Boys RR - RM5	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Boys RR - RM5	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Girls RR - RM6	2	$ 154.30	$ 30.86	$ 123.44
Relamp: Direct Line LED - 3-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Girls RR - RM6	1	$ 77.15	$ 15.43	$ 61.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Hallway 1 - RM7	5	$ 308.90	$ 61.78	$ 247.12
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Hallway 1 - RM7	1	$ 84.29	$ 16.86	$ 67.43
Relamp: Plug & Play LED - 4-Lamp - 4-Foot T5HO / FL1- Gym - RM8	15	$ 1,002.15	$ 200.43	$ 801.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Gym Stage - RM9	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 17 W / FL1- Gym Stage - RM9	3	$ 98.73	$ 19.75	$ 78.98
Relamp: LED - A-Lamp (3 - 25W): 9 W / FL1- Gym Stage - RM9	1	$ 20.76	$ 4.15	$ 16.61
Relamp: LED - A-Lamp (3 - 25W): 17 W / FL1- Nurses Office - RM11	2	$ 56.52	$ 11.30	$ 45.22
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Nurses Office - RM11	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Kitchen - RM12	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Boys & Girls RR - RM13	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 17 W / FL1- Boiler RM - RM14	1	$ 28.26	$ 5.65	$ 22.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Gym Hallway - RM15	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Gym Hallway - RM15	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Stairs B - RM16	3	$ 185.34	$ 37.07	$ 148.27
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- CR-3 - RM17	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- CR-3 - RM18	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Principal's Office - RM19	2	$ 123.56	$ 24.71	$ 98.85
Relamp: LED - A-Lamp (3 - 25W): 9 W / FL1- Principal's Office - RM19	1	$ 20.76	$ 4.15	$ 16.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Main Office - RM20	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Main Office RR - RM21	1	$ 61.78	$ 12.36	$ 49.42
Relamp: LED - A-Lamp (3 - 25W): 17 W / FL1- Supply Closet - RM22	1	$ 28.26	$ 5.65	$ 22.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Guidance Office - RM24	6	$ 370.68	$ 74.14	$ 296.54
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Guidance Office - RM24	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- CR 1 (ESL) - RM25	4	$ 337.16	$ 67.43	$ 269.73
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- CR 1 (ESL) - RM25	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- CR 5 - RM26	9	$ 556.02	$ 111.20	$ 444.82
Relamp: Direct Line LED - 2-Lamp - 2-Foot T8 / FL1- CR 5 - RM26	1	$ 65.07	$ 13.01	$ 52.06
Relamp: LED - A-Lamp (3 - 25W): 17 W / FL1- CR 5 - RM26	1	$ 28.26	$ 5.65	$ 22.61
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- CR 6 - RM27	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- CR 7 - RM28	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Stairs A - RM29	2	$ 123.56	$ 24.71	$ 98.85
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Hallway 1F - RM30	8	$ 674.32	$ 134.86	$ 539.46
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL1- Hallway 1F - RM30	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- CR 13 - RM31	11	$ 679.58	$ 135.92	$ 543.66

Savings values are estimates. Actual savings will vary.
Incentives and participation subject to program rules and Participation Agreement.

Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- CR 12 - RM32	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- CR 11 - RM33	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- Faculty Room - RM34	4	$ 247.12	$ 49.42	$ 197.70
Relamp: Direct Line LED - 3-Lamp - 2-Foot T8 / FL2- Faculty Room Closet - RM35	1	$ 82.09	$ 16.42	$ 65.67
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- Faculty Room RR - RM36	1	$ 61.78	$ 12.36	$ 49.42
Relamp: Direct Line LED - 1-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- Custodial Closet - RM37	1	$ 54.65	$ 10.93	$ 43.72
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- CR 10 - RM38	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- CR 9 - RM39	11	$ 927.19	$ 185.44	$ 741.75
Relamp: Direct Line LED - 2-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- CR 8 - RM40	11	$ 679.58	$ 135.92	$ 543.66
Relamp: Direct Line LED - 4-Lamp - 4-Foot T8 (Stand. - 12.5W) / FL2- Hallway 2F - RM41	7	$ 590.03	$ 118.01	$ 472.02
Relamp: LED - A-Lamp (3 - 25W): 17 W / Exterior C	1	$ 28.26	$ 5.65	$ 22.61
Low-Flow Aerators (Lavatory) / Rest Rooms	20	$ 238.00	$ 47.60	$ 190.40
Pipe Wrap Insulation / Mechanical Room	1	$ 540.00	$ 108.00	$ 432.00
TOTALS**		$ 15,546.40	$ 3,109.28	$ 12,437.12

