



Alvord Unified School District

Our Promise: All students will realize their unlimited potential.

Facilities Report

September 2021

Kevin Emenaker

Executive Director, Administrative Services

October 21, 2021





Alvord Unified School District

Our Promise: All students will realize their unlimited potential.

Agenda

- Facility Projects
 - Before and After Photos
- Work Orders by Site (September 2021)
- Climatec Overview By Phase
- Climatec Savings for Villegas Pilot Solar Program
- Phase IV Funding Plan
- Next Steps



McAuliffe Elementary After Photo

School: McAuliffe Elementary

Project Description: Replace
Non-Functioning Marquees

Board Approval Date:
October 8, 2020

Fiscal Impact: \$110,000 –
County Schools Facilities Fund

Project Duration: 11 Months

Start Date: October 8, 2020

Completed: September 2021



Maintenance Work Order Report - September 2021										
School Site	W.O.'s Still Active from the Program End Date - Aug. 31, 2021	Work Orders Received	Work Orders Completed	Work Orders Still Active		School Site	W.O.'s Still Active from the Program End Date - Aug 31, 2021	Work Orders Received	Work Orders Completed	Work Orders Still Active
Arlanza Elementary	24	16	8	32		Arizona Middle	80	24	19	85
Collett Elementary	31	19	12	38		Loma Vista Middle	47	18	13	52
Foothill Elementary	23	22	14	31		Villegas Middle	46	23	15	54
La Granada Elementary	45	22	16	51		Wells Middle	49	39	24	64
Lake Hills Elementary	23	17	8	32		Hillcrest High	74	55	40	89
McAulliffe Elementary	30	20	13	37		La Sierra High	143	73	56	160
Myra Lynn Elementary	93	15	13	95		Norte Vista High	91	55	28	118
Orrenmaa Elementary	31	14	10	35		Alvord Continuation	21	11	9	23
Promenade Elementary	51	12	8	55		Alvord Alternative Education	15	8	4	19
RMK Elementary	41	14	7	48		Total	1071	568	372	1267
Stokoe Elementary	53	25	11	67						
Terrace Elementary	17	19	10	26						
Twinhill Elementary	22	26	17	31						
Valley View Elementary	21	21	17	25						

Alvord USD Energy Master Plan

			Phase I			Alvord HS	Arizona MS	Arlanza ES	Collett ES	Facilities (M.O.T.)	Foothill ES	Hillcrest HS	La Granada ES	La Sierra HS	Lake Hills ES	Loma Vista MS	M cAuliffe ES	Myra Linn ES	Norte Vista HS	Orrenmaa ES	Stokoe ES	Promenade ES	RMK ES	Terrace ES	Twinhill ES	Valley View ES	Villegas MS	Wells MS		
			Phase II																											
			Phase III																											
			Phase IV																											
BUILDING AUTOMATION SYSTEM (BAS)	New Wi-Fi Based BAS														✓								✓			✓		✓		
	New BACnet Compatible BAS				✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Advanced BAS Programming						✓	✓	✓	✓	✓	✓		✓		✓			✓	✓	✓			✓						
	Integrate Occupancy Sensors				✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Exterior Lighting Control				✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Demand Control Ventilation					✓	✓	✓	✓		✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	BAS Training				✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	
HEATING & COOLING	New High Efficiency HVAC Units (rooftop, wall-mount + split systems)	Completed (Phase I & II)				2		26	30	2	12	7	15		15	7	13			21	92			13	7		15			34
		Phase III Modernizations					24	11		19	9	11		15	25	52			22	25	13	66	11		20	14	7		21	
		Phase IV				19	5	11			5	4		5	91		15	41	1	3	6	7	42	43	8	11	27	76		
	Central Plant Systems	New High Efficiency Chiller/ Re-Condition Chiller					1							1		2			1	1										
		New High Efficiency Boiler					2												1	2										
		Other Modernizations					35								20					19	19									
	Add High Efficiency Air Conditioning to Gym													✓					✓											
	Add High Efficiency Air Conditioning to Kitchen								✓		✓		✓			✓	✓	✓			✓			✓						
	LIGHTING	Interior Fluorescent Lighting Upgrades				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Interior LED Lighting Modernization				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Exterior LED Lighting Modernization				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Install/Modify Dual Technology Occupancy Sensors				✓	✓	✓	✓	✓		✓		✓	✓	✓	✓		✓					✓	✓	✓	✓	✓	✓			
Fixture Mounted Dimming Sensor					✓			✓		✓	✓	✓	✓	✓				✓		✓	✓				✓			✓		
SOLAR	Pool Solar Thermal Water Heating											✓		✓				✓												
	Solar Shade Structures											✓		✓	✓				✓			✓					✓			
OTHER	Non-Solar Shade Structures						✓	✓			✓		✓				✓				✓									
WATER	Detailed Irrigation Assesment				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Irrigation & Field Improvements						✓	✓			✓	✓	✓	✓	✓		✓		✓		✓	✓								

Phase I

Implemented FY 15/16
(Govn't Code 4217)

