

# FACILITY CONDITION ASSESSMENT

*Prepared for*

DLR Group

1650 Spruce Street Suite 300

Riverside, California 92507

Kevin Fleming



## FACILITY CONDITION ASSESSMENT

OF

PALOS VERDES PENINSULA UNIFIED SCHOOL DISTRICT

LUNADA BAY ELEMENTARY

520 PASEO LUNADO

PALOS VERDES ESTATES. CALIFORNIA 90274

### PREPARED BY:

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### EMG PROJECT #:

119663.16R000-001.017

### DATE OF REPORT:

November 30, 2016

### ONSITE DATE:

October 3, 2016



engineering | environmental | capital planning | project management

**Immediate Repairs Report**  
**Lunada Bay Elementary**  
**5/4/2017**



Report Section	Location Description	ID	Cost Description	Quantity	Unit	Unit Cost	Subtotal	Deficiency Repair Estimate *
3.1	Throughout Property	486672	ADA, Miscellaneous, Ramp/Stairs, Handrails, Modify	8	EA	\$316.25	\$2,530	<b>\$2,530</b>
5.2	East Part of the Property	486714	Pedestrian Pavement, Sidewalk, Asphalt, Replace	300	SF	\$2.60	\$781	<b>\$781</b>
5.3	Upper Parking Lot	588320	Storm Water Drainage, Drainage Piping, Replace	102	LF	\$98.45	\$10,042	<b>\$10,042</b>
5.5	Northeast Playground and Southeast Basketball Courts	486720	Play Surfaces & Sports Courts, Asphalt, Cut and Patch	800	SF	\$5.90	\$4,720	<b>\$4,720</b>
5.5	Playground and Basketball/Volleyball Courts	486721	Play Surfaces & Sports Courts, Asphalt, Mill & Overlay	47800	SF	\$3.28	\$156,784	<b>\$156,784</b>
8.1	Classrooms 17 & 18, MPR	487470	Interior Ceiling Finish, Acoustical Tile (ACT), Replace	6100	SF	\$3.11	\$18,977	<b>\$18,977</b>
<b>Immediate Repairs Total</b>								<b>\$193,834</b>

\* Location Factor (1.0) included in totals.



