

Donald Lum Elementary School

SUMMARY OF SCHOOL CAMPUS

- **Address:** 1801 Sandcreek Way, Alameda, CA 94501
- **Principal - Phone No. :** Kami Harris - (510) 748 4009
- **Year Built:** Original 1959
- **Total site Area:** 4.20 acres
- **Building Square Footage:** 36,150 sf
- **5 Portables:** 4,800 sf (1991 to 1998)
- **1 Modular:** 1,440 sf in 1998

FACILITY DESCRIPTION

Lum Elementary School was first constructed in 1959, with (2) Classroom Pods, and the Multi-Purpose / Administration Building. Another Classroom pod was added in 1964, and a fourth Classroom Building with Library and Media Center was added in 1974. All these buildings are wood-frame on concrete pad foundations with steel post and wood beam roof framing, and composition shingle roofing. This campus, including the covered walkways, was seismically retro-fitted in 2000, along with the addition of accessible site ramps, restroom upgrades, and electrical, telecom, clock, PA, security and fire alarm improvements. It serves 466 (K-5) students in 24 classrooms and a large asphalt paved playground.

KEY ASSESSMENT ITEMS

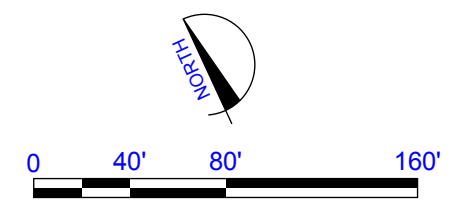
- Playground asphalt has deteriorated
- Roofing leaks and at end of service life
- Adhesive applied acoustic tile delaminating
- Interior floor and wall finishes at buildings and portables at end of service life
- Exterior windows, doors and wood finishes have reached end of service life
- HVAC system at computer room is ineffective
- Computer room wiring and cable is floor mounted
- Some dry rot at covered walkway beams



- CLASSROOM BUILDING
- ADMINISTRATION
- MULTI-PURPOSE / CAFETERIA BUILDING
- MODULAR BUILDING
- PORTABLE BUILDING
- COVERED WALKWAYS
- #C SEE ASSESSMENT SPREADSHEET FOR CIVIL KEYNOTES, TYP.

DONALD D. LUM ES
4/30/2012

Alameda USD Facilities Assessment



**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY		DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
				Quantity	Unit		
1) Civil							\$351,178
A) Existing Site Conditions							
i) ACCESS							
1	Existing Deficiency	ADA student drop off lacks compliant signage	1C				
	Recommended Remedy	Add compliant signage		1	LS	\$1,000	\$1,000
2	Existing Deficiency	Existing two parallel ADA stalls do not have compliant unloading zones, lack proper signage, and have excessive cross and longitudinal slope.	2C				
	Recommended Remedy	Based upon the limited number of onsite parking stalls, these two ADA stalls are not required. Significant costs would be associated with any attempt to make these compliant. We recommend that the signage be removed, and ADA markings be painted out, and that these be used for other parking or drop off purposes.		2	EA	\$500	\$1,000
3	Existing Deficiency	The ADA stall has out of date signage, and the required parking lot ADA entrance sign is located at the stall, rather than at the entrance to the parking lot.	3C				
	Recommended Remedy	Update ADA stall signage with the addition of the "fine" sign. Relocate the ADA parking lot entrance sign to the parking lot entrance.		1	LS	\$1,000	\$1,000
4	Existing Deficiency	Ramp to portable classroom has slope of 8.6%.	4C				
	Recommended Remedy	Lengthen ramp, or add pavement at bottom landing so ramp slope can be reduced to 1:12 max		160	SF	\$5	\$800
5	Existing Deficiency	Parking Area: Pavement deteriorated.	5C				
	Recommended Remedy	Crack seal, pavement fabric, and 1.5" minimum asphalt overlay		12,400	SF	\$6.00	\$74,400
6	Existing Deficiency	Play Area: Pavement is deteriorating	6C				
	Recommended Remedy	Crack seal, seal coat, and restripe.		49,800	SF	\$3.61	\$179,778