**Maximum incentive amount per project is $125,000. Measures that would qualify the project for funding through the State Energy Program (SEP) are identified above with an 'S'. If any "SEP measures" are included then the total incentive amount for all measures will be paid with SEP funds, otherwise the total incentive amount will come from NJ Clean Energy funds.

ENERGY SAVINGS PLAN

APPENDIX F – ECM BREAKDOWN BY BUILDING

HILLSIDE PUBLIC SCHOOLS % SAVINGS BY BUILDING (T.O.R.)

HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		UTILITY ELECTRIC CONSUMPTION SAVINGS	ELECTRIC DEMAND SAVINGS	ONSITE ELECTRIC SAVINGS	NATURAL GAS SAVINGS	ONSITE NATURAL GAS SAVINGS	Water & Sewer (Gal) SAVINGS
BUILDING/FACILITY NAME	SQFT	kWh	kW	kWh	THERMS	THERMS	Water & Sewer (Gal)
Hillside High School	157,000	75.7%	15.0%	31.8%	31.2%	31.2%	1.4%
A.P. Morris Early Childhood Center	89,000	41.2%	19.5%	27.6%	26.4%	26.4%	1.5%
Walter O. Krumbiegel Middle School	81,000	33.4%	18.0%	33.4%	25.6%	25.6%	8.0%
Hurden Looker Elementary School	65,000	46.7%	13.2%	35.6%	38.3%	38.3%	2.7%
George Washington Elementary School	45,080	97.8%	36.9%	57.1%	10.0%	29.8%	2.2%
Calvin Coolidge Elementary School	26,000	52.5%	10.8%	23.4%	39.9%	39.9%	3.7%
Saybrook Annex	12,000	31.1%	12.5%	31.1%	0.2%	0.2%	0.2%
Administration Building	11,000	90.3%	11.6%	30.2%	-1.3%	-1.3%	1.4%
TOTALS	**486,080**	**61.7%**	**18.3%**	**34.5%**	**27.2%**	**29.0%**	**2.1%**

HILLSIDE PUBLIC SCHOOLS SAVINGS BY BUILDING BY UTILITY FROM SMART SELECT

HILLSIDE PUBLIC SCHOOLS BUILDINGS/FACILITIES		ELECTRIC CONSUMPTION SAVINGS	ELECTRIC DEMAND SAVINGS	ONSITE ELECTRIC SAVINGS	NATURAL GAS SAVINGS	ONSITE NATURAL GAS SAVINGS	Water & Sewer (Gal) SAVINGS
BUILDING/FACILITY NAME	SQFT	kWh	kW	kWh	THERMS	THERMS	Water & Sewer (Gal)
Hillside High School	157,000	397,712	32	220,922	31,298	31,298	37,500
A.P. Morris Early Childhood Center	89,000	151,038	41	151,038	9,140	9,140	11,250
Walter O. Krumbiegel Middle School	81,000	99,103	28	99,103	8,579	8,579	37,500
Hurden Looker Elementary School	65,000	103,967	15	79,274	9,967	9,967	11,250
George Washington Elementary School	45,080	333,753	46	194,886	2,323	6,923	7,500
Calvin Coolidge Elementary School	26,000	54,977	5	33,269	6,088	6,088	7,500
Saybrook Annex	12,000	10,746	7	10,746	15	15	750
Administration Building	11,000	52,646	10	17,595	(93)	(93)	1,500
TOTALS	**486,080**	**1,203,942**	**183**	**806,833**	**67,318**	**71,917**	**114,750**

