



# New Jersey's Clean Energy Program

LGEA Exit Meeting for:  
*Winslow Township*

TRC Energy Services

March 20, 2019

# Introductions

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## *Winslow Township*

- Stephen Dringus – CFO
- Joseph Gallagher – Township Administrator
- Jennifer Conway – Purchasing Agent
- Kim Lombardo – Assistant to Purchasing Agent

## *NJ Clean Energy Program*

- Moussa Traore – TRC Auditor
- Elizabeth Ebinger – TRC Account Manager
- Gary Finger – TRC Outreach Manager
- Mike Thulen – ESIP Coordinator

# Agenda

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- The audit process overview
- Energy use & existing conditions
- Review of **E**nergy **C**onservation **M**easures (ECMs) identified
- Questions or concerns regarding the draft audit report
- Overview of NJCEP equipment incentives
- Next steps for Winslow Township

# LGEA Process

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- Application Approval
- Scheduling Call
- Audit
- Benchmarking & Analysis
- Draft Report
- Exit Meeting Presentation
- Final Report



# Site Visit and Utility Analysis

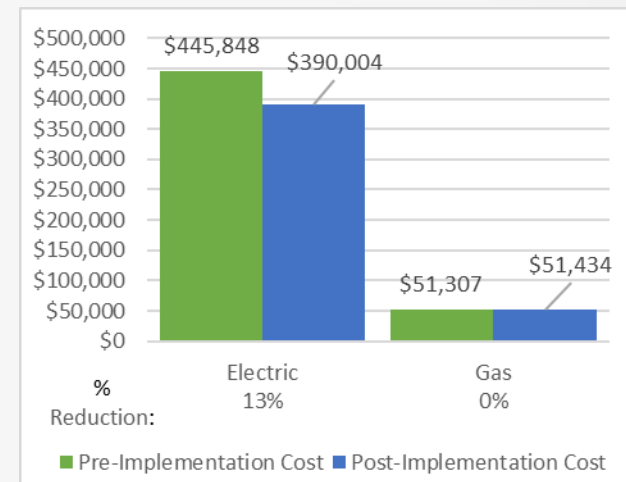
## Overview of Systems, Baseline & Existing Conditions:

- Building Envelope
- Lighting System
- HVAC and Mechanical Systems
- Plug Load Equipment
- Food Service and Refrigeration Systems

## Utility Consumption:

- Electric Consumption and Costs
- Natural Gas Consumption and Costs
- Solar Power Generation (Senior Building)

### Utility Cost Savings



# Sites Visited and Analyzed



- Municipal Building Garage
- Municipal Building
- Peter Volpa Park
- Salt Building
- David Iuliucci Park
- Stella Maiese Park
- Sign Room
- Public Works - Modular Office
- Senior Building
- Albion Park
- Star Building 1
- Police Records Building
- Calabrese Park
- Office Trailer
- Well # 2 - Sicklerville/  
Wmstwn. Rd.
- Well # 3 - Preston Drive
- Well # 6 - Colgate Road
- Well #4
- Pump Station #2
- Well # 9 - Cross Keys Road
- Well # 7 - Cross Keys Road
- Well # 8 - Cross Keys Road
- Factory Road
- Donio Park
- Ivy Hall Lane - Pump #3
- Quad Pump - Lehigh manor P#4
- Main Pump - Manor Hall P#1
- Oak Forest #1-Old Erial Road-  
P#8
- Mercer Lane - Pump #5
- Meeting House Circle - Pump #7
- Meeting House Circle - Pump #7
- Erial new Brookly Road - P #6
- Route 73 - Pump # 13
- Route 73 - Pump # 12
- Susan Lane - Pump # 14
- Victoria Manor - Pump #10
- New Brookly Road - Pump #11
- Pump Station #16
- Pump Station #17
- Water & Sewer Department Office  
Building
- Pump Station #18
- Pump Station #9

# Benchmarking



## ENERGY STAR® Statement of Energy Performance

LEARN MORE AT [energystar.gov](http://energystar.gov)

# 21

ENERGY STAR®  
Score<sup>1</sup>

### Municipal Building

Primary Property Type: Office  
Gross Floor Area (ft<sup>2</sup>): 15,000  
Built: 1975

For Year Ending: May 31, 2017  
Date Generated: November 02, 2018

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

#### Property & Contact Information

Property Address	Property Owner	Primary Contact
Municipal Building 125 South Route 73 Braddock, New Jersey 08037	Winslow Township 125 South Route 73 Braddock, NJ 08037 809-567-0700	Winslow Township 125 South Route 73 Braddock, NJ 08037 809-567-0700 jconway@winslowtownship.com

Property ID: 1793931

#### Energy Consumption and Energy Use Intensity (EUI)

Site EUI	Annual Energy by Fuel	National Median Comparison					
149.1 kBtu/ft <sup>2</sup>	<table style="width: 100%; border-collapse: collapse; font-size: x-small;"> <tr> <td style="width: 30%;">Natural Gas (kBtu)</td> <td style="width: 70%;">1,012,960 (45%)</td> </tr> <tr> <td>Electric - Grid (kBtu)</td> <td>1,223,028 (55%)</td> </tr> </table>	Natural Gas (kBtu)	1,012,960 (45%)	Electric - Grid (kBtu)	1,223,028 (55%)	National Median Site EUI (kBtu/ft <sup>2</sup> )	102.4
Natural Gas (kBtu)	1,012,960 (45%)						
Electric - Grid (kBtu)	1,223,028 (55%)						
		National Median Source EUI (kBtu/ft <sup>2</sup> )	205.6				
		% Diff from National Median Source EUI	46%				
<b>Source EUI</b>		<b>Annual Emissions</b>					
299.2 kBtu/ft <sup>2</sup>		Greenhouse Gas Emissions (Metric Tons CO <sub>2</sub> e/year)	178				

ENERGY STAR Scores are percentile ranking from 1 (least efficient) to 100 (most efficient). It compares your building's energy performance to similar buildings nationwide.

# Benchmarking



Building Name	ENERGY STAR Score
Municipal Building Garage	N/A
Municipal Building	<b>21</b>
Peter Volpa Park	N/A
Salt Building	N/A
David Iuliucci Park	N/A
Stella Maiese Park	N/A
Sign Room	N/A
Public Works - Modular Office	<b>15</b>
Senior Building	N/A
Albion Park	N/A
Star Building 1	N/A
Police Records Building	N/A
Calabrese Park	N/A
Office Trailer	<b>14</b>
Well # 2 - Sicklerville/Wmstwn. Rd.	N/A
Well # 3 - Preston Drive	N/A
Well # 6 - Colgate Road	N/A
Well #4	N/A
Pump Station #2	N/A
Well # 9 - Cross Keys Road	N/A
Well # 7 - Cross Keys Road	N/A

Building Name	ENERGY STAR Score
Well # 8 - Cross Keys Road	N/A
Factory Road	N/A
Donio Park	N/A
Ivy Hall Lane - Pump #3	N/A
Quad Pump - Lehigh manor P#4	N/A
Main Pump - Manor Hall P#1	N/A
Oak Forest #1-Old Erial Road-P#8	N/A
Mercer Lane - Pump #5	N/A
Meeting House Circle - Pump #7	N/A
Erial new Brookly Road - P #6	N/A
Route 73 - Pump # 13	N/A
Route 73 - Pump # 12	N/A
Susan Lane - Pump # 14	N/A
Victoria Manor - Pump #10	N/A
New Brookly Road - Pump #11	N/A
Pump Station #16	N/A
Pump Station #17	N/A
Water & Sewer Department Office Building	<b>67</b>
Pump Station #18	N/A
Pump Station #9	N/A



# All Opportunities



Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>	<b>285,010</b>	<b>198.8</b>	<b>-20.3</b>	<b>\$46,000.82</b>	<b>\$514,885.86</b>	<b>\$25,165.00</b>	<b>\$489,720.86</b>	<b>10.6</b>	<b>284,630</b>
Install LED Fixtures	189,310	166.1	-0.4	\$31,617.35	\$464,115.54	\$15,870.00	\$448,245.54	14.2	190,589
Retrofit Fluorescent Fixtures with LED Lamps and Drivers	11,546	6.2	-2.2	\$2,205.51	\$11,025.40	\$1,760.00	\$9,265.40	4.2	11,366
Retrofit Fixtures with LED Lamps	83,726	26.4	-17.6	\$12,091.26	\$38,948.34	\$7,535.00	\$31,413.34	2.6	82,254
Install LED Exit Signs	428	0.0	-0.1	\$86.70	\$796.58	\$0.00	\$796.58	9.2	421
<b>Lighting Control Measures</b>	<b>20,584</b>	<b>5.5</b>	<b>-4.3</b>	<b>\$3,053.09</b>	<b>\$18,524.00</b>	<b>\$1,965.00</b>	<b>\$16,559.00</b>	<b>5.4</b>	<b>20,219</b>
Install Occupancy Sensor Lighting Controls	17,218	5.0	-3.6	\$2,567.39	\$16,324.00	\$1,965.00	\$14,359.00	5.6	16,912
Install High/Low Lighting Controls	3,366	0.5	-0.7	\$485.70	\$2,200.00	\$0.00	\$2,200.00	4.5	3,307
<b>Motor Upgrades</b>	<b>68,397</b>	<b>28.5</b>	<b>0.0</b>	<b>\$12,031.95</b>	<b>\$113,144.35</b>	<b>\$0.00</b>	<b>\$113,144.35</b>	<b>9.4</b>	<b>68,875</b>
Premium Efficiency Motors	68,397	28.5	0.0	\$12,031.95	\$113,144.35	\$0.00	\$113,144.35	9.4	68,875
<b>Electric Unitary HVAC Measures</b>	<b>24,111</b>	<b>10.6</b>	<b>0.0</b>	<b>\$4,048.47</b>	<b>\$133,297.52</b>	<b>\$5,330.50</b>	<b>\$127,967.02</b>	<b>31.6</b>	<b>24,280</b>
Install High Efficiency Air Conditioning Units	14,464	7.5	0.0	\$2,105.30	\$94,974.59	\$4,038.50	\$90,936.09	43.2	14,565
Install High Efficiency Heat Pumps	9,648	3.1	0.0	\$1,943.17	\$38,322.93	\$1,292.00	\$37,030.93	19.1	9,715
<b>Gas Heating (HVAC/Process) Replacement</b>	<b>0</b>	<b>0.0</b>	<b>127.5</b>	<b>\$1,441.71</b>	<b>\$21,026.00</b>	<b>\$2,800.00</b>	<b>\$18,226.00</b>	<b>12.6</b>	<b>14,927</b>
Install High Efficiency Furnaces	0	0.0	127.5	\$1,441.71	\$21,026.00	\$2,800.00	\$18,226.00	12.6	14,927
<b>Domestic Water Heating Upgrade</b>	<b>6,532</b>	<b>0.0</b>	<b>13.7</b>	<b>\$1,152.24</b>	<b>\$293.97</b>	<b>\$0.00</b>	<b>\$293.97</b>	<b>0.3</b>	<b>8,184</b>
Install Low-Flow DHW Devices	6,532	0.0	13.7	\$1,152.24	\$293.97	\$0.00	\$293.97	0.3	8,184
<b>Plug Load Equipment Control - Vending Machine</b>	<b>6,447</b>	<b>0.7</b>	<b>0.0</b>	<b>\$952.64</b>	<b>\$920.00</b>	<b>\$0.00</b>	<b>\$920.00</b>	<b>1.0</b>	<b>6,492</b>
Vending Machine Control	6,447	0.7	0.0	\$952.64	\$920.00	\$0.00	\$920.00	1.0	6,492
<b>TOTALS</b>	<b>411,082</b>	<b>244.1</b>	<b>116.6</b>	<b>\$68,680.92</b>	<b>\$802,091.70</b>	<b>\$35,260.50</b>	<b>\$766,831.20</b>	<b>11.2</b>	<b>427,607</b>

