



Pacific Grove Unified School District

**Governing Board Presentation** 

**Board of Trustees** 

CA Contracting Program GC §4217

Presented by: ABM Building Solutions, LLC

CSLB #976012

Dec 07 2023





# WHO WE ARE

#### **PURPOSE**

To take care of the people, spaces and places that are important to you

#### VISION

To be the clear choice in the industries we serve through engaged people

#### MISSION

To make a difference, every person, every day



# **Key Team Members**



Robert Lallement
Regional Account Manager



Brett Lichtenthaler
Regional Vice President



Kevin Wolfe, PE Lead Project Developer



Derek Reichstein
Regional Director



Tony Roehrick, Ed.D.

Regional Account Manager



# Introduction Meeting 2/23/2023

## Our Process So Far

Memorandum of Understanding 3/13/2022



Preliminary Assessment 4/12/2023

Pr

PA Feasibility Presentation 5/18/2023



In Depth Review and Engineering June 2023 – Nov 2023



We Are Here



Report Findings and Finalize Scope of Work 12/07/2023

Negotiate and Approve Contract 01/11/2024



#### What we Developed/Designed:

- HVAC/Mechanical replacements to address Indoor Air Quality issues District Wide
- HVAC Building Automation Controls District Wide
- Boiler improvements for High School

#### What we included in Project Scope:

- All new units for Forest Grove Elementary
  - Add mixing boxes with actuators
  - Merv-13 Filters
  - Building Automation System via Pelican Wireless
- All new units for Robert Down Elementary K-Wing
  - Add units with both heating and cooling and improve ventilation
  - Building Automation System via Pelican Wireless









## **LED Lighting Improvements**

### What we Developed/Designed:

- LED Lighting upgrades throughout District
  - Building Interior
  - Building Exterior
  - Parking Lots
- Lighting Occupancy Sensors throughout District
- LED Lighting Upgrades for Stadium
  - New design to assist with Track
- Additional Lighting for Pool Area

### What we included in Project Scope:

All of the Above!



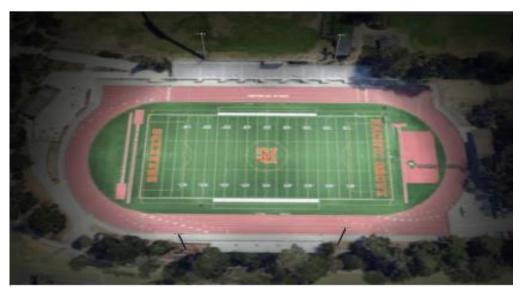












# Building Envelope Improvements / Water Conservation Measures

#### What we Developed/Designed:

- Building Envelope improvements District Wide
- Domestic Plumbing improvements District Wide
- Irrigation System improvements District Wide
- Landscape improvements at 4 locations

#### What we included in Project Scope:

- Building Envelope District Wide
  - Door/Window Sealing
  - Door Sweeps & Astragals
  - Weather Stripping
  - Polyurethane Sealant
- Domestic Plumbing improvements District Wide
  - New Low-Flow Toilets
  - New Low-Flow Showerheads
  - Pre-Rinse Sprayers / Faucet Improvements







### What we Developed/Designed:

- Resiliency for Middle School IT System
- Electrical Panel Upgrade for High School

#### What we included in Project Scope:

- New Generator for Middle School
  - Generac Natural Gas Generator to keep IT Systems up during Power Shutoffs
  - Smart Management Module
  - Aluminum Enclosure
- New Electrical Service Panel for High School
  - New Main Electric Service Panel
  - Replacing Critical Infrastructure and adding NEMA3R Enclosure for protection











# Measure & Scope Summary

- Replace all HVAC units for Forest Grove Elementary
  - Replacement of 28 gas fired furnaces, and replacement of 7 bard units
  - High efficiency units, add mixing boxes with dampers to allow for proper ventilation and control, add Merv-13 Filters
- Replace all HVAC units for K-Wing at Robert Down Elementary
  - Replacement of 3 natural gas furnaces with 3 heat pumps
  - High efficiency units, convert from gas to heat pump heating, add cooling, add ductwork for proper air distribution within classroom. Provide ADA allowance of \$82,678 for the district to perform ADA upgrades as needed.
- Pelican Wireless HVAC control system for all new units installed at FG and RD
  - Forest Grove ES and Robert Down ES (Kinder Wing)
  - Re-use 39 T-stats install 2 new T-stats, install 41 economizer controllers, install 4 repeaters for communication.
  - Utilize existing pelican controls infrastructure, upgrade software, add control of ventilation and outdoor air intake through economizer controls. Demand control ventilation and ability to close outdoor air dampers during "danger smoke days".