HILLSIDE PUBLIC SCHOOLS			INCLUDED IN PROJECT	INSTALLED COST	ANNUAL ELECTRIC COST SAVINGS	ANNUAL NATURAL GAS COST SAVINGS	ANNUAL Water & Sewer (Gal) COST SAVINGS	ANNUAL ENERGY COST SAVINGS	ANNUAL O&M COST SAVINGS	TOTAL ANNUAL COST SAVINGS	SIMPLE PAYBACK WITHOUT INCENTIVES	ELECTRIC CONSUMPTION SAVINGS	ELECTRIC DEMAND SAVINGS	NATURAL GAS SAVINGS	New Solar PPA (kWh) SAVINGS	Water & Sewer (Gal) SAVINGS	TOTAL SITE ENERGY SAVINGS	TOTAL SOURCE ENERGY SAVINGS	Reduction of CO_2	Reduction of NO_x	Reduction of SO_2	Reduction of Hg	ESTIMATED INCENTIVE AMOUNT	SIMPLE PAYBACK WITH INCENTIVES
ECM #	BUILDING/FACILITY	ENERGY CONSERVATION MEASURE	"Y" OR "N"	$	$	$	$	$	$	$	YEARS	kWh	kW	THERMS	New Solar PPA (kWh)	Water & Sewer (Gal)	MMBTU	MMBTU	LBS	LBS	LBS	LBS	$$	YEARS
1	Hillside High School	LED Lighting Replacement	Y	$34,695	$23,613	($1,015)	$0	$22,599	$0	$22,599	1.5	192,891	29.9	-1,385	0	0	522	1,699	196,206	171	426	897	$0	1.5
2	Hillside High School	Upgrade/Install Control System	Y	$452,727	$2,664	$23,744	$0	$26,408	$0	$26,408	17.1	24,239	0.0	31,942	0	0	3,277	3,585	400,380	317	54	113	$0	17.1
5	Hillside High School	Rooftop Unit Replacement	Y	$9,000	$534	($8)	$0	$526	$0	$526	17.1	3,366	2.0	-11	0	0	10	31	3,577	3	7	16	$0	17.1
6	Hillside High School	Split System AC & AHU Replacement	Y	$4,570	$71	$0	$0	$71	$0	$71	64.8	427	0.3	0	0	0	1	4	469	0	1	2	$0	64.8
7	Hillside High School	Pipe and Valve Insulation	Y	$596	$0	$386	$0	$386	$0	$386	1.5	0	0	519	0	0	52	54	545	5	0	0	$0	1.5
8	Hillside High School	Water Conservation	Y	$103	$0	$159	$353	$512	$0	$512	0.2	0	0.0	214	0	37,500	21	22	225	2	0	0	$0	0.2
9	Hillside High School	Solar PPA	Y	$0	$19,430	$0	$0	$19,430	$0	$19,430	0.0	176,790	0.0	0	-176,790	0	0	1,086	194,469	168	391	822	$0	0.0
1	A.P. Morris Early Childhood Center	LED Lighting Replacement	Y	$36,931	$15,996	($684)	$0	$15,313	$0	$15,313	2.4	118,860	20.7	-920	0	0	314	1,039	119,980	104	263	553	$0	2.4
2	A.P. Morris Early Childhood Center	Upgrade/Install Control System	Y	$182,659	$894	$6,317	$0	$7,211	$0	$7,211	25.3	7,592	-0.3	8,503	0	0	876	965	107,837	85	17	35	$0	25.3
5	A.P. Morris Early Childhood Center	Rooftop Unit Replacement	Y	$104,000	$4,592	$302	$0	$4,895	$0	$4,895	21.2	24,586	20.18303756	407	0	0	125	278	31,609	27	54	114	$0	21.2
7	A.P. Morris Early Childhood Center	Pipe and Valve Insulation	Y	$1,828	$0	$807	$0	$807	$0	$807	2.3	0	0.0	1,086	0	0	109	114	1,140	10	0	0	$0	2.3