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
7 Existing Deficiency	Pavement cross slope perpendicular to building in this area is approximately 4.3%	7C				
Recommended Remedy	Consider removing 20 ft strip of existing pavement parallel to building. Install 6 ft band of pavement at 2% max cross slope adjoining building, and 5 ft wide planting area to take up grade, and regrade/repave/restripe remaining area at 2% max cross slope.		120	SF	\$10	\$1,200
ii) FIRE/LIFE SAFETY/HAZ MAT						
1 Existing Deficiency	Poor onsite hydrant coverage in south and west portions of campus					
Recommended Remedy	Fire access is good, and portions of the campus are fire sprinklered. Consider adding a private onsite hydrant in the southwest portion of the campus.		1	EA	\$65,000	\$65,000
iii) UTILITIES						
1 Existing Deficiency	It appears that the domestic water service and the fire sprinkler service do not have any backflow devices.	8C				
Recommended Remedy	Add RPBP to domestic service, and single check detector check in vault to fire service.		1	LS	\$22,000	\$22,000
2 Existing Deficiency	Areas of campus Irrigation are manual.					
Recommended Remedy	Upgrade Irrigation to remote programmable Controller		1	LS	\$5,000	\$5,000
2) Architectural						\$1,606,400
A) Exterior						
i) ACCESS						
1 Existing Deficiency	Playground: drink fountain is non accessible	#1				
Recommended Remedy	Replace with accessible DF and pipe barriers		1	PAIR	\$5,000	\$5,000
ii) DEFERRED MAINTENANCE						
1 Existing Deficiency	Corridor fascia; wood damage	#2, #3, #4				
Recommended Remedy	Check for insect damage, repair and repaint		1,200	LF	\$4	\$4,800
2 Existing Deficiency	Wood siding/trims: wood check and peeling paint.	#7				
Recommended Remedy	repair/replace, prep and repaint		17,800	SF	\$3	\$53,400
3 Existing Deficiency	CMU walls: discolored and different colors	#5				
Recommended Remedy	Reseal and repaint CMU block		17,800	SF	\$5	\$89,000

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
4 Existing Deficiency	Shingle and BUR roofing has reached end of service life					
Recommended Remedy	Replace all shingle roofs with S.S. metal roofing, and BUR with 30-yr BUR and cool roof coating. Also new fascia, gutter, and RWL.		36,150	SF	\$9	\$325,350
5 Existing Deficiency	Exterior windows w/ Plexiglas beyond Service life					
Recommended Remedy	Replace all windows with Alum. frame & dual pane glass		3,400	SF	\$44	\$149,600
6 Existing Deficiency	Exterior doors beyond service life					
Recommended Remedy	Replace all ext. doors with metal frame and FRP door		28	EA	\$4,400	\$123,200
7 Existing Deficiency	No Trash Enclosure at this Site					
Recommended Remedy	Install a 2-Bin Trash Enclosure per Health Dept. standards		1	EA	\$15,000	\$15,000
8 Existing Deficiency	B3 & B4 Portables: wood foundation dry rot; no site drainage; wood panel dry rot & roof leaks	#6, #8, #9, #11				
Recommended Remedy	Replace with concrete foundation; add site drainage and new RWLs; replace (E) units with new.		30	CY	\$1,500	\$45,000
9 Existing Deficiency	Music Portable: wood panel and foundation dry rot; no site drainage; metal frame and ramp rust; faded paint with different colors.	#12, #13, #14, #15				
Recommended Remedy	Replace with concrete foundation/ ramp; add site drainage and new RWLs; replace (E) unit with new.		18	CY	\$1,000	\$18,000
10 Existing Deficiency	B1 & B2 Portables: gutter down spout missing; no site drainage on west elevation;	#10, #17, #18				
Recommended Remedy	Replace wood foundation and ramps with concrete; add site drainage and new RWLs; repaint		2,000	SF	\$4	\$8,000
11 Existing Deficiency	Day Care Modular: damaged downspout; steel corrosion; ivy growth; wood paneling/trim damage; excess pine tree litter on roof and gutters.	#10, #16, #19, #20, #21				
Recommended Remedy	Remove all growth from perimeter; add 12" conc. mow strip and site drainage; repair/replace wood panel/trim with cement board and repaint; replace downspouts with RWLs; remove Pines adjacent to roof.		6,400	SF	\$8	\$51,200

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY		DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
				Quantity	Unit		
B) Interior							
i) GENERAL & MAINTENANCE							
1	Existing Deficiency	Deteriorated painted wall and trim finish					
	Recommended Remedy	Repaint all interior walls, trims, doors, and other painted items		36,150	SF	\$2	\$72,300
2	Existing Deficiency	All flooring at end of service life					
	Recommended Remedy	Replace all flooring with resilient flooring, and walk-off Entry carpet mat.		36,150	SF	\$5	\$180,750
3	Existing Deficiency	Multi-Use: applied ceiling tiles delaminating	#27				
	Recommended Remedy	Investigate if roof joists are vented. If not probable dry rot replacement. Install new acoustic ceiling		4,900	SF	\$6	\$29,400
4	Existing Deficiency	Multi-Use Kitchen: does not meet Health Code for Re-heat kitchen	#28, #29				
	Recommended Remedy	Renovate kitchen to District standard for re-heat.; remove Range Hood and gas line stubs		1,800	SF	\$120	\$216,000
5	Existing Deficiency	B3 & B4 Portables: damages ceiling tiles; worn out floor carpet; aged wall paneling, windows, & door	#24, #25				
	Recommended Remedy	See Item #8 above. Provide new modular		1	LS	103000	\$103,000
6	Existing Deficiency	Music Portable: classroom sink is non-accessible; replace ceiling tiles	#22, #26				
	Recommended Remedy	See Item #8 above. Provide new modular		1	LS	103000	\$103,000
7	Existing Deficiency	Day Care Modular: damaged ceiling tile from roof leaks	#23				
	Recommended Remedy	Reseal/ repair roof and replace damaged tiles; replace carpet with resilient tile and carpet walk-off entry		1,200	SF	\$12	\$14,400