\* - All incentives presented in this table are based on NJ Smart Start Building equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Cost Effective Opportunities\*



\* Opportunities considered cost effective have a payback period less than 2/3rds of the useful life of the measure

Energy Conservation Measure		Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>237,465</b>	<b>54.1</b>	<b>-19.9</b>	<b>\$35,915.94</b>	<b>\$169,618.78</b>	<b>\$22,331.00</b>	<b>\$147,287.78</b>	<b>4.1</b>	<b>236,800</b>
ECM 1	Install LED Fixtures	142,326	22.7	0.0	\$21,669.83	\$121,408.05	\$13,170.00	\$108,238.05	5.0	143,322
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	11,431	6.0	-2.2	\$2,179.27	\$10,639.32	\$1,700.00	\$8,939.32	4.1	11,250
ECM 3	Retrofit Fixtures with LED Lamps	83,318	25.4	-17.6	\$11,983.36	\$36,847.25	\$7,461.00	\$29,386.25	2.5	81,845
ECM 4	Install LED Exit Signs	389	0.0	-0.1	\$83.48	\$724.16	\$0.00	\$724.16	8.7	383
<b>Lighting Control Measures</b>		<b>18,242</b>	<b>4.3</b>	<b>-3.9</b>	<b>\$2,858.30</b>	<b>\$14,000.00</b>	<b>\$1,335.00</b>	<b>\$12,665.00</b>	<b>4.4</b>	<b>17,912</b>
ECM 5	Install Occupancy Sensor Lighting Controls	14,981	3.8	-3.2	\$2,392.57	\$12,000.00	\$1,335.00	\$10,665.00	4.5	14,707
ECM 6	Install High/Low Lighting Controls	3,261	0.5	-0.7	\$465.73	\$2,000.00	\$0.00	\$2,000.00	4.3	3,204
<b>Motor Upgrades</b>		<b>50,833</b>	<b>18.9</b>	<b>0.0</b>	<b>\$8,943.33</b>	<b>\$68,025.59</b>	<b>\$0.00</b>	<b>\$68,025.59</b>	<b>7.6</b>	<b>51,188</b>
ECM 7	Premium Efficiency Motors	50,833	18.9	0.0	\$8,943.33	\$68,025.59	\$0.00	\$68,025.59	7.6	51,188
<b>Domestic Water Heating Upgrade</b>		<b>6,532</b>	<b>0.0</b>	<b>13.7</b>	<b>\$1,152.24</b>	<b>\$293.97</b>	<b>\$0.00</b>	<b>\$293.97</b>	<b>0.3</b>	<b>8,184</b>
ECM 8	Install Low-Flow DHW Devices	6,532	0.0	13.7	\$1,152.24	\$293.97	\$0.00	\$293.97	0.3	8,184
<b>Plug Load Equipment Control - Vending Machine</b>		<b>6,447</b>	<b>0.7</b>	<b>0.0</b>	<b>\$952.64</b>	<b>\$920.00</b>	<b>\$0.00</b>	<b>\$920.00</b>	<b>1.0</b>	<b>6,492</b>
ECM 9	Vending Machine Control	6,447	0.7	0.0	\$952.64	\$920.00	\$0.00	\$920.00	1.0	6,492
<b>TOTALS</b>		<b>319,520</b>	<b>78.1</b>	<b>-10.1</b>	<b>\$49,822.45</b>	<b>\$252,858.34</b>	<b>\$23,666.00</b>	<b>\$229,192.34</b>	<b>4.6</b>	<b>320,576</b>

\* - All incentives presented in this table are based on NJ Smart Start Building equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Municipal Building Garage



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>26,948</b>	<b>7.7</b>	<b>-4</b>	<b>\$4,437</b>	<b>\$66,558</b>	<b>\$11,691</b>	<b>\$1,990</b>	<b>\$9,701</b>	<b>2.2</b>	<b>26,632</b>
ECM 1	Install LED Fixtures	12,816	1.9	0	\$2,133	\$32,000	\$5,740	\$530	\$5,210	2.4	12,905
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	267	0.1	0	\$44	\$653	\$257	\$40	\$217	5.0	259
ECM 3	Retrofit Fixtures with LED Lamps	13,865	5.6	-4	\$2,260	\$33,904	\$5,693	\$1,420	\$4,273	1.9	13,467
<b>Lighting Control Measures</b>		<b>679</b>	<b>0.3</b>	<b>0</b>	<b>\$111</b>	<b>\$885</b>	<b>\$1,158</b>	<b>\$35</b>	<b>\$1,123</b>	<b>10.2</b>	<b>659</b>
ECM 4	Install Occupancy Sensor Lighting Controls	679	0.3	0	\$111	\$885	\$1,158	\$35	\$1,123	10.2	659
<b>Electric Unitary HVAC Measures</b>		<b>680</b>	<b>0.5</b>	<b>0</b>	<b>\$113</b>	<b>\$1,698</b>	<b>\$4,489</b>	<b>\$276</b>	<b>\$4,213</b>	<b>37.2</b>	<b>685</b>
	Install High Efficiency Air Conditioning Units	680	0.5	0	\$113	\$1,698	\$4,489	\$276	\$4,213	37.2	685
<b>Gas Heating (HVAC/Process) Replacement</b>		<b>0</b>	<b>0.0</b>	<b>10</b>	<b>\$117</b>	<b>\$2,350</b>	<b>\$2,538</b>	<b>\$400</b>	<b>\$2,138</b>	<b>18.2</b>	<b>1,216</b>
	Install High Efficiency Furnaces	0	0.0	10	\$117	\$2,350	\$2,538	\$400	\$2,138	18.2	1,216
<b>Domestic Water Heating Upgrade</b>		<b>1,668</b>	<b>0.0</b>	<b>0</b>	<b>\$278</b>	<b>\$2,777</b>	<b>\$14</b>	<b>\$0</b>	<b>\$14</b>	<b>0.1</b>	<b>1,680</b>
ECM 5	Install Low-Flow DHW Devices	1,668	0.0	0	\$278	\$2,777	\$14	\$0	\$14	0.1	1,680
<b>Food Service &amp; Refrigeration Measures</b>		<b>1,612</b>	<b>0.2</b>	<b>0</b>	<b>\$268</b>	<b>\$1,342</b>	<b>\$230</b>	<b>\$0</b>	<b>\$230</b>	<b>0.9</b>	<b>1,623</b>
ECM 6	Vending Machine Control	1,612	0.2	0	\$268	\$1,342	\$230	\$0	\$230	0.9	1,623
<b>TOTALS</b>		<b>31,587</b>	<b>8.6</b>	<b>6</b>	<b>\$5,324</b>	<b>\$75,608</b>	<b>\$20,119</b>	<b>\$2,701</b>	<b>\$17,418</b>	<b>3.3</b>	<b>32,495</b>

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# Municipal Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>77,784</b>	<b>13.2</b>	<b>-7</b>	<b>\$10,932</b>	<b>\$163,976</b>	<b>\$40,914</b>	<b>\$5,007</b>	<b>\$35,907</b>	<b>3.3</b>	<b>77,539</b>
ECM 1	Install LED Fixtures	44,413	7.1	0	\$6,285	\$94,280	\$28,094	\$3,000	\$25,094	4.0	44,724
ECM 2	Retrofit Fixtures with LED Lamps	33,371	6.1	-7	\$4,646	\$69,697	\$12,820	\$2,007	\$10,813	2.3	32,815
<b>Lighting Control Measures</b>		<b>9,844</b>	<b>1.8</b>	<b>-2</b>	<b>\$1,370</b>	<b>\$10,959</b>	<b>\$6,268</b>	<b>\$510</b>	<b>\$5,758</b>	<b>4.2</b>	<b>9,672</b>
ECM 3	Install Occupancy Sensor Lighting Controls	7,059	1.4	-1	\$982	\$7,858	\$4,668	\$510	\$4,158	4.2	6,935
ECM 4	Install High/Low Lighting Controls	2,786	0.4	-1	\$388	\$3,101	\$1,600	\$0	\$1,600	4.1	2,737
<b>Motor Upgrades</b>		<b>293</b>	<b>0.1</b>	<b>0</b>	<b>\$41</b>	<b>\$622</b>	<b>\$894</b>	<b>\$0</b>	<b>\$894</b>	<b>21.5</b>	<b>295</b>
	Premium Efficiency Motors	293	0.1	0	\$41	\$622	\$894	\$0	\$894	21.5	295
<b>Electric Unitary HVAC Measures</b>		<b>13,220</b>	<b>6.3</b>	<b>0</b>	<b>\$1,871</b>	<b>\$28,063</b>	<b>\$85,267</b>	<b>\$3,487</b>	<b>\$81,781</b>	<b>43.7</b>	<b>13,312</b>
	Install High Efficiency Air Conditioning Units	12,550	6.0	0	\$1,776	\$26,642	\$82,868	\$3,395	\$79,473	44.7	12,638
	Install High Efficiency Heat Pumps	669	0.3	0	\$95	\$1,421	\$2,399	\$92	\$2,307	24.4	674
<b>Gas Heating (HVAC/Process) Replacement</b>		<b>0</b>	<b>0.0</b>	<b>108</b>	<b>\$1,221</b>	<b>\$24,427</b>	<b>\$16,313</b>	<b>\$2,000</b>	<b>\$14,313</b>	<b>11.7</b>	<b>12,645</b>
	Install High Efficiency Furnaces	0	0.0	108	\$1,221	\$24,427	\$16,313	\$2,000	\$14,313	11.7	12,645
<b>Domestic Water Heating Upgrade</b>		<b>0</b>	<b>0.0</b>	<b>10</b>	<b>\$113</b>	<b>\$1,127</b>	<b>\$50</b>	<b>\$0</b>	<b>\$50</b>	<b>0.4</b>	<b>1,167</b>
ECM 5	Install Low-Flow DHW Devices	0	0.0	10	\$113	\$1,127	\$50	\$0	\$50	0.4	1,167
<b>Food Service &amp; Refrigeration Measures</b>		<b>4,836</b>	<b>0.6</b>	<b>0</b>	<b>\$684</b>	<b>\$3,422</b>	<b>\$690</b>	<b>\$0</b>	<b>\$690</b>	<b>1.0</b>	<b>4,869</b>
ECM 6	Vending Machine Control	4,836	0.6	0	\$684	\$3,422	\$690	\$0	\$690	1.0	4,869
<b>TOTALS</b>		<b>105,977</b>	<b>21.9</b>	<b>109</b>	<b>\$16,232</b>	<b>\$232,596</b>	<b>\$150,397</b>	<b>\$11,004</b>	<b>\$139,394</b>	<b>8.6</b>	<b>119,500</b>

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\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Peter Volpa Park