- HVAC Modernizations at 10 Sites (252 Units)
- New Central Plant Systems at 2 Sites
- New Building Automation Systems (BAS) at 6 Sites
- Lighting Modernizations
- Solar Thermal Pool Heating at 3 Sites

Phase II

Implemented FY 19/20
(Govn't Code 4217)

- HVAC Modernizations at 6 Sites (59 Units)
- Add A/C to La Sierra & Norte Vista Gyms
- New Central Plant Systems at 2 Sites
- New BAS + BAS Upgrades at 14 sites
- Complete LED Lighting Districtwide
- Solar Parking at 1 Site

Phase III

Board Approved for
Implementation June 2021
(Govn't Code 4217)

- HVAC Modernizations at 17 sites (365 Units)
- Enhanced Ventilation & MERV-13 filters for New HVAC Units
- New BAS at 6 Sites
- Solar Outdoor Learning & Dining Structures at 5 Sites
- Shade Structures (Non-Solar) at 6 Sites

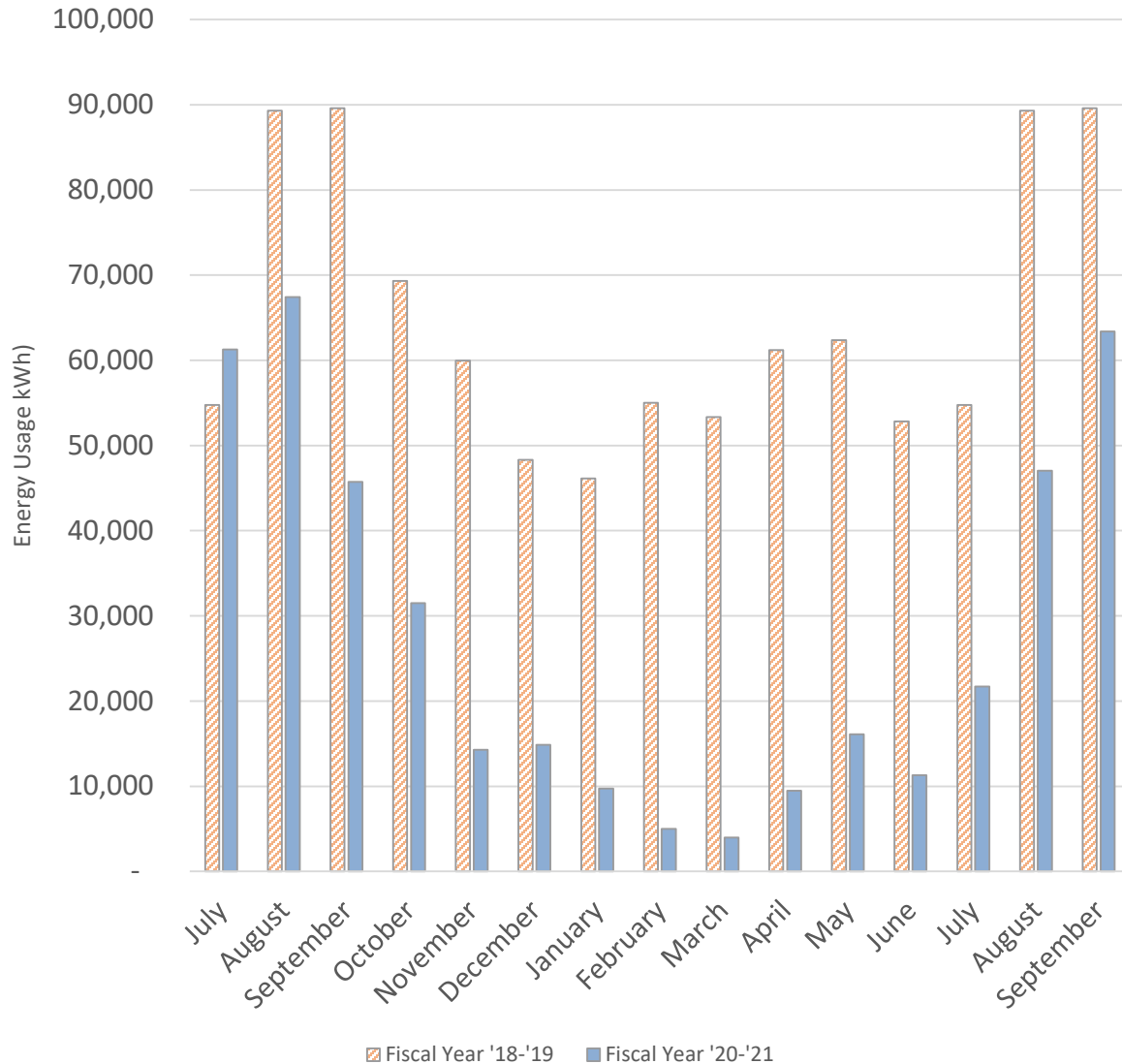
Phase IV

Board Considers for
Implementation Nov 2021
(Resolution 1)