# Measure & Scope Summary Continued

- Install remaining LED Lighting District Wide
  - Replace 1022 interior lamps, 165 Exterior Fixtures, 60 Stadium Lights, Add 203 Occupancy Sensors
- Building Envelope improvements District Wide
  - 16,776 Linear Ft Sealing, 362 DF Weather Stripping, 361 Door Sweeps, 43 Astragals
- Domestic Plumbing improvements District Wide
  - Install more efficient domestic plumbing equipment for water savings. This includes aerators on sinks, new toilets in select areas, flush valves, shower heads, and kitchen pre-rinse sprayers
- Generator at Middle School for Resiliency
  - Install 30kW generator to provide backup power to the main IT hub/room at the Middle School.
- New Electrical Panel at the High School
  - Replace and relocate main electrical panel/switchgear at the high school, 2500A 120/208V.
- Appliance upgrades at the Middle School
  - Replace 7 existing natural gas stove/oven appliances with new 7 new electrical stove/oven appliances.

# Measure & Scope Summary Continued

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Leveraging Savings for Funding with CA §4217

### Financial Overview

Area of Annual Savings	Amount
Utility Savings	\$85,700
Maintenance and Operational Savings*	\$21,400
Cost Avoidance Savings	\$260,600
Total Annual Savings (Year 1)	\$367,700
Total Savings Over Term (15 Years)	\$7,403,700

\$5,667,485

Infrastructure **Improvements** 



\*US Department of Energy: How to Determine and Verify Operating and Maintenance Savings in Energy Savings Performance Contracts; March 2018

https://www.energy.gov/sites/prod/files/2018/03/f49/om\_savings\_guidance.pdf



# Financial Overview

```
Project Budget 2023/24 – Measure D
Beginning Balance from Measure D, Series A (2023/24):
                                                           774,652
Measure D, Series B Funding:
                                                         $6,354,000
                                                         $7,128,652
Total Budget in 2023/24 for Measure D Projects:
Adopted Budget 2023/24 – Gutter, Roof & Paint Projects
Forest Grove Elementary (Buildings B,C and D):
                                                         ($1,050,000)
Pacific Grove High School (Buildings E and F):
                                                            700,000)
Budget Remaining for 2023/24 Series B:
                                                         $5,378,652
Proposed Award to ABM for Ca §4217 Project:
                                                         ($5,667,485)
Measure D, Series B to be shifted to Fund 40:
                                                            288,833)
```

PGUSD still has \$16,960,000 in Measure D Authorization for future Series (C, D, E)

# Benefits of GC §4217



- **Select** a partner who provides the best value
- Accomplish Facility, Technology & Infrastructure improvements
- Collaborative design
- Reduced overall project cost and time to implementation
- Reduce Utility and Operational expenses
- Savings fund the improvements
- ABM Guarantees the savings
- No Change orders
- No Cost overruns



\*GC §4217 was approved in 1984 and revised in 2005 to encourage public agencies to improve building efficiency & Infrastructure

# Project Greenhouse Equivalencies

40,590 Gallons of Gasoline



404,061 Pounds of Coal



834 Oil Barrels Consumed



43.8M Cell Phones Charged



122 Tons of Waste Recycled



14,712 Propane Tanks Used



893,111 Miles Driven



70 Homes' Electricity Use 1yr



# Process Beyond Development







# Thank You

ABM Building Solutions, LLC.