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>25,310</b>	<b>59.6</b>	<b>0</b>	<b>\$4,912</b>	<b>\$73,677</b>	<b>\$129,470</b>	<b>\$282</b>	<b>\$129,188</b>	<b>26.3</b>	<b>25,487</b>
	Install LED Fixtures	24,326	59.0	0	\$4,721	\$70,813	\$128,778	\$100	\$128,678	27.3	24,496
ECM 1	Retrofit Fixtures with LED Lamps	984	0.6	0	\$191	\$2,864	\$692	\$182	\$510	2.7	991
<b>Electric Unitary HVAC Measures</b>		<b>4,338</b>	<b>1.7</b>	<b>0</b>	<b>\$842</b>	<b>\$12,629</b>	<b>\$11,996</b>	<b>\$460</b>	<b>\$11,536</b>	<b>13.7</b>	<b>4,369</b>
	Install High Efficiency Heat Pumps	4,338	1.7	0	\$842	\$12,629	\$11,996	\$460	\$11,536	13.7	4,369
<b>Domestic Water Heating Upgrade</b>		<b>167</b>	<b>0.0</b>	<b>0</b>	<b>\$32</b>	<b>\$324</b>	<b>\$14</b>	<b>\$0</b>	<b>\$14</b>	<b>0.4</b>	<b>168</b>
ECM 2	Install Low-Flow DHW Devices	167	0.0	0	\$32	\$324	\$14	\$0	\$14	0.4	168
<b>TOTALS</b>		<b>29,815</b>	<b>61.3</b>	<b>0</b>	<b>\$5,786</b>	<b>\$86,630</b>	<b>\$141,480</b>	<b>\$742</b>	<b>\$140,738</b>	<b>24.3</b>	<b>30,023</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Salt Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>7,286</b>	<b>1.8</b>	<b>0</b>	<b>\$1,221</b>	<b>\$18,318</b>	<b>\$5,567</b>	<b>\$760</b>	<b>\$4,807</b>	<b>3.9</b>	<b>7,337</b>
ECM 1	Install LED Fixtures	6,373	1.4	0	\$1,068	\$16,023	\$4,698	\$600	\$4,098	3.8	6,418
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	633	0.2	0	\$106	\$1,591	\$515	\$80	\$435	4.1	637
ECM 3	Retrofit Fixtures with LED Lamps	280	0.1	0	\$47	\$703	\$354	\$80	\$274	5.8	282
<b>TOTALS</b>		<b>7,286</b>	<b>1.8</b>	<b>0</b>	<b>\$1,221</b>	<b>\$18,318</b>	<b>\$5,567</b>	<b>\$760</b>	<b>\$4,807</b>	<b>3.9</b>	<b>7,337</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# David Iuliucci Park



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>43</b>	<b>0.6</b>	<b>0</b>	<b>\$56</b>	<b>\$836</b>	<b>\$2,827</b>	<b>\$300</b>	<b>\$2,527</b>	<b>45.3</b>	<b>43</b>
	Install LED Fixtures	43	0.6	0	\$56	\$836	\$2,827	\$300	\$2,527	45.3	43
<b>TOTALS</b>		<b>43</b>	<b>0.6</b>	<b>0</b>	<b>\$56</b>	<b>\$836</b>	<b>\$2,827</b>	<b>\$300</b>	<b>\$2,527</b>	<b>45.3</b>	<b>43</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Stella Maiese Park



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>7,158</b>	<b>37.1</b>	<b>0</b>	<b>\$1,639</b>	<b>\$24,591</b>	<b>\$90,621</b>	<b>\$762</b>	<b>\$89,859</b>	<b>54.8</b>	<b>7,208</b>
	Install LED Fixtures	7,036	36.9	0	\$1,612	\$24,173	\$90,200	\$700	\$89,500	55.5	7,086
	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	115	0.2	0	\$26	\$394	\$386	\$60	\$326	12.4	115
	Retrofit Fixtures with LED Lamps	7	0.0	0	\$2	\$25	\$34	\$2	\$32	19.5	7
<b>Electric Unitary HVAC Measures</b>		<b>139</b>	<b>0.2</b>	<b>0</b>	<b>\$32</b>	<b>\$479</b>	<b>\$1,633</b>	<b>\$0</b>	<b>\$1,633</b>	<b>51.2</b>	<b>140</b>
	Install High Efficiency Air Conditioning Units	139	0.2	0	\$32	\$479	\$1,633	\$0	\$1,633	51.2	140
<b>TOTALS</b>		<b>7,298</b>	<b>37.3</b>	<b>0</b>	<b>\$1,671</b>	<b>\$25,070</b>	<b>\$92,254</b>	<b>\$762</b>	<b>\$91,492</b>	<b>54.7</b>	<b>7,349</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).



# Sign Room



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>2,655</b>	<b>0.5</b>	<b>0</b>	<b>\$441</b>	<b>\$6,615</b>	<b>\$1,490</b>	<b>\$231</b>	<b>\$1,259</b>	<b>2.9</b>	<b>2,631</b>
ECM 1	Install LED Fixtures	1,480	0.2	0	\$248	\$3,722	\$966	\$100	\$866	3.5	1,491
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	174	0.0	0	\$29	\$428	\$69	\$10	\$59	2.1	169
ECM 3	Retrofit Fixtures with LED Lamps	1,001	0.3	0	\$164	\$2,465	\$455	\$121	\$334	2.0	972
<b>Lighting Control Measures</b>		<b>132</b>	<b>0.0</b>	<b>0</b>	<b>\$22</b>	<b>\$174</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>4.4</b>	<b>128</b>
ECM 4	Install Occupancy Sensor Lighting Controls	132	0.0	0	\$22	\$174	\$116	\$20	\$96	4.4	128
<b>Gas Heating (HVAC/Process) Replacement</b>		<b>0</b>	<b>0.0</b>	<b>9</b>	<b>\$103</b>	<b>\$2,057</b>	<b>\$2,175</b>	<b>\$400</b>	<b>\$1,775</b>	<b>17.3</b>	<b>1,065</b>
	Install High Efficiency Furnaces	0	0.0	9	\$103	\$2,057	\$2,175	\$400	\$1,775	17.3	1,065
<b>Domestic Water Heating Upgrade</b>		<b>417</b>	<b>0.0</b>	<b>0</b>	<b>\$70</b>	<b>\$699</b>	<b>\$7</b>	<b>\$0</b>	<b>\$7</b>	<b>0.1</b>	<b>420</b>
ECM 5	Install Low-Flow DHW Devices	417	0.0	0	\$70	\$699	\$7	\$0	\$7	0.1	420
<b>TOTALS</b>		<b>3,205</b>	<b>0.6</b>	<b>9</b>	<b>\$635</b>	<b>\$9,545</b>	<b>\$3,788</b>	<b>\$651</b>	<b>\$3,137</b>	<b>4.9</b>	<b>4,244</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Public Works – Modular Office



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,451</b>	<b>0.5</b>	<b>0</b>	<b>\$245</b>	<b>\$3,670</b>	<b>\$1,165</b>	<b>\$302</b>	<b>\$863</b>	<b>3.5</b>	<b>1,421</b>
ECM 1	Install LED Fixtures	324	0.1	0	\$56	\$833	\$400	\$100	\$300	5.4	326
ECM 2	Retrofit Fixtures with LED Lamps	1,127	0.5	0	\$189	\$2,838	\$765	\$202	\$563	3.0	1,095
<b>Lighting Control Measures</b>		<b>298</b>	<b>0.1</b>	<b>0</b>	<b>\$50</b>	<b>\$400</b>	<b>\$540</b>	<b>\$70</b>	<b>\$470</b>	<b>9.4</b>	<b>289</b>
ECM 3	Install Occupancy Sensor Lighting Controls	298	0.1	0	\$50	\$400	\$540	\$70	\$470	9.4	289
<b>Domestic Water Heating Upgrade</b>		<b>278</b>	<b>0.0</b>	<b>0</b>	<b>\$48</b>	<b>\$476</b>	<b>\$14</b>	<b>\$0</b>	<b>\$14</b>	<b>0.3</b>	<b>280</b>
ECM 4	Install Low-Flow DHW Devices	278	0.0	0	\$48	\$476	\$14	\$0	\$14	0.3	280
<b>TOTALS</b>		<b>2,027</b>	<b>0.7</b>	<b>0</b>	<b>\$342</b>	<b>\$4,547</b>	<b>\$1,719</b>	<b>\$372</b>	<b>\$1,347</b>	<b>3.9</b>	<b>1,990</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Senior Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>26,626</b>	<b>6.5</b>	<b>-2</b>	<b>\$1,401</b>	<b>\$21,012</b>	<b>\$15,264</b>	<b>\$2,320</b>	<b>\$12,944</b>	<b>9.2</b>	<b>26,621</b>
ECM 1	Install LED Fixtures	18,304	2.8	0	\$976	\$14,642	\$11,040	\$1,210	\$9,830	10.1	18,432
ECM 2	Retrofit Fixtures with LED Lamps	8,322	3.7	-2	\$425	\$6,370	\$4,224	\$1,110	\$3,114	7.3	8,189
<b>Lighting Control Measures</b>		<b>1,715</b>	<b>0.8</b>	<b>0</b>	<b>\$87</b>	<b>\$697</b>	<b>\$1,852</b>	<b>\$250</b>	<b>\$1,602</b>	<b>18.4</b>	<b>1,684</b>
	Install Occupancy Sensor Lighting Controls	1,715	0.8	0	\$87	\$697	\$1,852	\$250	\$1,602	18.4	1,684
<b>Domestic Water Heating Upgrade</b>		<b>1,187</b>	<b>0.0</b>	<b>0</b>	<b>\$63</b>	<b>\$633</b>	<b>\$57</b>	<b>\$0</b>	<b>\$57</b>	<b>0.9</b>	<b>1,196</b>
ECM 3	Install Low-Flow DHW Devices	1,187	0.0	0	\$63	\$633	\$57	\$0	\$57	0.9	1,196
<b>TOTALS</b>		<b>29,528</b>	<b>7.3</b>	<b>-2</b>	<b>\$1,551</b>	<b>\$22,342</b>	<b>\$17,173</b>	<b>\$2,570</b>	<b>\$14,603</b>	<b>9.4</b>	<b>29,501</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Albion Park



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>4,026</b>	<b>13.9</b>	<b>0</b>	<b>\$813</b>	<b>\$12,200</b>	<b>\$38,012</b>	<b>\$802</b>	<b>\$37,210</b>	<b>45.8</b>	<b>4,044</b>
	Install LED Fixtures	3,794	13.5	0	\$767	\$11,511	\$37,024	\$700	\$36,324	47.3	3,820
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	175	0.2	0	\$35	\$521	\$344	\$50	\$294	8.5	170
	Retrofit Fixtures with LED Lamps	56	0.2	0	\$11	\$168	\$644	\$52	\$592	52.9	55
<b>Lighting Control Measures</b>		<b>9</b>	<b>0.0</b>	<b>0</b>	<b>\$2</b>	<b>\$14</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>54.9</b>	<b>9</b>
	Install Occupancy Sensor Lighting Controls	9	0.0	0	\$2	\$14	\$116	\$20	\$96	54.9	9
<b>Domestic Water Heating Upgrade</b>		<b>201</b>	<b>0.0</b>	<b>0</b>	<b>\$41</b>	<b>\$407</b>	<b>\$22</b>	<b>\$0</b>	<b>\$22</b>	<b>0.5</b>	<b>203</b>
ECM 2	Install Low-Flow DHW Devices	201	0.0	0	\$41	\$407	\$22	\$0	\$22	0.5	203
<b>TOTALS</b>		<b>4,236</b>	<b>13.9</b>	<b>0</b>	<b>\$856</b>	<b>\$12,621</b>	<b>\$38,149</b>	<b>\$822</b>	<b>\$37,327</b>	<b>43.6</b>	<b>4,256</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Star Building 1