5/4/2017

Report Section	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	Subtotal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Deficiency Repair Estimate	
3.1	Throughout Property	486672	ADA, Miscellaneous, Ramp/Stairs, Handrails, Modify	0	0	* 0	8	EA	\$316.25	\$2,530	\$2,530																				\$2,530	
5.2	Parking Lots	486715	Parking Lots, Asphalt Pavement, Seal & Stripe	5	3	2	25600	SF	\$0.38	\$9,715			\$9,715					\$9,715					\$9,715						\$9,715			\$38,861
5.2	East Part of the Property	486714	Pedestrian Pavement, Sidewalk, Asphalt, Replace	25	25	0	300	SF	\$2.60	\$781	\$781																					\$781
5.3	Upper Parking Lot	588320	Storm Water Drainage, Drainage Piping, Replace	40	59	0	102	LF	\$98.45	\$10,042	\$10,042																					\$10,042
5.5	Throughout Property	486727	Compact Fluorescent Lighting Fixture, 80 W, Replace	20	16	4	75	EA	\$256.88	\$19,266					\$19,266																	\$19,266
5.5	Throughout Property	486731	Flood Light, Exterior, 100 W, Replace	20	16	4	12	EA	\$995.47	\$11,946					\$11,946																	\$11,946
5.5	West Property Line	486736	Fences & Gates, Metal Tube, 4' High, Replace	30	23	7	450	LF	\$55.20	\$24,840								\$24,840														\$24,840
5.5	Throughout Property	486734	Fences & Gates, Chain Link, 8' High, Replace	30	17	13	1628	LF	\$53.90	\$87,749														\$87,749								\$87,749
5.5	Northeast Playground and Southeast Basketball Courts	486720	Play Surfaces & Sports Courts, Asphalt, Cut and Patch	25	25	0	800	SF	\$5.90	\$4,720	\$4,720																					\$4,720
5.5	Playground and Basketball/Volleyball Courts	486721	Play Surfaces & Sports Courts, Asphalt, Mill & Overlay	25	25	0	47800	SF	\$3.28	\$156,784	\$156,784																					\$156,784
5.5	Playground and Tennis/Volleyball Courts	486742	Play Surfaces & Sports Courts, Asphalt, Seal & Stripe	5	1	4	47800	SF	\$0.38	\$18,188					\$18,188					\$18,188					\$18,188						\$18,188	\$72,752
5.5	Playground	486745	Play Surfaces & Sports Courts, Rubber Tiles, Replace	20	13	7	11000	SF	\$16.63	\$182,875								\$182,875														\$182,875
5.5	Northwest Playground	486740	Play Structure, Pre-School, Replace	20	13	7	2	EA	\$7,590.00	\$15,180								\$15,180														\$15,180
5.5	Playground	486741	Play Structure, Swing Set, 4 Seats, Replace	20	13	7	3	EA	\$2,210.00	\$6,630								\$6,630														\$6,630
5.5	East Playground	486739	Play Structure, Medium, Replace	20	13	7	1	EA	\$40,005.63	\$40,006								\$40,006														\$40,006
6.3	Classrooms 17 & 18, Restrooms	486804	Roof, Asphalt Shingle Premium Grade, Replace	30	27	3	6180	SF	\$5.04	\$31,146				\$31,146																		\$31,146
6.3	Modular Classrooms	486806	Roof, Metal, Replace	40	31	9	5400	SF	\$12.45	\$67,225										\$67,225												\$67,225
6.3	Restrooms	486811	Roof Skylight, Plexiglass Dome Fixed 9-20 SF, Replace	30	23	7	6	EA	\$1,207.20	\$7,243								\$7,243														\$7,243
6.4	Throughout property	486883	Exterior Wall, Painted Surface, 1-2 Stories, Prep & Paint	10	6	4	47800	SF	\$2.87	\$137,219					\$137,219										\$137,219							\$274,439
6.4	Modular Classrooms	486889	Exterior Wall, Textured Plywood (T1-11), Replace	20	16	4	7700	SF	\$11.59	\$89,247					\$89,247																	\$89,247
7.1	MPR	486920	Fan, Centrifugal, Inline, 3,400 CFM, Replace	20	17	3	1	EA	\$3,875.39	\$3,875				\$3,875																		\$3,875
7.1	MPR	487482	Exhaust Fan, Centrifugal, 2,001 to 3,500 CFM, Replace	15	13	2	2	EA	\$3,072.78	\$6,146			\$6,146															\$6,146				\$12,291
7.1	Classrooms 18 & 19	487377	Furnace, Gas, 101 to 150 MBH, Replace	20	19	1	2	EA	\$5,644.27	\$11,289		\$11,289																				\$11,289
7.1	Classrooms K1 & K2	487320	Furnace, Gas, 101 to 150 MBH, Replace	20	17	3	2	EA	\$5,644.27	\$11,289				\$11,289																		\$11,289
7.1	MPR	486918	Furnace, Gas, 301 to 500 MBH, Replace	20	17	3	1	EA	\$18,756.31	\$18,756				\$18,756																		\$18,756
7.1	Permanent Buildings	487319	Furnace, Gas, 51 to 100 MBH, Replace	20	17	3	18	EA	\$3,801.45	\$68,426				\$68,426																		\$68,426
7.1	Modular Classrooms	486917	Heat Pump, 3.5 to 5 Ton, Replace	15	13	2	3	EA	\$8,928.22	\$26,785			\$26,785																\$26,785			\$53,569
7.2	MPR and Janitor Closet	487404	Water Heater, Gas, Residential, 30 to 50 GAL, Replace	10	8	2	2	EA	\$2,349.48	\$4,699			\$4,699										\$4,699									\$9,398
7.2	Office Building	487406	Water Heater, Gas, Residential, 30 to 50 GAL, Replace	10	5	5	1	EA	\$2,349.48	\$2,349						\$2,349											\$2,349					\$4,699
7.2	Throughout Building	588286	Plumbing System, Domestic Supply, Replace	40	37	3	30755	SF	\$5.84	\$179,609				\$179,609																		\$179,609
7.2	Site	588290	Sanitary Sewer System, Drain & Sewage, Vitrified Clay, 8", Renovate	50	48	2	600	LF	\$33.43	\$20,058			\$20,058																			\$20,058
7.4	Classrooms 17 and 18	487434	Circuit Breaker, 3 Phase, 600 V, 100 Amp, Replace	50	49	1	2	EA	\$1,945.76	\$3,892		\$3,892																				\$3,892
7.4	Main Electrical Room	487441	Building/Main Switchgear, 208 Y, 120 V, 1,600 Amp, Replace	30	16	14	1	EA	\$278,729.78	\$278,730															\$278,730							\$278,730
7.4	Classrooms 17 & 18	487437	Lighting System, Interior, School, Upgrade	25	24	1	2500	SF	\$15.36	\$38,409		\$38,409																				\$38,409
7.4	Throughout buildings	487439	Lighting System, Interior, School, Upgrade	25	17	8	28255	SF	\$15.36	\$434,093								\$434,093														\$434,093
7.5	MPR Stage	487445	ADA, Wheelchair Lift, Up to One Floor, Replace	15	6	9	1	EA	\$14,547.50	\$14,548										\$14,548												\$14,548
7.6	Office Heater Room	487449	Fire Alarm Control Panel, Multiplex, Replace	15	11	4	1	EA	\$4,284.35	\$4,284					\$4,284															\$4,284		\$8,569
8.1	Throughout buildings	487476	Interior Wall Finish, Concrete/Masonry, Prep & Paint	8	5	3	50700	SF	\$1.45	\$73,566				\$73,566								\$73,566									\$73,566	\$220,697
8.1	Throughout buildings	487467	Interior Floor Finish, Vinyl Tile (VCT), Replace	15	11	4	4600	SF	\$4.80	\$22,083					\$22,083																\$22,083	\$44,166
8.1	Restrooms	487468	Interior Floor Finish, Ceramic Tile, Replace	50	41	9	3100	SF	\$15.76	\$48,841										\$48,841												\$48,841
8.1	Throughout buildings	487466	Interior Floor Finish, Carpet Standard-Commercial Medium-Traffic, Replace	10	6	4	21500	SF	\$7.26	\$156,010					\$156,010										\$156,010							\$312,021
8.1	Classrooms 17 & 18, MPR	487470	Interior Ceiling Finish, Acoustical Tile (ACT), Replace																													