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
3) Mechanical / Plumbing						\$236,600
A) Exterior						
i) SITE SYSTEMS						
1 Energy Management	campus energy management system does not exist					
Recommended Remedy	add campus wide ddc control and create district standard for energy control systems		36,150	SF	\$2	\$72,300
2 Roof top Gas lines	Exposed iron pipe gas lines have severe rusting					
Recommended Remedy	Replace all roof top gas lines	ALLOW	36,150	SF	\$2	\$72,300
3 Existing Restrooms	Interior classroom POD toilets are non-compliant. Main toilet rooms compliant, w/ waterless urinals.					
Recommended Remedy	replace non-compliant toilet room fixtures with urinals (0.125 gpf), water closets (1.28gpf), and lavatories (0,5gpm) to bring into current code compliance and reduce water consumption.		5	LS	\$6,000	\$30,000
B) Interior						
i) ACCESS						
N/A						
ii) EXISTING SYSTEMS						
1 Existing Systems- Admin	Rooftop units fair to poor condition. No cooling IT space					
Recommended Remedy	Replace as needed		1	LS	\$6,000	\$6,000
2 Existing Deficiency-PODS Classrooms	Interior Pods served by Fan coil with heating coil in good condition, however cooling is desired by District.					
Recommended Remedy	Add DX cooling coils and condensing units to existing systems, modify ductwork as necessary. Mount CU's on roof.		4	LS	\$6,000.00	\$24,000
3 Existing Deficiency-multi use	Ventilation with (3) self contained heating units (Poor Condition)					
Recommended Remedy	replace with high efficiency gas fired roof top ac unit		3	EA	\$8,000	\$24,000
4 Existing Deficiency-computer room	Self contained heater (fair condition). Cooling provided by portable ac unit, supplemented by swamp cooler.					
Recommended Remedy	replace with rooftop packaged ac unit and ductwork		1	EA	\$8,000	\$8,000

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
5 Existing Deficiency	(E) electric water heater at end of service life					
Recommended Remedy	Replace (5) electric water heaters		5	EA	\$4,000	\$20,000
6 Existing Deficiency	Sink piping is rust clogged w/ poor drainage					
Recommended Remedy	Replumb all sinks	ALLOW	30	EA	\$1,200	\$36,000
7 Existing Deficiency	Day Care Modular: Gas heater at end of service life					
Recommended Remedy	replace with high efficiency gas fired furnace with DX cooling coil and condensing unit.		1	LS	\$8,000	\$8,000
8 Boiler Plant	boiler/pumps about 10 years old. (fair condition)					
Recommended Remedy	Replace boiler and all associated equipment, and U.G. supply lines to Pods.		1	LS	\$150,000	\$150,000
4) Electrical						\$430,928
A) General						
i) EXISTING SYSTEMS						
School Modernization in 2000 included upgrades to electrical service , tele communication, clock, security, and fire alarm systems. No Cable TV service. Main switchboard appears to be original equipment (circa 1959) with some new panels installed.						
B) Mandatory						
i) EXTERIOR LIGHTING						
Existing System: Exterior building lighting provided by wallpacks and floodlights, surface square dropped lens at covered walkways.						
1 Existing Deficiency	Inadequate exterior lighting provided, walkways dark as noted by staff.					
Recommended Remedy	Add (15) fixtures and replace (E) with new; add (2) 16-ft pole fixtures at Parking area		30	EA	\$750	\$22,500
2 Existing Deficiency	No exterior emergency lighting provided for emergency egress.					
Recommended Remedy	Add exterior battery pack fixtures for minimum code coverage		15	EA	\$375	\$5,625
ii) INTERIOR LIGHTING						
Existing System: Existing suspended fluorescent fixtures in classroom areas do not have seismic supports						
1 Existing Deficiency	Suspended fixtures do not have seismic supports & cables to prevent sideways shifting					
Recommended Remedy	Add horizontal bracing and diagonal restraint wires per code		36,150	SF	\$2	\$72,300

