

***Board of Education  
Township of Middletown***

***Middletown, New Jersey***

***Fuel Savings Analysis  
With  
Intellidyne Boiler Controls***

***Installed at:***

***Bayview Elementary School***

***Ocean Avenue Elementary School***

***Leonardo Elementary School***

***Middletown Village School***

***Lincroft Elementary School***

***River Plaza Elementary School***

*The following analysis was performed using the monthly natural gas consumption data, in Therms, provided to the school by New Jersey Natural Gas for the periods of 2006, 2007 and January of 2008. Monthly Heating Degree Day data was sourced from the National Weather Service as reported by the Aberdeen, New Jersey Reporting Station for the same periods. Monthly comparisons by school varied based on what month the Intellidyne control was installed. This resulted in some of the schools having only 3 months of comparable data and other schools having 6 months of comparable data.*

*The Natural Gas consumption data was “normalized” to take into account the monthly differences in heating degree days. Detailed charts are shown by school indicating the comparable months and Heating Degree Day differences between 2006 and 2007.*

*Following is a summary by School showing the number of Therms saved and the monetized savings using the per Therm billing amount from the gas provider’s monthly billing record.*

<b>Bayview Elementary School</b>
<p><i>Intellidyne Controls – 2 model LCH controls installed 8/1/07 – Installed Cost - \$4650.00</i>  <i>Comparative Months – Sept., Oct., Nov., &amp; Dec. 2006 (Pre – installation) –HDD – 1330, Consumption -5615 Th.</i>  <i>Sept., Oct., Nov., &amp; Dec. 2007 (Post – installation) –HDD – 1667 Consumption -7426 Th</i></p>
<b>Consumption change adjusted for HDD; = + 5 % (388 Therms)</b>
<b>Lincroft Elementary School</b>
<p><i>Intellidyne Controls – 2 model LCH controls installed 10/17/07 – Installed Cost - \$4650.00</i>  <i>Comparative Months – Oct., Nov., &amp; Dec. 2006 (Pre – installation) –HDD – 1277, Consumption -6588 Th.</i>  <i>Oct., Nov., &amp; Dec. 2007 (Post – installation) –HDD – 1602 Consumption -3630 Th</i></p>
<b>Consumption change adjusted for HDD; = - 128% (4635 Therms)</b>
<b>Middletown Village School</b>
<p><i>Intellidyne Controls –1 model CHS controls installed 3/7/07 – Installed Cost - \$4275.00</i>  <i>Comparative Months –Mar. &amp; Sept thru Dec. 2006 + Jan. 2007 (Pre-Installation)-HDD -2806, Consumption – 21043 Th.</i>  <i>Mar. &amp; Sept thru Dec. 2006 + Jan. 2008 (Post installation) – HDD-3287, Consumption -18453 Th</i></p>
<b>Consumption change adjusted for HDD; = - 28% (5143 Therms)</b>
<b>Leonardo Elementary School</b>
<p><i>Intellidyne Controls –1 model CHS controls installed 3/7/07 – Installed Cost - \$4275.00</i>  <i>Comparative Months – Mar. &amp; Sept thru Dec. 2006 + Jan. 2007 (Pre-Installation)-HDD -2806, Consumption – 10871 Th.</i>  <i>Mar. &amp; Sept thru Dec. 2006 + Jan. 2008 (Post-installation) – HDD-3287, Consumption -13445 Th</i></p>
<b>Consumption change adjusted for HDD; = + 5 % (711 Therms)</b>

**Ocean Ave Elementary School**

Intellidyne Controls –1 model CHS control & 1 model LCS control installed 10/17/07 – Installed Cost - \$6850  
 Comparative Months – Nov. & Dec. 2006 + Jan. 2007 (Pre-Installation)-HDD-1061, Consumption – 7939 Th.  
 Nov. & Dec. 2007 + Jan. 2008 (Post Installation)-HDD-1449, Consumption – 6978 Th

Consumption change adjusted for HDD; = - 55% (3864 Therms)

**River Plaza Elementary School**

Intellidyne Controls –1 model CHS control installed 12/12/07 & 1 model LCS control installed 10/17/07 – Installed Cost -\$6850.00  
 Comparative Months –Oct., Nov. & Dec. 2006 + Jan. 2007 (Pre-installation) – HDD 2097, Consumption –7951 Th.  
 Oct., Nov. & Dec. 2007 + Jan. 2008 (Post-installation)– HDD 2538, Consumption – 8726 Th.

Consumption change adjusted for HDD; = - 10% (897 Therms)

**Total All Schools**

Intellidyne Controls Installed: 4 Model CHS Controls; Installed Cost: \$17,100.00  
 2 Model LCS Controls; Installed Cost: \$4,200.00  
 4 Model LCH Controls; Installed Cost: \$9,300.00

Pre-Installation Consumption: 59,107 Therms; Total Heating Degree Days: 11,377; Th / HDD = 5.20  
 Post Installation Consumption: 58,658 Therms; Total Heating Degree Days: 13,830; Th / HDD = 4.24

Total Consumption change adjusted for HDD; = - 18.5% (13,440 Therms)  
 Realized Savings @ \$1.2894 per Therm = \$17,329.54