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,334</b>	<b>0.9</b>	<b>0</b>	<b>\$255</b>	<b>\$3,830</b>	<b>\$1,748</b>	<b>\$303</b>	<b>\$1,445</b>	<b>5.7</b>	<b>1,334</b>
ECM 1	Install LED Fixtures	964	0.1	0	\$186	\$2,789	\$966	\$100	\$866	4.7	970
ECM 2	Retrofit Fixtures with LED Lamps	371	0.7	0	\$69	\$1,041	\$782	\$203	\$579	8.3	364
<b>Domestic Water Heating Upgrade</b>		<b>167</b>	<b>0.0</b>	<b>0</b>	<b>\$32</b>	<b>\$322</b>	<b>\$14</b>	<b>\$0</b>	<b>\$14</b>	<b>0.4</b>	<b>168</b>
ECM 3	Install Low-Flow DHW Devices	167	0.0	0	\$32	\$322	\$14	\$0	\$14	0.4	168
<b>TOTALS</b>		<b>1,501</b>	<b>0.9</b>	<b>0</b>	<b>\$288</b>	<b>\$4,152</b>	<b>\$1,762</b>	<b>\$303</b>	<b>\$1,459</b>	<b>5.1</b>	<b>1,502</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Police Records Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>21,283</b>	<b>3.5</b>	<b>-3</b>	<b>\$3,493</b>	<b>\$52,401</b>	<b>\$9,147</b>	<b>\$1,500</b>	<b>\$7,647</b>	<b>2.2</b>	<b>21,070</b>
ECM 1	Install LED Fixtures	6,736	1.0	0	\$1,117	\$16,752	\$5,725	\$600	\$5,125	4.6	6,784
ECM 2	Retrofit Fixtures with LED Lamps	14,546	2.5	-3	\$2,377	\$35,649	\$3,422	\$900	\$2,522	1.1	14,286
<b>Lighting Control Measures</b>		<b>3,509</b>	<b>0.6</b>	<b>-1</b>	<b>\$573</b>	<b>\$4,587</b>	<b>\$1,590</b>	<b>\$185</b>	<b>\$1,405</b>	<b>2.5</b>	<b>3,446</b>
ECM 3	Install Occupancy Sensor Lighting Controls	3,244	0.6	-1	\$530	\$4,240	\$1,390	\$185	\$1,205	2.3	3,186
ECM 4	Install High/Low Lighting Controls	265	0.0	0	\$43	\$346	\$200	\$0	\$200	4.6	260
<b>Electric Unitary HVAC Measures</b>		<b>742</b>	<b>0.2</b>	<b>0</b>	<b>\$123</b>	<b>\$1,845</b>	<b>\$1,691</b>	<b>\$92</b>	<b>\$1,599</b>	<b>13.0</b>	<b>747</b>
	Install High Efficiency Heat Pumps	742	0.2	0	\$123	\$1,845	\$1,691	\$92	\$1,599	13.0	747
<b>Domestic Water Heating Upgrade</b>		<b>1,668</b>	<b>0.0</b>	<b>0</b>	<b>\$277</b>	<b>\$2,766</b>	<b>\$29</b>	<b>\$0</b>	<b>\$29</b>	<b>0.1</b>	<b>1,680</b>
ECM 5	Install Low-Flow DHW Devices	1,668	0.0	0	\$277	\$2,766	\$29	\$0	\$29	0.1	1,680
<b>TOTALS</b>		<b>27,202</b>	<b>4.3</b>	<b>-4</b>	<b>\$4,466</b>	<b>\$61,598</b>	<b>\$12,457</b>	<b>\$1,777</b>	<b>\$10,680</b>	<b>2.4</b>	<b>26,943</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Calabrese Park



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>3,040</b>	<b>10.1</b>	<b>0</b>	<b>\$839</b>	<b>\$12,583</b>	<b>\$22,924</b>	<b>\$20</b>	<b>\$22,904</b>	<b>27.3</b>	<b>3,061</b>
	Install LED Fixtures	2,696	9.3	0	\$744	\$11,158	\$21,501	\$0	\$21,501	28.9	2,715
	Retrofit Fixtures with LED Lamps	344	0.8	0	\$95	\$1,426	\$1,423	\$20	\$1,403	14.8	347
<b>TOTALS</b>		<b>3,040</b>	<b>10.1</b>	<b>0</b>	<b>\$839</b>	<b>\$12,583</b>	<b>\$22,924</b>	<b>\$20</b>	<b>\$22,904</b>	<b>27.3</b>	<b>3,061</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Office Trailer



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>324</b>	<b>0.1</b>	<b>0</b>	<b>\$62</b>	<b>\$937</b>	<b>\$500</b>	<b>\$100</b>	<b>\$400</b>	<b>6.4</b>	<b>326</b>
ECM 1	Install LED Fixtures	324	0.1	0	\$62	\$937	\$500	\$100	\$400	6.4	326
<b>Lighting Control Measures</b>		<b>1,600</b>	<b>0.5</b>	<b>0</b>	<b>\$305</b>	<b>\$2,436</b>	<b>\$1,666</b>	<b>\$160</b>	<b>\$1,506</b>	<b>4.9</b>	<b>1,572</b>
ECM 2	Install Occupancy Sensor Lighting Controls	1,495	0.5	0	\$285	\$2,277	\$1,466	\$160	\$1,306	4.6	1,469
	Install High/Low Lighting Controls	105	0.0	0	\$20	\$160	\$200	\$0	\$200	10.0	103
<b>Domestic Water Heating Upgrade</b>		<b>556</b>	<b>0.0</b>	<b>0</b>	<b>\$107</b>	<b>\$1,072</b>	<b>\$14</b>	<b>\$0</b>	<b>\$14</b>	<b>0.1</b>	<b>560</b>
ECM 3	Install Low-Flow DHW Devices	556	0.0	0	\$107	\$1,072	\$14	\$0	\$14	0.1	560
<b>TOTALS</b>		<b>2,480</b>	<b>0.6</b>	<b>0</b>	<b>\$474</b>	<b>\$4,445</b>	<b>\$2,180</b>	<b>\$260</b>	<b>\$1,920</b>	<b>4.0</b>	<b>2,458</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).



# Well #2 – Sicklerville/Williamstown Rd.



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>3,709</b>	<b>0.8</b>	<b>0</b>	<b>\$731</b>	<b>\$10,972</b>	<b>\$5,378</b>	<b>\$650</b>	<b>\$4,728</b>	<b>6.5</b>	<b>3,735</b>
ECM 1	Install LED Fixtures	3,176	0.5	0	\$626	\$9,394	\$4,830	\$500	\$4,330	6.9	3,198
ECM 2	Retrofit Fixtures with LED Lamps	533	0.3	0	\$105	\$1,578	\$548	\$150	\$398	3.8	537
<b>Lighting Control Measures</b>		<b>136</b>	<b>0.1</b>	<b>0</b>	<b>\$27</b>	<b>\$214</b>	<b>\$540</b>	<b>\$70</b>	<b>\$470</b>	<b>17.6</b>	<b>137</b>
	Install Occupancy Sensor Lighting Controls	136	0.1	0	\$27	\$214	\$540	\$70	\$470	17.6	137
<b>Motor Upgrades</b>		<b>2,314</b>	<b>0.8</b>	<b>0</b>	<b>\$456</b>	<b>\$6,845</b>	<b>\$4,006</b>	<b>\$0</b>	<b>\$4,006</b>	<b>8.8</b>	<b>2,330</b>
ECM 3	Premium Efficiency Motors	2,314	0.8	0	\$456	\$6,845	\$4,006	\$0	\$4,006	8.8	2,330
<b>TOTALS</b>		<b>6,158</b>	<b>1.7</b>	<b>0</b>	<b>\$1,215</b>	<b>\$18,031</b>	<b>\$9,923</b>	<b>\$720</b>	<b>\$9,203</b>	<b>7.6</b>	<b>6,201</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Well # 3 - Preston Drive



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>3,627</b>	<b>1.4</b>	<b>0</b>	<b>\$691</b>	<b>\$10,365</b>	<b>\$4,007</b>	<b>\$391</b>	<b>\$3,616</b>	<b>5.2</b>	<b>3,652</b>
ECM 1	Install LED Fixtures	2,908	0.4	0	\$554	\$8,311	\$2,862	\$300	\$2,562	4.6	2,929
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	136	0.2	0	\$26	\$389	\$413	\$60	\$353	13.6	137
ECM 3	Retrofit Fixtures with LED Lamps	582	0.8	0	\$111	\$1,664	\$732	\$31	\$701	6.3	587
<b>Lighting Control Measures</b>		<b>33</b>	<b>0.1</b>	<b>0</b>	<b>\$6</b>	<b>\$51</b>	<b>\$232</b>	<b>\$40</b>	<b>\$192</b>	<b>30.3</b>	<b>34</b>
	Install Occupancy Sensor Lighting Controls	33	0.1	0	\$6	\$51	\$232	\$40	\$192	30.3	34
<b>Motor Upgrades</b>		<b>3,512</b>	<b>1.4</b>	<b>0</b>	<b>\$669</b>	<b>\$10,037</b>	<b>\$9,516</b>	<b>\$0</b>	<b>\$9,516</b>	<b>14.2</b>	<b>3,537</b>
	Premium Efficiency Motors	3,512	1.4	0	\$669	\$10,037	\$9,516	\$0	\$9,516	14.2	3,537
<b>TOTALS</b>		<b>7,172</b>	<b>2.9</b>	<b>0</b>	<b>\$1,366</b>	<b>\$20,452</b>	<b>\$13,755</b>	<b>\$431</b>	<b>\$13,324</b>	<b>9.8</b>	<b>7,222</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Well # 6 - Colgate



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,554</b>	<b>0.5</b>	<b>0</b>	<b>\$253</b>	<b>\$3,798</b>	<b>\$1,351</b>	<b>\$230</b>	<b>\$1,121</b>	<b>4.4</b>	<b>1,531</b>
ECM 1	Install LED Fixtures	626	0.1	0	\$104	\$1,556	\$650	\$100	\$550	5.3	631
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	795	0.4	0	\$128	\$1,920	\$592	\$100	\$492	3.8	771
ECM 3	Retrofit Fixtures with LED Lamps	133	0.1	0	\$21	\$322	\$110	\$30	\$80	3.7	129
<b>Motor Upgrades</b>		<b>17,379</b>	<b>3.2</b>	<b>0</b>	<b>\$2,878</b>	<b>\$43,168</b>	<b>\$21,788</b>	<b>\$0</b>	<b>\$21,788</b>	<b>7.6</b>	<b>17,501</b>
ECM 4	Premium Efficiency Motors	17,379	3.2	0	\$2,878	\$43,168	\$21,788	\$0	\$21,788	7.6	17,501
<b>TOTALS</b>		<b>18,934</b>	<b>3.8</b>	<b>0</b>	<b>\$3,131</b>	<b>\$46,965</b>	<b>\$23,139</b>	<b>\$230</b>	<b>\$22,909</b>	<b>7.3</b>	<b>19,032</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Well #4



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>702</b>	<b>0.2</b>	<b>0</b>	<b>\$101</b>	<b>\$1,520</b>	<b>\$125</b>	<b>\$22</b>	<b>\$103</b>	<b>1.0</b>	<b>701</b>
ECM 1	Retrofit Fixtures with LED Lamps	702	0.2	0	\$101	\$1,520	\$125	\$22	\$103	1.0	701
<b>TOTALS</b>		<b>702</b>	<b>0.2</b>	<b>0</b>	<b>\$101</b>	<b>\$1,520</b>	<b>\$125</b>	<b>\$22</b>	<b>\$103</b>	<b>1.0</b>	<b>701</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Pump Station #2