**Robert Lallement** 

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# Measure & Scope Summary

### What we Developed/Designed:

- HVAC/Mechanical replacements to address Indoor Air Quality issues
- Building Automation Controls
- LED Lighting Systems
- Building Envelope improvements
- Water Conservation measures
- Energy Resiliency
- Electric Service upgrades
- Appliance upgrades
- Xeriscaping

### What we included in Project Scope:

- Replace all HVAC units for Forest Grove Elementary
- Replace all HVAC units for K-Wing at Robert Down Elementary with Heating and Cooling
- Pelican Wireless HVAC control system for all new units installed at FG and RD
- Install remaining LED Lighting District Wide
- New LED Lighting for HS Stadium
- Building Envelope improvements District Wide
- Domestic Plumbing improvements District Wide
- Generac Generator at Middle School for Resiliency
- New Electrical Panel at the High School
- Appliance upgrades at the Middle School



#### **ELECTRICAL**

lights serviced and maintained



#### **ENERGY**

23% average energy reduction for client properties



#### **EV CHARGING**

**6,000+** EV charging stations installed and maintained



#### **HVAC & MECHANICAL**

14,375+ heating and cooling systems serviced and maintained



#### **JANITORIAL**

484+ million sq. ft. of buildings cleaned and serviced



#### LANDSCAPE & TURF

600+ properties maintained



#### **PARKING & TRANSPORTATION**

300,000+ parking spaces and 500+ parking locations managed





40,000+ parking lot poles and



Our 20,350+ team members in California are dedicated to providing maintenance to 3,700+ facilities, including LAX, SFO, BUR, and SJC airports.

- Over 40 years in business with \$713 Million in Current Guarantees
- Adequate Financial Resources \$1.5 billion in revenue in California













**Building Value** 

Founded in San Francisco in 1909 We operate **LAX**, **SFO**, **BUR, and SJC airports**  20,350+ Californians employed

23 branch locations \$1.1+ billion in revenue

3,700+ buildings serviced and maintained

## **DOE** Qualifications and Licenses



- U.S. Department of Energy's (DOE) Qualified List of ESCOs: ABM has been added to the DOE's List to conduct Energy Savings
  Performance Contracts (ESPCs) with Federal & State Agencies. We are currently developing projects across the nation in their
  most mission critical environments & data centers.
- NAESCO Accredited: ABM has been accredited by the National Association of Energy Service Companies.
- State of California Department of General Services (DGS) Prequalified ESCO
- B General Building Contractor
- C-4 Boiler, Hot Water Heating and Steam Fitting
- C-7 Low Voltage Systems
- C10 Electrical
- C20 Warm-Air Heating, Ventilating and Air-Conditioning
- C36 Plumbing
- C38 Refrigeration
- C43 Sheet Metal
- C-61 / D62 Air and Water Balancing
- C-61 / D65 Weatherization and Energy Conservation









# Bonding, DSA, and Litigation





- Bonding Limits
   \$70M on a single project & \$500M aggregate
- DSA Experience
   Lompoc USD, Winters USD, Newcastle ESD
- Pending Litigation
   ABM has no pending/recent litigation relating to any efficiency improvement project performance or measurement and verification (M&V)

# Government Code §4217 Improvement Examples



- Heating, Ventilation and Air Conditioning Improvements
- Park, Street and Parking Lot Lighting Retrofits
- Building Interior Lighting Retrofits
- Swimming Pool Heating and Water Conservation
- Grounds Irrigation Systems Improvements
- Ceiling Replacements

- Domestic Water Conservation Measures
- Electric or NG Buses and Work Vehicles
- Window and Door Replacements
- Roof Replacement or Repairs
- Building Automation Systems
- High Efficiency Transformers
- Hard Scape
- ADA Access

- Building Envelop Sealing
- Solar PV, Solar Thermal
- Wind Turbine Energy
- Electrical Upgrades
- Plug Load Controls
- Biomass Energy
- Battery Storage
- Sub Metering
- Green Roofs
- UPS







### PERFORMANCE CONTRACTING

- Initial Feasibility Analysis
- Measurement & Verification
- Engineering Calculations & Design
- Repairs, Replacements, Retrofits & Upgrades
- Identification & Processing of Utility Rebates & EPA Tax Incentives
- Structuring Financing Terms to Generate Positive Cash Flow
- Commissioning & Retro-Commissioning
- On-Site Training

#### **ABM Infrastructure Solutions**

High-efficiency conservation, facility modernization & technical service program that addresses both facility upgrades & funding needs of clients.

\*Performance Contracting serviced out of HVAC & Maintenance Locations.