

Parchment School District / Honeywell Performance Contracting Partnership



**Creating Sustainable, Efficient,
Green Learning Environments**

**Preliminary Opportunity Analysis
January 30, 2025**



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Creating Sustainable, Efficient, Green
Learning Environments



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Parchment School District / Honeywell Partnership Milestones

ACTION:

TARGET DATE:

Information Exchange Meetings

April 12, 2024

Meetings are intended to provide a conceptual overview of the program, answer questions, and most importantly exchange information so Honeywell can better understand the District's needs and structure. Meetings result in an agreement to proceed.

Board Authorization for Feasibility Study

April 24

A co-authored action plan to determine the feasibility, potential scope of work, and implementation schedule for entering into a Performance Contract.

Preliminary Survey

May - June

A mutual commitment of time to analyze the District's buildings and inspect infrastructure systems in order to define areas of possible improvement and potential savings. Honeywell will perform on site building surveys and gather all applicable operating costs.

Verification / Feasibility Meeting

July 17-31

Determine the feasibility of a Performance Contracting program. Start to prioritize what the partnership will include, potential scope of work, energy savings, operational cost avoidances, rebates, and any capital contribution to help fund the program.

Board Authorization to Advertise for Project

February

With the Administration team's endorsement, review project feasibility with the Board to gain their support. Honeywell will assist in developing all procurement documents for the competitive process.

District Advertises "Request for Proposal"

February

This is a formal request by the District for proposals for the implementation of energy management equipment, modernization, and maintenance services on a performance contracting basis.

Mandatory Bid Meeting and Survey

March

Proposals Due

March

District Selects Performance Contracting Partner

March

Negotiate Contract Documents

April

Begin Implementation

April / May



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Parchment School District Project Goals

DISTRICT GOALS 2023 – 2024

Finance Goal: maintain fiscal responsibility while meeting district goals.

- Implement a Five-Year Purchase and Replacement Plan for Capital Assets Including Technology
- Develop Efficient Automated and Electronic Procedures
- Develop Short and Long-Term Financial Goals
- Develop Comprehensive Budgeting Process Include Line Item Allocations
- Seek Grant Opportunities and Improve Use of Current Grants
- Maintain a Stable Fund Balance

Facilities - Operations Goal: We will maintain and improve facilities & operations.

- Comprehensive District Facilities Assessment to Determine District Priorities
- Committee / Board Members: Develop Plan to Bonding or Sinking Funds to Improve Facilities
- Conduct Facility Utilization Study
- Enhance Safety and Security
- Develop and Implement Effective Systems for Operations

PROVIDE THE BEST POSSIBLE LEARNING ENVIRONMENT

- **Upgrade and Enhance**
 - Lighting Systems – continue transition to LEDs & obsolete panel replacement
 - Heating / Air Conditioning / Mechanical - efficiency and planned replacement
 - Pneumatic Temperature control replacement strategy
 - Energy Management System – extend Honeywell / Tridium system in each building- recommissioning
 - Building Envelope: Tighten envelope to improve mechanical efficiency
 - Water Conservation / Water Filtering compliance with EGLE
- **Improve** Learning Environment:
- Facilities to **Support** Parchment's Educational Mission

MAXIMIZE OPERATING FUNDS

- Lower Utility and Operational costs...**Guaranteed**
- Redirect reduced utility/operational costs to help **Fund Improvements**
- **Utilize** available ESSER, Sinking Fund and Utility rebates
- **Support** Parchment's Capital Renewal / Strategic Facilities Plan
- Determine **best financial solution**/approach
- Potential to stretch existing capital funds to **reduce future bond issue**
- **Positive Phase 1 & 2 energy project messaging** to support bond initiative

IMPROVE OPERATIONAL EFFICIENCY

- **Comprehensive** approach vs piece meal
- **Economies of scale** with trades associated with project
- Design, Implementation, Support
- Maintenance **Staff involvement** and **Training**
- **Centralized** Control / Monitoring of all Systems / User friendly
- **Standardize** equipment where possible / feasible
- **Develop Energy Policy / Strategy** that improves efficiency, is sustainable, and provides accountability



UTILITY ANALYSIS

Utility Baseline Information – Handout



Parchment School District Potential Scope of Work Matrix

Legend:

Black X's Indicate:

Energy work, critical items identified with Parchment Operations team, 3-5 Yr and Capital plan

POTENTIAL SCOPE OF WORK	HIGH SCHOOL	MIDDLE SCHOOL	NORTH ELEMENTARY	CENTRAL ELEMENTARY	NORTHWOOD ELEMENTARY	PARCHMENT INNOV. CTR.
A. Lighting Improvements						
4' T8 Fluorescent: Re-lamp Owner 14W LED, Ballast Remain	X	X	X	X	X	X
4' T8 Fluorescent: Retrofit with 9W LED , Remove Ballast	X	X	X	X	X	X
Gym Fixtures: Retrofit with LED Tubes, Remove Ballast	X		X	X		X
Multi-Purpose: Dome/Pendant, LED Tubes, Remove Ballast	X					
Auditorium: Hanging Fixtures replaced LED Pendant Fixture	X					
Replace CFL Recessed Can Fixture with 8" LED Can Fixture	X		X	X	X	
Replace Screw-in Lamps with LED Screw-in Lamps	X					
Replace Up-lights with LED Up-lights					X	
Office Desk Up-lights: Retrofit with LED Lamp				X		
Wall Flood Fixtures: Install LED Flood Fixture				X		
District Stock: LED Lamp Installation	X	X	X	X	X	X
De-Commission Bypass Light Control Panels	X					