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>241</b>	<b>0.1</b>	<b>0</b>	<b>\$40</b>	<b>\$604</b>	<b>\$723</b>	<b>\$120</b>	<b>\$603</b>	<b>15.0</b>	<b>243</b>
	Install LED Fixtures	170	0.1	0	\$28	\$426	\$650	\$100	\$550	19.3	172
ECM 1	Retrofit Fixtures with LED Lamps	71	0.0	0	\$12	\$178	\$73	\$20	\$53	4.5	72
<b>Motor Upgrades</b>		<b>1,360</b>	<b>0.6</b>	<b>0</b>	<b>\$227</b>	<b>\$3,404</b>	<b>\$3,783</b>	<b>\$0</b>	<b>\$3,783</b>	<b>16.7</b>	<b>1,369</b>
	Premium Efficiency Motors	1,360	0.6	0	\$227	\$3,404	\$3,783	\$0	\$3,783	16.7	1,369
<b>TOTALS</b>		<b>1,601</b>	<b>0.7</b>	<b>0</b>	<b>\$267</b>	<b>\$4,009</b>	<b>\$4,506</b>	<b>\$120</b>	<b>\$4,386</b>	<b>16.4</b>	<b>1,612</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Well # 9 - Cross Keys Road



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>745</b>	<b>0.2</b>	<b>0</b>	<b>\$126</b>	<b>\$1,897</b>	<b>\$1,035</b>	<b>\$110</b>	<b>\$925</b>	<b>7.3</b>	<b>750</b>
ECM 1	Install LED Fixtures	626	0.1	0	\$106	\$1,594	\$966	\$100	\$866	8.1	631
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	119	0.1	0	\$20	\$302	\$69	\$10	\$59	2.9	120
<b>Motor Upgrades</b>		<b>325</b>	<b>0.1</b>	<b>0</b>	<b>\$55</b>	<b>\$827</b>	<b>\$1,344</b>	<b>\$0</b>	<b>\$1,344</b>	<b>24.4</b>	<b>327</b>
	Premium Efficiency Motors	325	0.1	0	\$55	\$827	\$1,344	\$0	\$1,344	24.4	327
<b>TOTALS</b>		<b>1,070</b>	<b>0.3</b>	<b>0</b>	<b>\$182</b>	<b>\$2,724</b>	<b>\$2,378</b>	<b>\$110</b>	<b>\$2,268</b>	<b>12.5</b>	<b>1,078</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Well # 7 - Cross Keys Road



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>6,151</b>	<b>1.5</b>	<b>0</b>	<b>\$1,067</b>	<b>\$16,009</b>	<b>\$6,803</b>	<b>\$723</b>	<b>\$6,080</b>	<b>5.7</b>	<b>6,194</b>
ECM 1	Install LED Fixtures	3,132	0.5	0	\$543	\$8,150	\$4,830	\$500	\$4,330	8.0	3,154
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	2,447	0.9	0	\$425	\$6,369	\$1,302	\$220	\$1,082	2.5	2,465
ECM 3	Retrofit Fixtures with LED Lamps	456	0.1	0	\$79	\$1,186	\$454	\$3	\$451	5.7	459
ECM 4	Install LED Exit Signs	117	0.0	0	\$20	\$304	\$217	\$0	\$217	10.7	117
<b>Lighting Control Measures</b>		<b>504</b>	<b>0.2</b>	<b>0</b>	<b>\$88</b>	<b>\$700</b>	<b>\$810</b>	<b>\$105</b>	<b>\$705</b>	<b>8.1</b>	<b>508</b>
ECM 5	Install Occupancy Sensor Lighting Controls	504	0.2	0	\$88	\$700	\$810	\$105	\$705	8.1	508
<b>Motor Upgrades</b>		<b>1,479</b>	<b>0.3</b>	<b>0</b>	<b>\$257</b>	<b>\$3,848</b>	<b>\$2,260</b>	<b>\$0</b>	<b>\$2,260</b>	<b>8.8</b>	<b>1,489</b>
ECM 6	Premium Efficiency Motors	1,479	0.3	0	\$257	\$3,848	\$2,260	\$0	\$2,260	8.8	1,489
<b>Electric Unitary HVAC Measures</b>		<b>1,309</b>	<b>0.3</b>	<b>0</b>	<b>\$227</b>	<b>\$3,406</b>	<b>\$11,118</b>	<b>\$324</b>	<b>\$10,794</b>	<b>47.5</b>	<b>1,318</b>
	Install High Efficiency Heat Pumps	1,309	0.3	0	\$227	\$3,406	\$11,118	\$324	\$10,794	47.5	1,318
<b>TOTALS</b>		<b>9,443</b>	<b>2.3</b>	<b>0</b>	<b>\$1,638</b>	<b>\$23,962</b>	<b>\$20,991</b>	<b>\$1,152</b>	<b>\$19,839</b>	<b>12.1</b>	<b>9,509</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Well # 8 - Cross Keys Road



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>13,278</b>	<b>2.9</b>	<b>-1</b>	<b>\$3,352</b>	<b>\$50,276</b>	<b>\$13,117</b>	<b>\$1,540</b>	<b>\$11,577</b>	<b>3.5</b>	<b>13,240</b>
ECM 1	Install LED Fixtures	9,680	1.5	0	\$2,454	\$36,810	\$9,518	\$1,000	\$8,518	3.5	9,747
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	3,442	1.4	-1	\$859	\$12,884	\$3,309	\$540	\$2,769	3.2	3,341
ECM 3	Install LED Exit Signs	156	0.0	0	\$39	\$582	\$290	\$0	\$290	7.5	151
<b>Lighting Control Measures</b>		<b>790</b>	<b>0.3</b>	<b>0</b>	<b>\$197</b>	<b>\$1,576</b>	<b>\$810</b>	<b>\$105</b>	<b>\$705</b>	<b>3.6</b>	<b>766</b>
ECM 4	Install Occupancy Sensor Lighting Controls	790	0.3	0	\$197	\$1,576	\$810	\$105	\$705	3.6	766
<b>Motor Upgrades</b>		<b>4,611</b>	<b>1.6</b>	<b>0</b>	<b>\$1,169</b>	<b>\$17,533</b>	<b>\$4,645</b>	<b>\$0</b>	<b>\$4,645</b>	<b>4.0</b>	<b>4,643</b>
ECM 5	Premium Efficiency Motors	4,611	1.6	0	\$1,169	\$17,533	\$4,645	\$0	\$4,645	4.0	4,643
<b>Electric Unitary HVAC Measures</b>		<b>2,589</b>	<b>0.7</b>	<b>0</b>	<b>\$656</b>	<b>\$9,847</b>	<b>\$11,118</b>	<b>\$324</b>	<b>\$10,794</b>	<b>16.4</b>	<b>2,608</b>
	Install High Efficiency Heat Pumps	2,589	0.7	0	\$656	\$9,847	\$11,118	\$324	\$10,794	16.4	2,608
<b>TOTALS</b>		<b>21,267</b>	<b>5.5</b>	<b>-1</b>	<b>\$5,374</b>	<b>\$79,232</b>	<b>\$29,690</b>	<b>\$1,969</b>	<b>\$27,721</b>	<b>5.2</b>	<b>21,256</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).



# Factory Road



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$) *	Estimated Net Cost (\$)	Simple Payback Period (yrs) **	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,235</b>	<b>0.8</b>	<b>0</b>	<b>\$216</b>	<b>\$3,241</b>	<b>\$2,897</b>	<b>\$460</b>	<b>\$2,437</b>	<b>11.3</b>	<b>1,212</b>
	Install LED Fixtures	370	0.2	0	\$66	\$989	\$1,950	\$300	\$1,650	25.0	373
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	865	0.6	0	\$150	\$2,252	\$947	\$160	\$787	5.2	839
<b>Lighting Control Measures</b>		<b>34</b>	<b>0.0</b>	<b>0</b>	<b>\$6</b>	<b>\$47</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>16.3</b>	<b>33</b>
	Install Occupancy Sensor Lighting Controls	34	0.0	0	\$6	\$47	\$116	\$20	\$96	16.3	33
<b>TOTALS</b>		<b>1,269</b>	<b>0.9</b>	<b>0</b>	<b>\$222</b>	<b>\$3,288</b>	<b>\$3,013</b>	<b>\$480</b>	<b>\$2,533</b>	<b>11.4</b>	<b>1,245</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Donio Park



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>9,424</b>	<b>24.9</b>	<b>-1</b>	<b>\$2,151</b>	<b>\$32,261</b>	<b>\$60,978</b>	<b>\$690</b>	<b>\$60,288</b>	<b>28.0</b>	<b>9,414</b>
	Install LED Fixtures	8,547	23.9	0	\$1,954	\$29,306	\$59,777	\$500	\$59,277	30.3	8,564
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	346	0.4	0	\$78	\$1,166	\$661	\$110	\$551	7.1	336
ECM 2	Retrofit Fixtures with LED Lamps	453	0.6	0	\$102	\$1,527	\$395	\$80	\$315	3.1	440
ECM 3	Install LED Exit Signs	78	0.0	0	\$17	\$262	\$145	\$0	\$145	8.3	76
<b>Domestic Water Heating Upgrade</b>		<b>0</b>	<b>0.0</b>	<b>1</b>	<b>\$13</b>	<b>\$130</b>	<b>\$29</b>	<b>\$0</b>	<b>\$29</b>	<b>2.2</b>	<b>106</b>
ECM 4	Install Low-Flow DHW Devices	0	0.0	1	\$13	\$130	\$29	\$0	\$29	2.2	106
<b>TOTALS</b>		<b>9,424</b>	<b>24.9</b>	<b>0</b>	<b>\$2,164</b>	<b>\$32,391</b>	<b>\$61,007</b>	<b>\$690</b>	<b>\$60,317</b>	<b>27.9</b>	<b>9,520</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Ivy Hall Lane - Pump #3



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>4,391</b>	<b>0.8</b>	<b>0</b>	<b>\$728</b>	<b>\$10,916</b>	<b>\$4,012</b>	<b>\$460</b>	<b>\$3,552</b>	<b>4.9</b>	<b>4,422</b>
ECM 1	Install LED Fixtures	4,231	0.6	0	\$701	\$10,518	\$3,793	\$400	\$3,393	4.8	4,261
ECM 2	Retrofit Fixtures with LED Lamps	160	0.1	0	\$27	\$398	\$219	\$60	\$159	6.0	161
<b>Motor Upgrades</b>		<b>190</b>	<b>0.1</b>	<b>0</b>	<b>\$31</b>	<b>\$471</b>	<b>\$1,131</b>	<b>\$0</b>	<b>\$1,131</b>	<b>36.0</b>	<b>191</b>
	Premium Efficiency Motors	190	0.1	0	\$31	\$471	\$1,131	\$0	\$1,131	36.0	191
<b>TOTALS</b>		<b>4,581</b>	<b>0.9</b>	<b>0</b>	<b>\$759</b>	<b>\$11,387</b>	<b>\$5,144</b>	<b>\$460</b>	<b>\$4,684</b>	<b>6.2</b>	<b>4,613</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Quad Pump – Lehigh Manor Pump #4