Report Section	Location	Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	Subtotal	Year																Deficiency Repair Estimate												
												2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		2033	2034	2035	2036								
	8.3	Kitchen	487490	Commercial Kitchen, Food Warmer, Replace	15	9	6	2	EA	\$1,551.91	\$3,104						\$3,104																\$3,104							
	8.3	Kitchen	487485	Commercial Kitchen, Freezer, 2-Door Reach-In, Replace	15	5	10	1	EA	\$4,644.00	\$4,644										\$4,644												\$4,644							
	8.3	Kitchen	487483	Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace	15	5	10	1	EA	\$4,256.00	\$4,256										\$4,256												\$4,256							
Totals, Unescalated												\$193,834	\$53,589	\$70,873	\$386,667	\$458,243	\$12,030	\$3,556	\$454,837	\$434,093	\$148,801	\$8,900	\$74,231	\$14,414	\$87,749	\$590,148	\$12,030	\$452	\$46,116	\$0	\$118,121	\$3,168,683								
Location Factor (1.00)												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Totals, Escalated (3.0% inflation, compounded annually)												\$193,834	\$55,196	\$75,189	\$422,522	\$515,757	\$13,946	\$4,246	\$559,392	\$549,896	\$194,151	\$11,961	\$102,753	\$20,551	\$128,863	\$892,651	\$18,742	\$725	\$76,223	\$0	\$207,125	\$4,043,724								

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## FACILITY CONDITION ASSESSMENT

LUNADA BAY ELEMENTARY  
520 PASEO LUNADO  
PALOS VERDES ESTATES, CALIFORNIA 90274

EMG PROJECT NO: 119663.16R000-001.017

# 1. EXECUTIVE SUMMARY

## 1.1. PROPERTY INFORMATION AND GENERAL PHYSICAL CONDITION

The property information is summarized in the table below. More detailed descriptions may be found in the various sections of the report and in the Appendices.

PROPERTY INFORMATION	
Address:	520 Paseo Lunado, Palos Verdes Estates, Los Angeles County, California 90274
Year Constructed/Renovated:	Built 1957 Renovated 2000
Current Occupants:	School
Management Point of Contact:	Palos Verdes Peninsula Unified School District Terry Kamibayashi, Maintenance & Operations Director 310.544.0045 phone 424.903.5241 cell <a href="mailto:kamibayashi@pvpusd.net">kamibayashi@pvpusd.net</a>
Property Type:	Elementary School
Site Area:	10.6 acres
Building Area:	30,755 SF
Number of Buildings:	12
Number of Stories:	1
Parking Type and Number of Spaces:	28 spaces in open lots.
Building Construction:	Masonry bearing walls and wood-framed roofs.
Roof Construction:	Permanent buildings: Gabled roofs with clay tiles. Modular buildings: Flat roofs with metal panels.
Exterior Finishes:	Permanent buildings: Painted Brick Veneer Modular buildings: Wood Siding
Heating, Ventilation and Air Conditioning:	Individual package heat pump units at modular classrooms. Forced-air furnace units at permanent classrooms. Supplemental components: Roof-mounted exhaust air fans.
Fire and Life/Safety:	Hydrants, smoke detectors, alarms, strobes, extinguishers, pull stations, alarm panel, exit signs.
Dates of Visit:	October 3, 2016
On-Site Point of Contact (POC):	Tony Pring
Assessment and Report Prepared by:	Valentin Tinajero
Reviewed by:	Mark Surdam Program Manager <a href="mailto:msurdam@emgcorp.com">msurdam@emgcorp.com</a> 800.733.0660 x6251