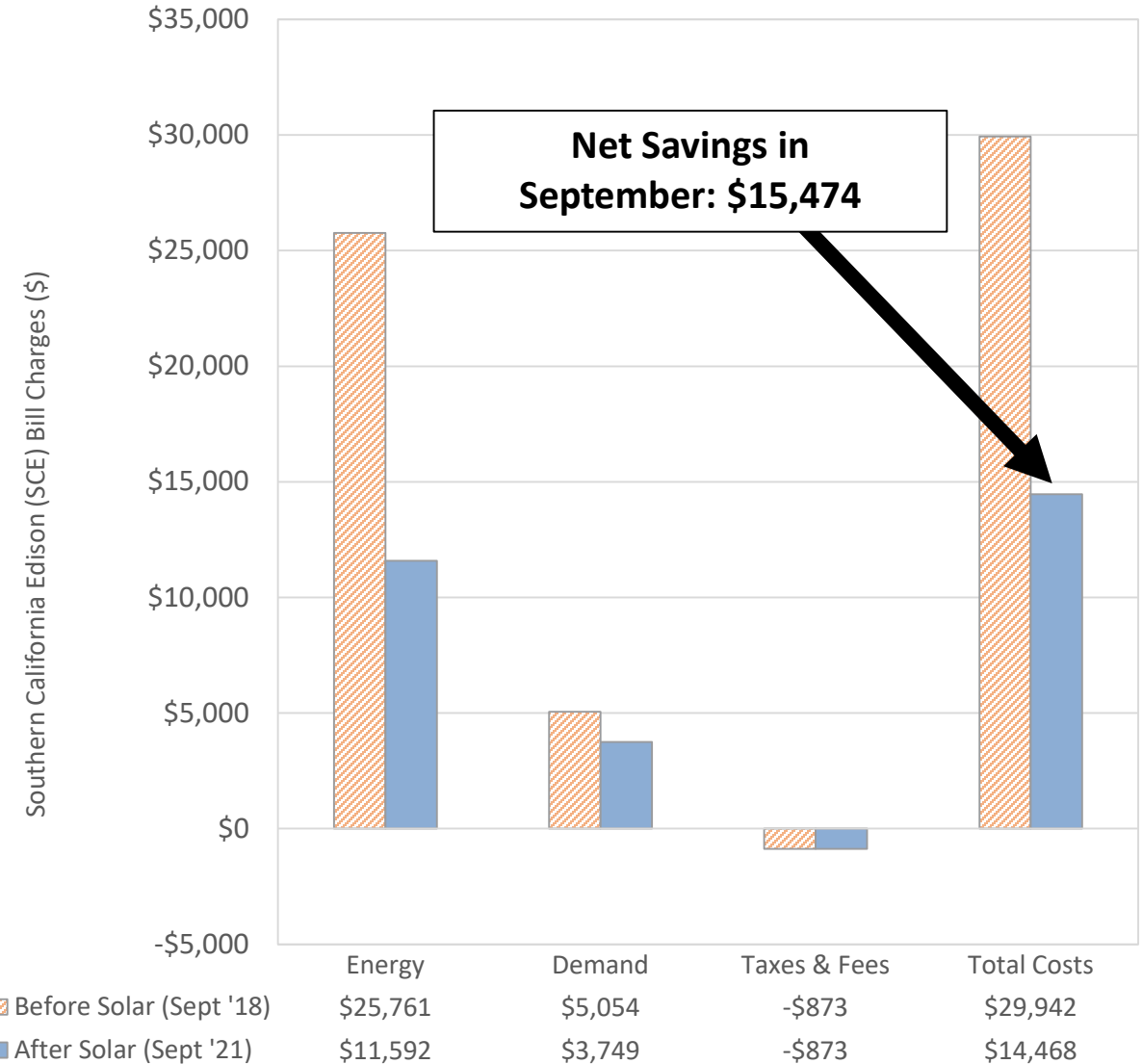
- HVAC Modernizations at 19 sites (520 Units)
- HVAC Kitchen Addition at 8 sites
- Central Plant Modernizations at 4 Sites
- Enhanced Ventilation & MERV-13 filters for New HVAC Units
- New BAS at 9 Sites
- Irrigation & Field Improvements at 11 Sites

Villegas Solar Pilot Program

Villegas MS Fiscal Year Comparison



Villegas Energy Bill: Before & After



Phase IV Funding Plan



Infrastructure Improvements:

Phase III <i>(in process)</i>	\$ 19 million
Phase IV	\$ 18.7 million

Total Program Savings	\$ 31.8 million
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Funding Source:
ESSER Federal Stimulus Funding



Next Steps for AUSD Energy Master Plan

- Board Authorized Phase III Installation Agreement June
- Complete Phase III Design June - August
- Phase III Equipment Ordered August
- Facilities Report to the Board Tonight
- Commence Phase III Construction October
- Board Considers ESSER III Expenditure Plan* October 21
- Board Considers Phase IV Installation Agreement* November 4

****If authorized by the Board, the following next steps will occur:***

- Complete Phase IV Design Dec - Jan
- Phase IV Equipment Ordered January
- Commence Phase IV Construction March
- Phase III & IV Construction Period 24 months (combined)