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>2,435</b>	<b>0.5</b>	<b>0</b>	<b>\$397</b>	<b>\$5,951</b>	<b>\$3,082</b>	<b>\$360</b>	<b>\$2,722</b>	<b>6.9</b>	<b>2,452</b>
ECM 1	Install LED Fixtures	2,168	0.3	0	\$353	\$5,299	\$2,862	\$300	\$2,562	7.3	2,183
ECM 2	Retrofit Fixtures with LED Lamps	267	0.1	0	\$43	\$652	\$219	\$60	\$159	3.7	269
<b>Lighting Control Measures</b>		<b>48</b>	<b>0.0</b>	<b>0</b>	<b>\$8</b>	<b>\$63</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>12.2</b>	<b>49</b>
	Install Occupancy Sensor Lighting Controls	48	0.0	0	\$8	\$63	\$116	\$20	\$96	12.2	49
<b>Motor Upgrades</b>		<b>4,131</b>	<b>1.1</b>	<b>0</b>	<b>\$673</b>	<b>\$10,096</b>	<b>\$6,877</b>	<b>\$0</b>	<b>\$6,877</b>	<b>10.2</b>	<b>4,159</b>
ECM 3	Premium Efficiency Motors	4,131	1.1	0	\$673	\$10,096	\$6,877	\$0	\$6,877	10.2	4,159
<b>TOTALS</b>		<b>6,614</b>	<b>1.6</b>	<b>0</b>	<b>\$1,078</b>	<b>\$16,110</b>	<b>\$10,075</b>	<b>\$380</b>	<b>\$9,695</b>	<b>9.0</b>	<b>6,660</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Main Pump – Manor Hall Pump #1



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>5,352</b>	<b>0.9</b>	<b>0</b>	<b>\$942</b>	<b>\$14,123</b>	<b>\$4,050</b>	<b>\$480</b>	<b>\$3,570</b>	<b>3.8</b>	<b>5,390</b>
ECM 1	Install LED Fixtures	5,068	0.8	0	\$891	\$13,372	\$3,758	\$400	\$3,358	3.8	5,103
ECM 2	Retrofit Fixtures with LED Lamps	284	0.2	0	\$50	\$751	\$292	\$80	\$212	4.2	286
<b>Lighting Control Measures</b>		<b>77</b>	<b>0.0</b>	<b>0</b>	<b>\$14</b>	<b>\$109</b>	<b>\$540</b>	<b>\$70</b>	<b>\$470</b>	<b>34.5</b>	<b>78</b>
	Install Occupancy Sensor Lighting Controls	77	0.0	0	\$14	\$109	\$540	\$70	\$470	34.5	78
<b>Motor Upgrades</b>		<b>7,457</b>	<b>4.7</b>	<b>0</b>	<b>\$1,312</b>	<b>\$19,676</b>	<b>\$15,856</b>	<b>\$0</b>	<b>\$15,856</b>	<b>12.1</b>	<b>7,509</b>
	Premium Efficiency Motors	7,457	4.7	0	\$1,312	\$19,676	\$15,856	\$0	\$15,856	12.1	7,509
<b>TOTALS</b>		<b>12,886</b>	<b>5.7</b>	<b>0</b>	<b>\$2,267</b>	<b>\$33,907</b>	<b>\$20,445</b>	<b>\$550</b>	<b>\$19,895</b>	<b>8.8</b>	<b>12,976</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Oak Forest #1 – Old Erial Rd. Pump #8



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>908</b>	<b>0.2</b>	<b>0</b>	<b>\$155</b>	<b>\$2,321</b>	<b>\$1,001</b>	<b>\$102</b>	<b>\$899</b>	<b>5.8</b>	<b>914</b>
ECM 1	Install LED Fixtures	635	0.1	0	\$108	\$1,623	\$931	\$100	\$831	7.7	640
ECM 2	Retrofit Fixtures with LED Lamps	273	0.1	0	\$47	\$698	\$70	\$2	\$68	1.5	275
<b>Motor Upgrades</b>		<b>1,135</b>	<b>0.8</b>	<b>0</b>	<b>\$193</b>	<b>\$2,901</b>	<b>\$3,134</b>	<b>\$0</b>	<b>\$3,134</b>	<b>16.2</b>	<b>1,143</b>
	Premium Efficiency Motors	1,135	0.8	0	\$193	\$2,901	\$3,134	\$0	\$3,134	16.2	1,143
<b>TOTALS</b>		<b>2,044</b>	<b>1.0</b>	<b>0</b>	<b>\$348</b>	<b>\$5,222</b>	<b>\$4,135</b>	<b>\$102</b>	<b>\$4,033</b>	<b>11.6</b>	<b>2,058</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Mercer Lane – Pump #5



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>622</b>	<b>0.2</b>	<b>0</b>	<b>\$103</b>	<b>\$1,550</b>	<b>\$788</b>	<b>\$120</b>	<b>\$668</b>	<b>6.5</b>	<b>626</b>
ECM 1	Install LED Fixtures	495	0.1	0	\$82	\$1,233	\$650	\$100	\$550	6.7	498
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	127	0.1	0	\$21	\$317	\$138	\$20	\$118	5.6	128
<b>Motor Upgrades</b>		<b>2,649</b>	<b>0.7</b>	<b>0</b>	<b>\$440</b>	<b>\$6,599</b>	<b>\$3,134</b>	<b>\$0</b>	<b>\$3,134</b>	<b>7.1</b>	<b>2,668</b>
ECM 3	Premium Efficiency Motors	2,649	0.7	0	\$440	\$6,599	\$3,134	\$0	\$3,134	7.1	2,668
<b>Domestic Water Heating Upgrade</b>		<b>139</b>	<b>0.0</b>	<b>0</b>	<b>\$23</b>	<b>\$231</b>	<b>\$7</b>	<b>\$0</b>	<b>\$7</b>	<b>0.3</b>	<b>140</b>
ECM 4	Install Low-Flow DHW Devices	139	0.0	0	\$23	\$231	\$7	\$0	\$7	0.3	140
<b>TOTALS</b>		<b>3,410</b>	<b>0.9</b>	<b>0</b>	<b>\$566</b>	<b>\$8,380</b>	<b>\$3,929</b>	<b>\$120</b>	<b>\$3,809</b>	<b>6.7</b>	<b>3,434</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Meeting House Circle – Pump #7



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,835</b>	<b>0.3</b>	<b>0</b>	<b>\$306</b>	<b>\$4,595</b>	<b>\$1,297</b>	<b>\$150</b>	<b>\$1,147</b>	<b>3.7</b>	<b>1,848</b>
ECM 1	Install LED Fixtures	1,708	0.3	0	\$285	\$4,277	\$1,160	\$130	\$1,030	3.6	1,720
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	127	0.1	0	\$21	\$318	\$138	\$20	\$118	5.5	128
<b>Motor Upgrades</b>		<b>7,651</b>	<b>5.2</b>	<b>0</b>	<b>\$1,277</b>	<b>\$19,156</b>	<b>\$9,214</b>	<b>\$0</b>	<b>\$9,214</b>	<b>7.2</b>	<b>7,705</b>
ECM 3	Premium Efficiency Motors	7,651	5.2	0	\$1,277	\$19,156	\$9,214	\$0	\$9,214	7.2	7,705
<b>TOTALS</b>		<b>9,487</b>	<b>5.5</b>	<b>0</b>	<b>\$1,583</b>	<b>\$23,752</b>	<b>\$10,511</b>	<b>\$150</b>	<b>\$10,361</b>	<b>6.5</b>	<b>9,553</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).



# Erial New Brookly Rd. – Pump #6



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,681</b>	<b>0.3</b>	<b>0</b>	<b>\$279</b>	<b>\$4,189</b>	<b>\$858</b>	<b>\$122</b>	<b>\$736</b>	<b>2.6</b>	<b>1,693</b>
ECM 1	Install LED Fixtures	473	0.1	0	\$79	\$1,179	\$650	\$100	\$550	7.0	476
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	95	0.1	0	\$16	\$238	\$138	\$20	\$118	7.4	96
ECM 3	Retrofit Fixtures with LED Lamps	1,113	0.2	0	\$185	\$2,772	\$70	\$2	\$68	0.4	1,120
<b>Motor Upgrades</b>		<b>4,098</b>	<b>3.3</b>	<b>0</b>	<b>\$681</b>	<b>\$10,213</b>	<b>\$6,877</b>	<b>\$0</b>	<b>\$6,877</b>	<b>10.1</b>	<b>4,127</b>
ECM 4	Premium Efficiency Motors	4,098	3.3	0	\$681	\$10,213	\$6,877	\$0	\$6,877	10.1	4,127
<b>Domestic Water Heating Upgrade</b>		<b>83</b>	<b>0.0</b>	<b>0</b>	<b>\$14</b>	<b>\$139</b>	<b>\$7</b>	<b>\$0</b>	<b>\$7</b>	<b>0.5</b>	<b>84</b>
ECM 5	Install Low-Flow DHW Devices	83	0.0	0	\$14	\$139	\$7	\$0	\$7	0.5	84
<b>TOTALS</b>		<b>5,863</b>	<b>3.6</b>	<b>0</b>	<b>\$974</b>	<b>\$14,541</b>	<b>\$7,742</b>	<b>\$122</b>	<b>\$7,620</b>	<b>7.8</b>	<b>5,904</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Route 73 - Pump # 13



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>988</b>	<b>0.3</b>	<b>0</b>	<b>\$176</b>	<b>\$2,643</b>	<b>\$2,128</b>	<b>\$240</b>	<b>\$1,888</b>	<b>10.7</b>	<b>995</b>
ECM 1	Install LED Fixtures	758	0.2	0	\$135	\$2,029	\$1,781	\$200	\$1,581	11.7	764
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	191	0.2	0	\$34	\$510	\$275	\$40	\$235	6.9	192
ECM 3	Install LED Exit Signs	39	0.0	0	\$7	\$104	\$72	\$0	\$72	10.4	39
<b>Lighting Control Measures</b>		<b>29</b>	<b>0.0</b>	<b>0</b>	<b>\$5</b>	<b>\$41</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>18.5</b>	<b>29</b>
	Install Occupancy Sensor Lighting Controls	29	0.0	0	\$5	\$41	\$116	\$20	\$96	18.5	29
<b>Motor Upgrades</b>		<b>2,225</b>	<b>1.3</b>	<b>0</b>	<b>\$397</b>	<b>\$5,954</b>	<b>\$3,783</b>	<b>\$0</b>	<b>\$3,783</b>	<b>9.5</b>	<b>2,241</b>
ECM 4	Premium Efficiency Motors	2,225	1.3	0	\$397	\$5,954	\$3,783	\$0	\$3,783	9.5	2,241
<b>TOTALS</b>		<b>3,243</b>	<b>1.6</b>	<b>0</b>	<b>\$578</b>	<b>\$8,638</b>	<b>\$6,027</b>	<b>\$260</b>	<b>\$5,767</b>	<b>10.0</b>	<b>3,265</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Route 73 - Pump # 12