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POTENTIAL SCOPE OF WORK	HIGH SCHOOL	MIDDLE SCHOOL	NORTH ELEMENTARY	CENTRAL ELEMENTARY	NORTHWOOD ELEMENTARY	PARCHMENT INNOV. CTR.
B. Building Management System						
Upgrade Honeywell Tridium System Software	X	X	X	X	X	X
System Recommissioning / Building Schedule Adjustment	X	X	X	X	X	X
Boiler Alarm Notification / Tridium / Phone Integration	X	X	X	X	X	X
Pneumatic Air Compressor – Line Leaks/Hose not connected						X
Integrate New Unit Ventilators Direct Digital Controls (DDC)	X	X		X		
C. HVAC Improvements						
UV Replacement, DDC and hot water piping in 300 wing (6)				X		
Critical Boiler Room Mechanical: Pumps, Motors, etc	X	X	X	X	X	X
Library Unit Ventilator (UV) Replacement (4)	X					
UV Replacement w/ DDC controls 700 Wing (13)	X					
UV Replacement & DDC rm 116/117 wing (6)		X				
Office Area Mechanical Equipment Replacement	X					
Weight Room Coil / Condensing Unit Replacement	X					
Kitchen Make-Up Air Unit and Exhaust Fan Replacement		X				
D. Building Envelope Improvements						
Weather Stripping Doors	X	X	X	X	X	X
Wall – Roof Penetration Caulk / Sealing	X	X		X	X	X
Air Conditioning Covers		X			X	X
Old / Single Pane Window Replacement Gym				X		



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POTENTIAL SCOPE OF WORK	HIGH SCHOOL	MIDDLE SCHOOL	NORTH ELEMENTARY	CENTRAL ELEMENTARY	NORTHWOOD ELEMENTARY	PARCHMENT INNOV. CTR.
E. Water Conservation Improvements						
Water Closet Flush Valve Retrofit/Replace (1.6 to 1.28 GPF)	X	X	X	X	X	X
Urinal Flush Valve Replacement	X	X	X	X	X	X
Sink / LAV Faucet Aerators	X	X	X	X	X	X
Filter 1st Grant – Lead Fixture Removal	X	X	X	X	X	X
Full Building Filtration System	?	?	?	?	?	?
F. Other Improvements						
Bus Block Heaters with Outside Air Sensor		X				
Utility Company Rate Analysis – Rate Change	X	X	X	X	X	X
Kitchen Offices Condensation Leak on Desk	X					
Fire Alarm Replacement – Admin –mentioned bldg demo						?



POTENTIAL SUPPORT SERVICES

Develop Energy Policy – Energy Coordinator Stopped at COVID

Administration Team / Board of Education Support

Building utilization / coordination meetings

Energy officer for each building

Behavioral Management – removal of classroom appliances unless necessary

Pre-established temperature set points: day / night

Pre-established equipment run times

Support Services

Staff Training – Upon completion of installation

Annual Measurement & Verification of Savings

Annual Energy Audit and Guarantee

Annual Performance Review





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PARCHMENT SCHOOL DISTRICT
Preliminary Financial Analysis
Potential Annual Savings / Project Funding

Utility Demand Savings

April, 2023 to March, 2024 Costs	Electrical:	\$ 305,416	\$ +/- 115,000
	Natural Gas:	\$ 133,302	
	Water/Sewer:	\$ 14,951	
	Total:	\$ 453,669	
Inhouse Performed LED Replacement			\$ +/- 3,000

Utility Supply Savings

Rate change ? Demand Response Program	+/- \$15,000	\$ +/- 15,000
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Operational Savings (2022-2023 / 2023-2024) (Minimal due to significant District Needs)

Lighting Replacement / Electrical (10,562-508) (Avg 5.5k)	\$ 5,500	
HVAC Outside Purchase Service Cost (88,000 - 52,000)	\$	
Water Conservation / Plumbing Parts	\$	
Building Envelope Repairs (14,200)	\$	
Potential Operational Savings (99,700 - 72,400)	\$ _____	\$ +/- 5,500

Potential Annual Capital Contribution \$ _____

Total Annual Funding / Savings Available to Fund Project: \$

Potential Additional One Time Funding

Utility Rebate	+/- \$ 15,100
Sinking Fund (SF)	+/- \$ 1,900,000
Filter 1 st Lead removal Grant	\$ 120,000

Budgetary Financial Scenario's: Leverage Savings to Accomplish More Projects

Black X's: +/- \$ 3,000,000 (includes 1.5m - 1.9m SF)



Performance Guarantees

Financial Guarantee

Honeywell guarantees Parchment School District will achieve the agreed upon savings for each year of our agreement,

or

Honeywell will pay Parchment School District the difference between the amount guaranteed and the actual savings.

Operational Guarantee

Honeywell will guarantee Parchment School District that we will not sacrifice occupant comfort, light levels or any system performance in order to meet our financial guarantee!



SAMPLE BOARD MOTION

Authorization for Advertisement

MOVE THAT:

The Board of Education authorizes the Superintendent to move forward and advertise for the installation of a Performance Contracting Program through a “Request for Proposal”.

Proposals submitted will outline the scope of work, terms and timeline for installation. The Parchment School District plans to implement a program with the successful bidder.