

# PERFORMANCE CONTRACTING

## Preliminary Energy Analysis

### Summary of Potential Energy Conservation Measures (ECMs)

	CMS	JHHS	WOES	WES
SYSTEM WIDE EMS	X	X	X	X
RENOVATE OR NEW ENERGY EFFICIENT HVAC SYSTEM	X			
SELECTED HVAC EQUIPMENT REPLACEMENTS		X		
RETRO-COMMISSIONING (OR Cx of REPLACEMENT HVAC)	X	X	X	X
SCHOOL WIDE OCCUPANCY SENSORS	X	X	X	X
NEW ENERGY EFFICIENT HIGH BAY GYM LIGHTING SYSTEM	X	X	X	X
REDUCED WATTAGE LAMPS AND BALLASTS	80% Existing	30% Existing	X	X
SELECTED NEW ENERGY EFFICIENT LIGHT FIXTURES	X	X	X	X
REPLACE SELECTED SINGLE PANE WINDOWS WITH DP	X	X		
SELECTED EXTERIOR LIGHTING REPLACEMENTS	X	X	X	X
SELECTED LOW FLOW PLUMBING FIXTURES	X	X	X	X

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### Summary of Potential ECM Savings

	CMS	JHHS	WOES	WES	
SYSTEM WIDE EMS	\$4,212	\$5,169	\$2,478	\$2,662	\$14,521
RENOVATE OR NEW ENERGY EFFICIENT HVAC SYSTEM	\$28,937	\$0	\$0	\$0	\$28,937
SELECTED HVAC EQUIPMENT REPLACEMENTS	\$0	\$7,662	\$0	\$0	\$7,662
RETRO-COMMISSIONING (OR Cx of REPLACEMENT HVAC)	\$2,082	\$11,493	\$1,837	\$1,977	\$17,389
SCHOOL WIDE OCCUPANCY SENSORS	\$4,212	\$7,753	\$3,718	\$3,993	\$19,676
NEW ENERGY EFFICIENT HIGH BAY GYM LIGHTING SYSTEM	\$2,808	\$5,169	\$2,478	\$2,662	\$13,117
REDUCED WATTAGE LAMPS AND BALLASTS	\$562	\$5,169	\$2,478	\$1,863	\$10,072
SELECTED NEW ENERGY EFFICIENT LIGHT FIXTURES	TBD	TBD	TBD	TBD	\$0
REPLACE SELECTED SINGLE PANE WINDOWS WITH DP	\$3,070	\$0	\$0	\$0	\$3,070
SELECTED EXTERIOR LIGHTING REPLACEMENTS	\$678	\$1,256	\$598	\$649	\$3,181
SELECTED LOW FLOW PLUMBING FIXTURES	TBD	TBD	TBD	TBD	\$0
	<b>\$46,561</b>	<b>\$43,671</b>	<b>\$13,587</b>	<b>\$13,806</b>	<b>\$117,625</b>
	38.4%	23.1%	13.4%	13.1%	

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## Preliminary Energy Analysis

### Estimated Costs & Savings

- Costs: **\$2.5 to \$4.5 per sq ft**
- Median building energy savings: **22%**
- Median building annual savings: **\$32,000/YR**
- Median payback time: **10 years**



***Energy Conservation Measures:***

Building Automation System  
upgrades  
HVAC System Replacements  
Operations Optimization  
Occupancy Sensors for Lighting  
  
Energy Efficient Interior Lighting  
Selected Envelope Upgrades  
(Windows)  
Energy Efficient Exterior Lighting  
Water-Efficient Technologies

**PROJECT AT A GLANCE**

***Project Size:***

4 K-12 schools / 378,122 square feet

***Projected Project Cost:***

\$1.0 to \$1.7 million

***Projected Annual Cost Savings:***

\$120,000 - \$150,000

***Projected Total Project Savings:***

\$1.8 to 2.25 million

***Greenhouse Gas Emission Reduction:***

22%

***Projected Simple Payback:***

10 years (financed over 15 years)