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,795</b>	<b>0.5</b>	<b>0</b>	<b>\$306</b>	<b>\$4,597</b>	<b>\$2,056</b>	<b>\$240</b>	<b>\$1,816</b>	<b>5.9</b>	<b>1,807</b>
ECM 1	Install LED Fixtures	1,604	0.3	0	\$274	\$4,109	\$1,781	\$200	\$1,581	5.8	1,615
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	191	0.2	0	\$33	\$489	\$275	\$40	\$235	7.2	192
<b>Lighting Control Measures</b>		<b>29</b>	<b>0.0</b>	<b>0</b>	<b>\$5</b>	<b>\$40</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>19.3</b>	<b>29</b>
	Install Occupancy Sensor Lighting Controls	29	0.0	0	\$5	\$40	\$116	\$20	\$96	19.3	29
<b>Motor Upgrades</b>		<b>1,135</b>	<b>0.8</b>	<b>0</b>	<b>\$194</b>	<b>\$2,909</b>	<b>\$3,134</b>	<b>\$0</b>	<b>\$3,134</b>	<b>16.2</b>	<b>1,143</b>
	Premium Efficiency Motors	1,135	0.8	0	\$194	\$2,909	\$3,134	\$0	\$3,134	16.2	1,143
<b>TOTALS</b>		<b>2,959</b>	<b>1.2</b>	<b>0</b>	<b>\$505</b>	<b>\$7,545</b>	<b>\$5,306</b>	<b>\$260</b>	<b>\$5,046</b>	<b>10.0</b>	<b>2,980</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Susan Lane - Pump # 14



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,165</b>	<b>0.3</b>	<b>0</b>	<b>\$174</b>	<b>\$2,608</b>	<b>\$1,959</b>	<b>\$230</b>	<b>\$1,729</b>	<b>9.9</b>	<b>1,164</b>
ECM 1	Install LED Fixtures	888	0.2	0	\$151	\$2,263	\$1,681	\$200	\$1,481	9.8	894
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	238	0.1	0	\$20	\$296	\$206	\$30	\$176	8.9	231
	Install LED Exit Signs	39	0.0	0	\$3	\$48	\$72	\$0	\$72	22.5	38
<b>Motor Upgrades</b>		<b>1,760</b>	<b>0.6</b>	<b>0</b>	<b>\$299</b>	<b>\$4,485</b>	<b>\$2,308</b>	<b>\$0</b>	<b>\$2,308</b>	<b>7.7</b>	<b>1,772</b>
ECM 3	Premium Efficiency Motors	1,760	0.6	0	\$299	\$4,485	\$2,308	\$0	\$2,308	7.7	1,772
<b>TOTALS</b>		<b>2,925</b>	<b>0.9</b>	<b>0</b>	<b>\$473</b>	<b>\$7,093</b>	<b>\$4,267</b>	<b>\$230</b>	<b>\$4,037</b>	<b>8.5</b>	<b>2,936</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Victoria Manor - Pump #10



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>2,182</b>	<b>0.6</b>	<b>0</b>	<b>\$354</b>	<b>\$5,315</b>	<b>\$3,035</b>	<b>\$320</b>	<b>\$2,715</b>	<b>7.7</b>	<b>2,183</b>
ECM 1	Install LED Fixtures	1,786	0.4	0	\$294	\$4,405	\$2,898	\$300	\$2,598	8.8	1,799
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	396	0.2	0	\$61	\$910	\$138	\$20	\$118	1.9	384
<b>Lighting Control Measures</b>		<b>24</b>	<b>0.0</b>	<b>0</b>	<b>\$4</b>	<b>\$30</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>25.9</b>	<b>24</b>
	Install Occupancy Sensor Lighting Controls	24	0.0	0	\$4	\$30	\$116	\$20	\$96	25.9	24
<b>Motor Upgrades</b>		<b>2,536</b>	<b>0.8</b>	<b>0</b>	<b>\$417</b>	<b>\$6,254</b>	<b>\$3,134</b>	<b>\$0</b>	<b>\$3,134</b>	<b>7.5</b>	<b>2,554</b>
ECM 3	Premium Efficiency Motors	2,536	0.8	0	\$417	\$6,254	\$3,134	\$0	\$3,134	7.5	2,554
<b>TOTALS</b>		<b>4,742</b>	<b>1.3</b>	<b>0</b>	<b>\$775</b>	<b>\$11,598</b>	<b>\$6,286</b>	<b>\$340</b>	<b>\$5,946</b>	<b>7.7</b>	<b>4,760</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# New Brookly Road - Pump #11



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,784</b>	<b>0.4</b>	<b>0</b>	<b>\$298</b>	<b>\$4,472</b>	<b>\$2,172</b>	<b>\$240</b>	<b>\$1,932</b>	<b>6.5</b>	<b>1,796</b>
ECM 1	Install LED Fixtures	1,593	0.3	0	\$266	\$3,994	\$1,897	\$200	\$1,697	6.4	1,604
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	191	0.2	0	\$32	\$478	\$275	\$40	\$235	7.4	192
<b>Lighting Control Measures</b>		<b>29</b>	<b>0.0</b>	<b>0</b>	<b>\$5</b>	<b>\$39</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>19.8</b>	<b>29</b>
	Install Occupancy Sensor Lighting Controls	29	0.0	0	\$5	\$39	\$116	\$20	\$96	19.8	29
<b>TOTALS</b>		<b>1,813</b>	<b>0.5</b>	<b>0</b>	<b>\$303</b>	<b>\$4,511</b>	<b>\$2,288</b>	<b>\$260</b>	<b>\$2,028</b>	<b>6.7</b>	<b>1,825</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Pump Station #16



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>993</b>	<b>0.3</b>	<b>0</b>	<b>\$163</b>	<b>\$2,451</b>	<b>\$1,837</b>	<b>\$230</b>	<b>\$1,607</b>	<b>9.8</b>	<b>997</b>
ECM 1	Install LED Fixtures	898	0.1	0	\$155	\$2,321	\$1,631	\$200	\$1,431	9.2	904
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	95	0.1	0	\$9	\$130	\$206	\$30	\$176	20.3	93
<b>Lighting Control Measures</b>		<b>15</b>	<b>0.0</b>	<b>0</b>	<b>\$1</b>	<b>\$11</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>72.5</b>	<b>14</b>
	Install Occupancy Sensor Lighting Controls	15	0.0	0	\$1	\$11	\$116	\$20	\$96	72.5	14
<b>Motor Upgrades</b>		<b>927</b>	<b>0.5</b>	<b>0</b>	<b>\$160</b>	<b>\$2,397</b>	<b>\$2,642</b>	<b>\$0</b>	<b>\$2,642</b>	<b>16.5</b>	<b>934</b>
	Premium Efficiency Motors	927	0.5	0	\$160	\$2,397	\$2,642	\$0	\$2,642	16.5	934
<b>TOTALS</b>		<b>1,935</b>	<b>0.7</b>	<b>0</b>	<b>\$325</b>	<b>\$4,859</b>	<b>\$4,595</b>	<b>\$250</b>	<b>\$4,345</b>	<b>13.4</b>	<b>1,945</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Pump Station #17



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,542</b>	<b>0.3</b>	<b>0</b>	<b>\$257</b>	<b>\$3,862</b>	<b>\$2,034</b>	<b>\$220</b>	<b>\$1,814</b>	<b>7.0</b>	<b>1,548</b>
ECM 1	Install LED Fixtures	1,415	0.2	0	\$237	\$3,554	\$1,897	\$200	\$1,697	7.2	1,425
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	127	0.1	0	\$21	\$308	\$138	\$20	\$118	5.7	123
<b>Lighting Control Measures</b>		<b>19</b>	<b>0.0</b>	<b>0</b>	<b>\$3</b>	<b>\$25</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>30.7</b>	<b>19</b>
	Install Occupancy Sensor Lighting Controls	19	0.0	0	\$3	\$25	\$116	\$20	\$96	30.7	19
<b>Motor Upgrades</b>		<b>607</b>	<b>0.3</b>	<b>0</b>	<b>\$102</b>	<b>\$1,526</b>	<b>\$1,842</b>	<b>\$0</b>	<b>\$1,842</b>	<b>18.1</b>	<b>611</b>
	Premium Efficiency Motors	607	0.3	0	\$102	\$1,526	\$1,842	\$0	\$1,842	18.1	611
<b>TOTALS</b>		<b>2,169</b>	<b>0.6</b>	<b>0</b>	<b>\$362</b>	<b>\$5,413</b>	<b>\$3,992</b>	<b>\$240</b>	<b>\$3,752</b>	<b>10.4</b>	<b>2,178</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).



# Water & Sewer Department Office Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>8,830</b>	<b>3.2</b>	<b>-1</b>	<b>\$1,472</b>	<b>\$22,082</b>	<b>\$12,952</b>	<b>\$1,576</b>	<b>\$11,376</b>	<b>7.7</b>	<b>8,785</b>
ECM 1	Install LED Fixtures	4,476	0.7	0	\$753	\$11,297	\$8,694	\$900	\$7,794	10.3	4,508
ECM 2	Retrofit Fixtures with LED Lamps	4,353	2.5	-1	\$719	\$10,785	\$4,259	\$676	\$3,583	5.0	4,277
<b>Lighting Control Measures</b>		<b>991</b>	<b>0.5</b>	<b>0</b>	<b>\$164</b>	<b>\$1,309</b>	<b>\$1,242</b>	<b>\$145</b>	<b>\$1,097</b>	<b>6.7</b>	<b>973</b>
ECM 3	Install Occupancy Sensor Lighting Controls	780	0.4	0	\$129	\$1,030	\$1,042	\$145	\$897	7.0	766
ECM 4	Install High/Low Lighting Controls	211	0.1	0	\$35	\$278	\$200	\$0	\$200	5.7	207
<b>Electric Unitary HVAC Measures</b>		<b>1,094</b>	<b>0.8</b>	<b>0</b>	<b>\$184</b>	<b>\$2,762</b>	<b>\$5,985</b>	<b>\$368</b>	<b>\$5,617</b>	<b>30.5</b>	<b>1,102</b>
	Install High Efficiency Air Conditioning Units	1,094	0.8	0	\$184	\$2,762	\$5,985	\$368	\$5,617	30.5	1,102
<b>Domestic Water Heating Upgrade</b>		<b>0</b>	<b>0.0</b>	<b>3</b>	<b>\$42</b>	<b>\$420</b>	<b>\$14</b>	<b>\$0</b>	<b>\$14</b>	<b>0.3</b>	<b>333</b>
ECM 5	Install Low-Flow DHW Devices	0	0.0	3	\$42	\$420	\$14	\$0	\$14	0.3	333
<b>TOTALS</b>		<b>10,915</b>	<b>4.5</b>	<b>2</b>	<b>\$1,862</b>	<b>\$26,573</b>	<b>\$20,193</b>	<b>\$2,089</b>	<b>\$18,104</b>	<b>9.7</b>	<b>11,193</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that pro

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Pump Station #18



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,542</b>	<b>0.3</b>	<b>0</b>	<b>\$230</b>	<b>\$3,447</b>	<b>\$1,867</b>	<b>\$240</b>	<b>\$1,627</b>	<b>7.1</b>	<b>1,544</b>
ECM 1	Install LED Fixtures	1,288	0.2	0	\$215	\$3,227	\$1,631	\$200	\$1,431	6.6	1,297
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	254	0.2	0	\$15	\$220	\$237	\$40	\$197	13.4	247
<b>Lighting Control Measures</b>		<b>39</b>	<b>0.0</b>	<b>0</b>	<b>\$2</b>	<b>\$18</b>	<b>\$116</b>	<b>\$20</b>	<b>\$96</b>	<b>42.9</b>	<b>38</b>
	Install Occupancy Sensor Lighting Controls	39	0.0	0	\$2	\$18	\$116	\$20	\$96	42.9	38
<b>Motor Upgrades</b>		<b>622</b>	<b>0.3</b>	<b>0</b>	<b>\$104</b>	<b>\$1,559</b>	<b>\$1,842</b>	<b>\$0</b>	<b>\$1,842</b>	<b>17.7</b>	<b>626</b>
	Premium Efficiency Motors	622	0.3	0	\$104	\$1,559	\$1,842	\$0	\$1,842	17.7	626
<b>TOTALS</b>		<b>2,203</b>	<b>0.7</b>	<b>0</b>	<b>\$336</b>	<b>\$5,024</b>	<b>\$3,825</b>	<b>\$260</b>	<b>\$3,565</b>	<b>10.6</b>	<b>2,208</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Pump Station #9



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO <sub>2</sub> e Emissions Reduction (lbs)
<b>Lighting Upgrades</b>		<b>1,030</b>	<b>0.2</b>	<b>0</b>	<b>\$183</b>	<b>\$2,743</b>	<b>\$2,005</b>	<b>\$220</b>	<b>\$1,785</b>	<b>9.8</b>	<b>1,038</b>
ECM 1	Install LED Fixtures	959	0.1	0	\$170	\$2,554	\$1,932	\$200	\$1,732	10.2	966
ECM 2	Retrofit Fixtures with LED Lamps	71	0.0	0	\$13	\$189	\$73	\$20	\$53	4.2	72
<b>TOTALS</b>		<b>1,030</b>	<b>0.2</b>	<b>0</b>	<b>\$183</b>	<b>\$2,743</b>	<b>\$2,005</b>	<b>\$220</b>	<b>\$1,785</b>	<b>9.8</b>	<b>1,038</b>

\* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

\*\* - Simple Payback Period is based on net measure costs (i.e. after incentives).