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
C) Deferred Maintenance						
i) FIRE ALARM /DETECTION						
	Existing System:	Notifier control and expander panels, strobes, detectors are recent system upgrades				
1	Existing Deficiency					
	Recommended Remedy	Notifier panel is not preferred manufacturer				
		Replace fire alarm panel with district preferred manufacturer (Firelite).	1	LS	\$16,000	\$16,000
ii) TELEPHONE/DATA SYSTEM						
	Existing System:	Rack mounted Rauland telephone system upgrade.				
1	Existing Deficiency	Rauland panel is not preferred manufacturer				
	Recommended Remedy	Replace Rauland system with District standard VOIP.	1	EA	\$32,000	\$32,000
2	Existing Deficiency	In some areas, ie, media center, classrooms, offices, plastic floor thresholds or rugs used to cover data cables to tables and work stations.				
	Recommended Remedy	Add data outlets to eliminate use of thresholds	25	EA	\$400	\$10,000
3	Existing Deficiency	Surface raceway in several locations has broken pieces				
	Recommended Remedy	Replace broken raceway	100	LF	\$20	\$2,000
4	Existing Deficiency	Add data distribution equipment, including fiber optic panels, patch panels, switches and wireless data transmitters, to accommodate new data outlets note above				
	Recommended Remedy	Add data distribution equipment to activate all data outlets	3	EA	\$1,500	\$4,500
iii) BELL/CLOCK/SPEAKER SYSTEM						
	Existing System:	Rack mounted Rauland bell/clock/speaker system is recent upgrade				
1	Existing Deficiency	Rauland panel is not preferred manufacturer Master clock does not work, many clocks have been replaced.				
	Recommended Remedy	Replace Rauland system with District standard VOIP.	1	EA	\$10,000	\$10,000
v) INTERIOR LIGHTING						
	Existing System:	Suspended eggcrate 2x4 fluorescent fixtures in typical classrooms, surface eggcrate 2x4 in offices, cafeteria, and Multi Purpose room, floodlights at stage 1x4 fluorescemt wraparound fixtures in media center.				

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
1 Existing Deficiency	Fixtures appear to be older, with T8 or T12 lamps and magnetic ballasts.					
Recommended Remedy	Replace with new energy efficient fixtures w/ T5 lamps and electronic ballasts		36,150	SF	\$2	\$72,300
2 Existing Deficiency	Fixtures observed with broken or missing lenses.					
Recommended Remedy	Replace with new fixtures		20	EA	\$75	\$1,500
3 Existing Deficiency	Some occupancy sensors observed, local room switches are typical classroom and office lighting controls					
Recommended Remedy	Replace toggle switches with ultrasonic/infrared room occupancy sensors		36,150	SF	\$0.35	\$12,653
vi) EXIT SIGNS						
Existing System:	Exit signs and dual head battery packs observed.					
1 Existing Deficiency	Fixtures observed with broken or missing lenses.					
Recommended Remedy	Replace exit signs		5	EA	\$425	\$2,125
2 Existing Deficiency	Emergency egress fixtures were observed, quantity may not be adequate.					
Recommended Remedy	Add dual head battery packs at egress paths		10	EA	\$375	\$3,750
vii) POWER						
1 Existing Deficiency	Main panel sub feeders to Pods are rusted and shorting					
Recommended Remedy	Replace with new PVC conduit and conductors		1	EA	\$75,000	\$75,000
2 Existing Deficiency	Roof top power and signal conduit is rusting out.					
Recommended Remedy	Replace all roof top conduit		36,150	SF	\$2	\$72,300
3 Existing Deficiency	In some areas, ie, media center, classrooms, offices, plastic floor thresholds used to cover power cables to tables and work stations.					
Recommended Remedy	Add power outlets to eliminate use of thresholds		30	EA	\$475	\$14,250

**Lum Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
4 Existing Deficiency	In some areas, ie, media center, classrooms, offices, plastic surface raceway is broken and hanging loose from walls, with data and power cables exposed.					
Recommended Remedy	Replace broken raceways		100	LF	\$20	\$2,000
5 Existing Deficiency	In some areas, devices are missing coverplates with data or power cables exposed.					
Recommended Remedy	Replace coverplates		5	EA	\$25	\$125
6 Existing Deficiency	Inadequate power distribution for receptacles for data system as noted above					
Recommended Remedy	For added receptacles noted above, install new panelboard (42pole, 100amp, 120/208volt, 3phase, with Transient Voltage Surge Suppression) and new feeder from switchboard		1	LS	\$4,700	\$4,700
5) Structural						\$0
1 Existing Deficiency	none	NA				\$0
					Sub-Total	\$2,625,106
			Cost per SF:	#DIV/0!		
					SOFT COSTS @ 25%	\$656,276
TOTAL COSTS (not including escalation)						\$3,281,382

1



2



3



4



5



6



7



8



9



10



DONALD D. LUM ES

11



12



13



14



15



16



17



18



19



20



DONALD D. LUM ES

21



22



23



24



25



26



27



28



29



DONALD D. LUM ES