8	A.P. Morris Early Childhood Center	Water Conservation	Y	$248	$0	$48	$129	$177	$0	$177	1.4	0	0.0	64	0	11,250	6	7	67	1	0	0	$0	1.4
1	Walter O. Krumbiegel Middle School	LED Lighting Replacement	Y	$20,547	$13,651	($575)	$0	$13,077	$0	$13,077	1.6	94,975	28.2	-739	0	0	250	830	95,626	83	210	442	$0	1.6
2	Walter O. Krumbiegel Middle School	Upgrade/Install Control System	Y	$309,818	$483	$6,759	$0	$7,243	$0	$7,243	42.8	4,127	-0.2	8,693	0	0	883	952	106,252	84	9	19	$0	42.8
7	Walter O. Krumbiegel Middle School	Pipe and Valve Insulation	Y	$472	$0	$319	$0	$319	$0	$319	1.5	0	0.0	411	0	0	41	43	431	4	0	0	$0	1.5
8	Walter O. Krumbiegel Middle School	Water Conservation	Y	$67	$0	$166	$637	$803	$0	$803	0.1	0	0.0	214	0	37,500	21	22	225	2	0	0	$0	0.1
1	Hurden Looker Elementary School	LED Lighting Replacement	Y	$14,898	$12,030	($261)	$0	$11,769	$0	$11,769	1.3	69,191	15.8	-350	0	0	201	624	72,020	63	153	322	$0	1.3
2	Hurden Looker Elementary School	Upgrade/Install Control System	Y	$184,875	$1,519	$7,501	$0	$9,021	$0	$9,021	20.5	10,083	-0.5	10,061	0	0	1,040	1,153	128,802	102	22	47	$0	20.5
7	Hurden Looker Elementary School	Pipe and Valve Insulation	Y	$220	$0	$143	$0	$143	$0	$143	1.5	0	0.0	191	0	0	19	20	201	2	0	0	$0	1.5
8	Hurden Looker Elementary School	Water Conservation	Y	$62	$0	$48	$206	$254	$0	$254	0.2	0	0.0	64	0	11,250	6	7	67	1	0	0	$0	0.2
9	Hurden Looker Elementary School	Solar PPA	Y	$0	$3,827	$0	$0	$3,827	$0	$3,827	0.0	24,693	0.0	0	-24,693	0	0	152	27,162	23	55	115	$0	0.0
1	George Washington Elementary School	LED Lighting Replacement	Y	$15,944	$7,014	($366)	$0	$6,648	$0	$6,648	2.4	58,626	10.7	-493	0	0	151	508	58,715	51	130	273	$0	2.4
2	George Washington Elementary School	Upgrade/Install Control System	Y	$159,477	$4,268	$4,504	$0	$8,772	$0	$8,772	18.2	40,702	0.0	6,071	0	0	746	1,026	115,806	95	90	189	$0	18.2
3	George Washington Elementary School	Boiler Replacement	Y	$530,000	($74)	$1,274	$0	$1,201	$23,497	$24,698	21.5	-702	0.0	1,718	0	0	169	174	19,325	15	-2	-3	$0	21.5
4	George Washington Elementary School	Premium Efficiency Pump Motors and VFDs	Y	$50,000	$1,876	($474)	$0	$1,402	$0	$1,402	35.7	17,893	0.0	-639	0	0	-3	104	12,204	11	40	83	$0	35.7
7	George Washington Elementary School	Pipe and Valve Insulation	Y	$257	$0	$166	$0	$166	$0	$166	1.5	0	0.0	224	0	0	22	23	235	2	0	0	$0	1.5
8	George Washington Elementary School	Water Conservation	Y	$60	$0	$32	$77	$108	$0	$108	0.6	0	0.0	43	0	7,500	4	4	45	0	0	0	$0	0.6