# Solar Energy Generation Potential



Building Name	None / Low	Med.	High
Municipal Building Garage	X		
Municipal Building			X
Peter Volpa Park	X		
Salt Building	X		
David Iuliucci Park	X		
Stella Maiese Park	X		
Sign Room	X		
Public Works - Modular Office	X		
Senior Building	X		
Albion Park	X		
Star Building 1	X		
Police Records Building	X		
Calabrese Park	X		
Office Trailer	X		
Well # 2 - Sicklerville/Wmstwn. Rd.		X	
Well # 3 - Preston Drive	X		
Well # 6 - Colgate Road	X		
Well #4	X		
Pump Station #2	X		
Well # 9 - Cross Keys Road	X		
Well # 7 - Cross Keys Road	X		

Building Name	None / Low	Med.	High
Well # 8 - Cross Keys Road	X		
Factory Road	X		
Donio Park	X		
Ivy Hall Lane - Pump #3	X		
Quad Pump - Lehigh manor P#4	X		
Main Pump - Manor Hall P#1	X		
Oak Forest #1-Old Erial Road-P#8	X		
Mercer Lane - Pump #5	X		
Meeting House Circle - Pump #7	X		
Erial new Brookly Road - P #6	X		
Route 73 - Pump # 13	X		
Route 73 - Pump # 12	X		
Susan Lane - Pump # 14	X		
Victoria Manor - Pump #10	X		
New Brookly Road - Pump #11	X		
Pump Station #16	X		
Pump Station #17	X		
Water & Sewer Department Office Bdg	X		
Pump Station #18	X		
Pump Station #9	X		

# Energy Efficient Best Practices

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- Reduce Air Leakage
- Close Doors and Windows
- Develop a Lighting Maintenance Schedule
- Ensure Lighting Controls Are Operating Properly
- Use Fans to Reduce Cooling Load
- Use Window Treatments/Coverings
- Clean and/or Replace HVAC filters
- Check and Seal Duct Leakage
- Perform Proper Boiler Maintenance
- Perform Proper Water Heater Maintenance
- Plug Load Controls
- Water Conservation

*See individual reports for specific EE practices by building*

# Clean Energy Program Portfolio



## ELIGIBLE SECTORS

Commercial, Industrial, Government, Non-Profit, Institutional and Multifamily

## INCENTIVE PROGRAMS

### Equipment Rebates:

- SmartStart
- CTEEP  
(Customer Tailored Energy Efficiency Pilot)
- Direct Install
- Large Energy Users

### Whole Buildings:

- Pay for Performance

### Energy Generation:

- Combined Heat and Power (CHP)

## OTHER PROGRAMS

### Renewable Energy Generation:

- SREC Registration Program (SRP)

\* eligible programs are highlighted in yellow

# Recommended NJCEP Incentives per Building



Building Name	SmartStart	CTEEP
Municipal Building Garage	X	X
Municipal Building	X	X
Peter Volpa Park	X	X
Salt Building	X	X
David Iuliucci Park		
Stella Maiese Park		
Sign Room	X	X
Public Works - Modular Office	X	X
Senior Building	X	X
Albion Park	X	X
Star Building 1	X	X
Police Records Building	X	X
Calabrese Park		
Office Trailer	X	X
Well # 2 - Sicklerville/Wmstwn. Rd.	X	X
Well # 3 - Preston Drive	X	X
Well # 6 - Colgate Road	X	X
Well #4	X	X
Pump Station #2	X	X
Well # 9 - Cross Keys Road	X	X
Well # 7 - Cross Keys Road	X	X

Building Name	SmartStart	CTEEP
Well # 8 - Cross Keys Road	X	X
Factory Road	X	X
Donio Park	X	X
Ivy Hall Lane - Pump #3	X	X
Quad Pump - Lehigh manor P#4	X	X
Main Pump - Manor Hall P#1	X	X
Oak Forest #1-Old Erial Road-P#8	X	X
Mercer Lane - Pump #5	X	X
Meeting House Circle - Pump #7	X	X
Erial new Brookly Road - P #6	X	X
Route 73 - Pump # 13	X	X
Route 73 - Pump # 12	X	X
Susan Lane - Pump # 14	X	X
Victoria Manor - Pump #10	X	X
New Brookly Road - Pump #11	X	X
Pump Station #16	X	X
Pump Station #17	X	X
Water & Sewer Department Office Bdg	X	X
Pump Station #18	X	X
Pump Station #9	X	X

# SmartStart: Overview



- Two types of incentives for high efficiency equipment installation:
  - Prescriptive
  - Custom
- Project Categories:
  - New Construction
  - Renovation
  - Remodeling
  - Equipment Replacement
- Project pre-approval required for lighting and custom measures
- Incentives up to \$500,000 per electric account & \$500,000 per natural gas account
- Specific incentives and individual applications for Lighting, HVAC, VFDs, Refrigeration, Controls and more!

[www.NJCleanEnergy/SSB](http://www.NJCleanEnergy/SSB)



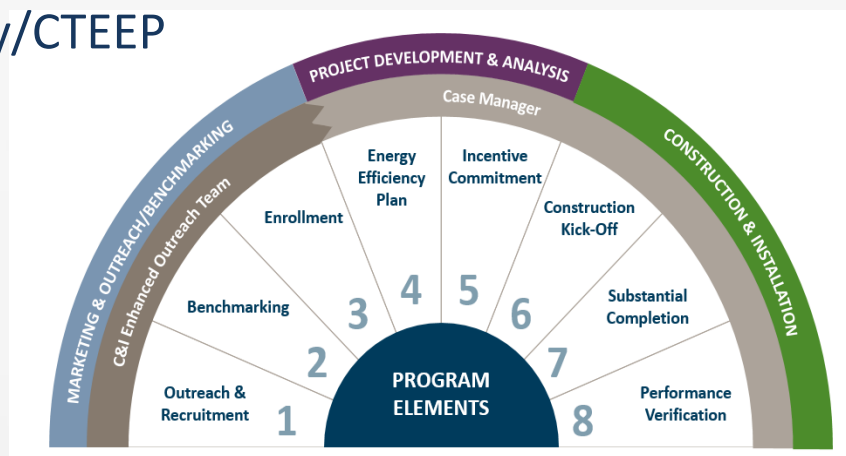
# CTEEP: Overview



## Customer Tailored Energy Efficiency Pilot (CTEEP)

- Provide customers with **on-site assistance** to discuss project opportunities and program incentives.
- A **single application** submission streamlines multiple prescriptive and custom measures.
- Provide **technical assistance incentives** to help offset soft costs associated with developing and planning an energy efficiency project.
- Incentives up to \$250,000 entity cap.

[www.NJCleanEnergy.com/CTEEP](http://www.NJCleanEnergy.com/CTEEP)



# SmartStart & CTEEP :



## Financing Option

- 0% Financing
- Up to \$130,000 for 10 years
- SJG can help guide you through the process

Contact:

Bruce Grossman – Program Manager

South Jersey Gas

#1 South Jersey Plaza

Folsom, NJ 08037

Phone: 609-561-9000, ext. 4271



# Recommended NJCEP Incentives per Building



Building Name	SmartStart	CTEEP
Municipal Building Garage	X	X
Municipal Building	X	X
Peter Volpa Park	X	X
Salt Building	X	X
David Iuliucci Park		
Stella Maiese Park		
Sign Room	X	X
Public Works - Modular Office	X	X
Senior Building	X	X
Albion Park	X	X
Star Building 1	X	X
Police Records Building	X	X
Calabrese Park		
Office Trailer	X	X
Well # 2 - Sicklerville/Wmstwn. Rd.	X	X
Well # 3 - Preston Drive	X	X
Well # 6 - Colgate Road	X	X
Well #4	X	X
Pump Station #2	X	X
Well # 9 - Cross Keys Road	X	X
Well # 7 - Cross Keys Road	X	X

Building Name	SmartStart	CTEEP
Well # 8 - Cross Keys Road	X	X
Factory Road	X	X
Donio Park	X	X
Ivy Hall Lane - Pump #3	X	X
Quad Pump - Lehigh manor P#4	X	X
Main Pump - Manor Hall P#1	X	X
Oak Forest #1-Old Erial Road-P#8	X	X
Mercer Lane - Pump #5	X	X
Meeting House Circle - Pump #7	X	X
Erial new Brookly Road - P #6	X	X
Route 73 - Pump # 13	X	X
Route 73 - Pump # 12	X	X
Susan Lane - Pump # 14	X	X
Victoria Manor - Pump #10	X	X
New Brookly Road - Pump #11	X	X
Pump Station #16	X	X
Pump Station #17	X	X
Water & Sewer Department Office Bdg	X	X
Pump Station #18	X	X
Pump Station #9	X	X

## Energy Savings Improvement Program (ESIP)

- Provides alternative financing for energy savings projects at public institutions. Value of energy savings leveraged to pay for cost of EE projects over a 15 year contract. Does not count as debt/require voter approval.
- Requires an audit as 1<sup>st</sup> step (LGEA satisfies requirement)
- ESIP participation question on LGEA application
- Program administered directly by BPU

## ESIP Process

## New Jersey's Clean Energy Program Interaction

Initial Energy Audit completed  
for entity building(s)

Local Government Energy Audit  
(LGEA) may be used to meet  
this requirement

Entity issues ESIP RFP (previously  
approved by BPU) and selects ESCO  
or DIY approach

Investment Grade Energy Audit completed  
and Energy Savings Plan (ESP)  
developed

P4P Energy Reduction Plan (ERP),  
Direct Install, or SmartStart application  
recommended submittal time frame

Third party review of ESP

Review and approval of ESP  
by Board of Public Utilities (BPU)

Entity adopts ESP,  
determines guarantee



FOR MORE INFORMATION

# ESIP

**Mike Thulen**

ESIP Coordinator

Office: 609-777-3338

Cell: 732-330-2419

[ESIP@bpu.nj.gov](mailto:ESIP@bpu.nj.gov)

# Questions

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# FOR MORE INFORMATION

**Visit** [NJCleanEnergy.com](http://NJCleanEnergy.com)

**Call** (866) NJSMART

**Gary Finger**

Regional Outreach Manager

856.780.8553

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