

# LED LIGHTING RETROFIT PROJECT

Facilities Support Services Energy Reduction Strategy

Measure Q

Board of Education – April 7, 2022

## SCOPE OF WORK

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- Replace exterior light fixtures with energy efficient light fixtures. LDV and Leataata Floyd will receive interior LED retrofit also.
- Work in June - September, 2022
- 25 sites will receive work
- Average of 90% energy savings per light fixture
- Will receive SMUD energy retrofit rebate
- Expected project payback period of 7.8 years
- District Negotiated 7 year material warranty (1 year typical)
- PLA will apply
  - Inside Wireman classification

## PROCUREMENT METHOD

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- Government Code 4217 – Energy Service Contract
- Post a notice of public hearing to determine an energy service contract 14 days prior to meeting
- Board hold a public hearing to:
  - Determine whether the anticipated energy cost savings of proposed project has been reasonably established
  - Adopt a resolution to implement the proposed project as an “energy conservation facility” and award an energy service contract to contractor

# PROCUREMENT COST ANALYSIS

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## Value of 4217.10 vs Design, Bid, Build

### Budgeted Project Cost “Hard”\*

ITEM	Quantity	Unit Price	Total Price
Construction Costs (average price of total units)	4,804	\$477.92	\$2,388,164
		SMUD Rebate	-\$92,213
Insurance/Bonds	3% of cost minus rebate		\$57,399
	Construction Budget:		\$2,353,350

\*Information gathered from local lighting rep firms, supply houses and electrical contractors

### Budgeted, Typical Project Cost “Soft”

ITEM	Common %	Total Price
Scope Development and design	12%	\$282,402
Construction Management	10%	\$235,335
Project Allowance/Contingency	5%	\$117,668

Total Project Budget, Design-Bid-Build **\$2,988,755**

Total Project Budget, 4217.10 et seq. **\$2,353,350**

# FINANCIAL ANALYSIS

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## Project Investment: \$2,353,350

First year energy savings			\$295,920
Maintenance Savings			\$19,206
Inflation Rate			3%
Simple Payback			7.5 years
Internal Rate of Return			12%
<u>Year</u>	<u>Energy Cost Avoidance</u>	<u>Maintenance Cost Avoidance</u>	<u>Net Cost Avoidance</u>
One	\$295,920	\$19,206	\$315,126
Two	\$304,798	\$19,590	\$324,388
Three	\$313,942	\$19,982	\$333,923
Four	\$323,360	\$20,382	\$343,741
Five	\$333,061	\$20,789	\$353,850
Six	\$343,052	\$21,205	\$364,257
Seven	\$353,344	\$21,629	\$374,973
Eight	\$363,944	\$22,062	\$386,006
Nine	\$374,863	\$22,503	\$397,365
Ten	\$386,108	\$22,953	\$409,061
Eleven	\$397,692	\$21,805	\$419,497
Twelve	\$409,622	\$20,715	\$430,338
Thirteen	\$421,911	\$19,679	\$441,590
Fourteen	\$434,568	\$18,695	\$453,264
Fifteen	\$447,606	\$17,761	\$465,366
<b>Total</b>	<b>\$5,503,791</b>	<b>\$308,956</b>	<b>\$5,812,746</b>

# ESTIMATED ENERGY COST SAVINGS

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## ENERGY CONSERVATION MEASURES

MEASURE NUMBER	INCLUDED IN PROJECT	CAMPUS	PROJECT COST	ANNUAL SAVINGS	REBATE	COST/MINUS REBATE	SIMPLE PAYBACK Energy Savings Only
1	Y	ROSEMONT HS	\$315,050	\$31,693	\$12,225	\$302,825	9.6
2	Y	EINSTEIN MS	\$173,710	\$18,125	\$6,140	\$167,570	9.2
3	Y	GOLDEN EMPIRE ES	\$29,120	\$2,098	\$1,217	\$27,903	13.3
4	Y	CAMELIA BASIC	\$37,825	\$10,343	\$1,640	\$36,185	3.5
5	Y	SERNA CENTER / ENROLLMENT CENTER	\$89,024	\$23,281	\$8,080	\$80,944	3.5
6	Y	JOHN STILL MS	\$170,502	\$14,510	\$5,720	\$164,782	11.4
7	Y	JOHN STILL ES	\$67,040	\$9,923	\$4,100	\$62,940	6.3
8	Y	ROSA PARKS K-8	\$178,405	\$16,496	\$6,310	\$172,095	10.4
9	Y	JOHN BIDWELL ES	\$40,185	\$5,000	\$1,508	\$38,677	7.7
10	Y	PONY EXPRESS ES	\$50,350	\$6,376	\$1,874	\$48,476	7.6
11	Y	WENZEL K-8	\$27,488	\$5,636	\$1,526	\$25,962	4.6
12	Y	SCHOOL OF ENG AND SCIENCE	\$105,125	\$14,706	\$3,360	\$101,765	6.9
13	Y	KENNEDY HS	\$256,345	\$26,839	\$10,147	\$246,198	9.2
14	Y	SUTTERVILLE ES	\$33,724	\$2,043	\$1,360	\$32,364	15.8
15	Y	HOLLYWOOD PARK	\$37,334	\$4,606	\$1,500	\$35,834	7.8
16	Y	LEONARDO DA VINCI	\$204,674	\$25,393	\$3,024	\$201,650	7.9
17	Y	MC CLATCHY HS	\$126,000	\$19,396	\$5,678	\$120,322	6.2
18	Y	LETAATA FLOYD	\$111,488	\$11,472	\$2,002	\$109,486	9.5
19	Y	SUTTER MS	\$46,171	\$5,544	\$1,688	\$44,503	8.0
20	Y	JUDAH ES	\$32,914	\$2,576	\$1,280	\$31,634	12.3
21	Y	SACRAMENTO HS	\$122,558	\$18,035	\$5,188	\$117,370	6.5
22	Y	MARK TWAIN	\$27,000	\$3,105	\$1,080	\$25,920	8.3
23	Y	CHARLES A. JONES SKILL CTR	\$63,880	\$14,637	\$4,120	\$59,760	4.1
24	Y	CB WIRE	\$42,252	\$4,087	\$1,566	\$40,686	10.0
		TOTAL	\$2,388,164	\$295,920	\$92,213	\$2,295,951	7.8

Estimated ongoing general fund savings

SMUD Rebate

## NEXT STEPS FOR TONIGHT

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- Hold public hearing
- Board questions and comments
- Action for Resolution Authorizing Energy Service Contract under Government Code 4217.12