9	George Washington Elementary School	Solar PPA	Y	$0	$14,563	$0	$0	$14,563	$0	$14,563	0.0	138,867	0.0	0	-138,867	0	0	853	152,754	132	307	646	$0	0.0
10	George Washington Elementary School	Combined Heat & Power Unit	Y	$275,000	$11,043	($3,412)	$0	$7,631	$0	$7,631	36.0	78,368	35.0	-4,600	0	0	-193	266	32,389	32	173	365	$0	36.0
1	Calvin Coolidge Elementary School	LED Lighting Replacement	Y	$5,169	$2,284	($194)	$0	$2,089	$0	$2,089	2.5	26,337	5.1	-254	0	0	64	225	25,998	23	58	123	$0	2.5
2	Calvin Coolidge Elementary School	Upgrade/Install Control System	Y	$137,034	($22)	$3,264	$0	$3,242	$0	$3,242	42.3	-184	-0.1	4,266	0	0	426	446	49,707	39	0	-1	$0	42.3
3	Calvin Coolidge Elementary School	Boiler Replacement	Y	$490,000	($5)	$1,699	$0	$1,693	$8,549	$10,242	47.8	-76	0.0	2,220	0	0	222	232	25,889	20	0	0	$0	47.8
4	Calvin Coolidge Elementary School	Premium Efficiency Pump Motors and VFDs	Y	$25,000	$506	($214)	$0	$292	$0	$292	85.6	7,191	0.0	-280	0	0	-3	39	4,635	4	16	33	$0	85.6
7	Calvin Coolidge Elementary School	Pipe and Valve Insulation	Y	$108	$0	$72	$0	$72	$0	$72	1.5	0	0.0	94	0	0	9	10	99	1	0	0	$0	1.5
8	Calvin Coolidge Elementary School	Water Conservation	Y	$48	$0	$33	$113	$146	$0	$146	0.3	0	0.0	43	0	7,500	4	4	45	0	0	0	$0	0.3
9	Calvin Coolidge Elementary School	Solar PPA	Y	$0	$1,528	$0	$0	$1,528	$0	$1,528	0.0	21,708	0.0	0	-21,708	0	0	133	23,879	21	48	101	$0	0.0
1	Saybrook Annex	LED Lighting Replacement	Y	$3,338	$2,613	($64)	$0	$2,549	$0	$2,549	1.3	10,746	6.6	-86	0	0	28	94	10,812	9	24	50	$0	1.3
7	Saybrook Annex	Pipe and Valve Insulation	Y	$111	$0	$72	$0	$72	$0	$72	1.5	0	0.0	97	0	0	10	10	102	1	0	0	$0	1.5
8	Saybrook Annex	Water Conservation	Y	$5	$0	$3	$9	$12	$0	$12	0.4	0	0.0	4	0	750	0	0	4	0	0	0	$0	0.4
1	Administration Building	LED Lighting Replacement	Y	$2,881	$3,685	($75)	$0	$3,610	$0	$3,610	0.8	17,595	10.0	-101	0	0	50	157	18,169	16	39	82	$0	0.8
8	Administration Building	Water Conservation	Y	$12	$0	$6	$33	$39	$0	$39	0.3	0	0.0	9	0	1,500	1	1	9	0	0	0	$0	0.3
9	Administration Building	Solar PPA	Y	$0	$5,615	$0	$0	$5,615	$0	$5,615	0.0	35,051	0.0	0	-35,051	0	0	215	38,556	33	77	163	$0	0.0
		TOTALS		$3,052,761	$154,200	$50,482	$1,556	$206,237	$32,046	$238,284	12.8	1,203,942	183.5	67,318	-397,109	114,750	9,485	17,215	2,077,064	1,763	2,661	5,600	$0	12.8

ENERGY SAVINGS PLAN

APPENDIX G – LOCAL GOVERNMENT ENERGY AUDITS