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SYSTEMIC CONDITION SUMMARY			
Site	Fair	HVAC	Fair
Structure	Fair	Plumbing	Fair
Roof	Fair	Electrical	Good
Vertical Envelope	Fair	Elevators	--
Interiors	Fair	Fire	Fair

The following bullet points highlight the most significant short term and modernization recommendations:

- Domestic water piping upgrade
- Sanitary sewer system upgrade
- Accessibility improvements
- Playground surface improvement
- Lighting upgrade

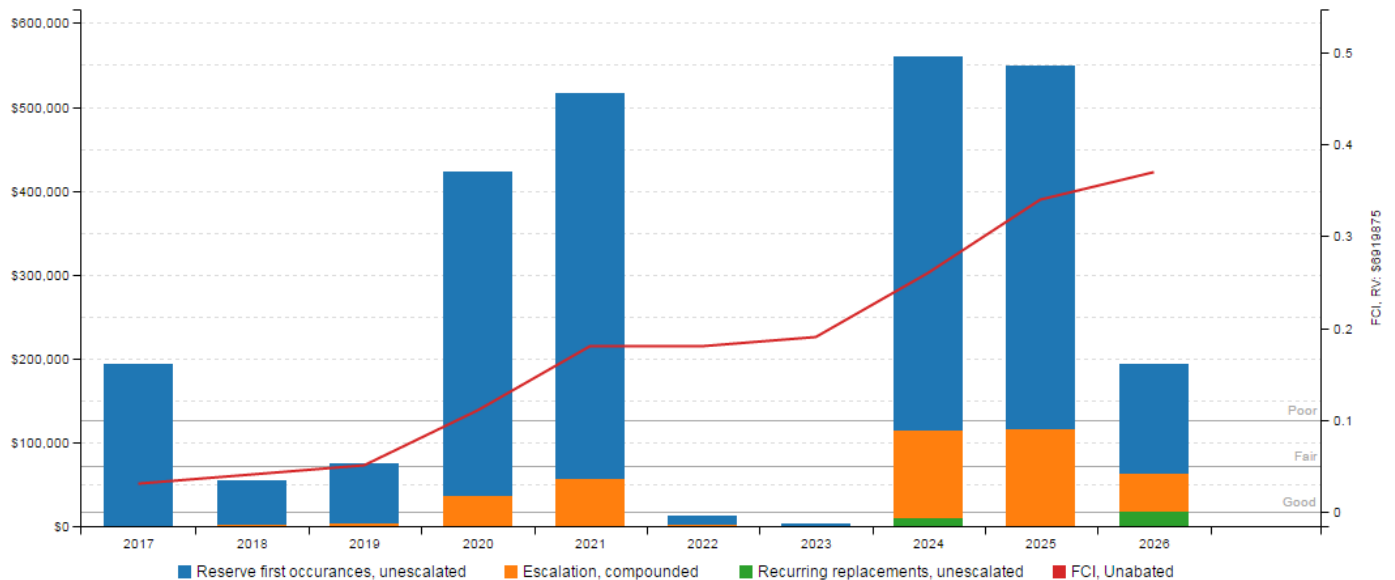
Generally, the property appears to have been constructed within industry standards in force at the time of construction. The property appears to have been well maintained in recent years and is in fair overall condition.

According to property management personnel, the property has had no capital improvement expenditures over the past three years.

## 1.2. FACILITY CONDITION INDEX (FCI)

### FCI Analysis: Lunada Bay Elementary

Replacement Value: \$ 6,919,875; Inflation rate: 3.0%



One of the major goals of the FCA is to calculate the FCI, which gives an indication of a building's overall condition. Two FCI ratios are calculated and presented, the Current Year and Ten-Year. The Current Year FCI is the ratio of Immediate Repair Costs to the building's Current Replacement Value. Similarly, the Ten-Year FCI is the ratio of anticipated Capital Reserve Needs over the next ten years to the Current Replacement Value.

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FCI CONDITION RATING	DEFINITION	PERCENTAGE VALUE
Good	In new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0% to 5%
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.	> than 5% to 10%
Poor	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	> than 10% to 60%
Very Poor	Has reached the end of its useful or serviceable life. Renewal is now necessary.	> than 60%

The graphs above and tables below represent summary-level findings for the FCA. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall strategy that can serve as the basis for a portfolio-wide capital improvement funding strategy. Key findings from the assessment include:

KEY FINDING	METRIC	
Current Year Facility Condition Index (FCI) $FCI = (IR)/(CRV)$	2.8%	Good
10-Year Facility Condition Index (FCI) $FCI = (RR)/(CRV)$	34%	Poor
Current Replacement Value (CRV)	30,755 SF * \$225 / SF = \$6,919,875	
Year 0 (Current Year) - Immediate Repairs (IR)	\$193,834	
Years 1-10 – Replacement Reserves (RR)	\$2,402,256	
<b>TOTAL Capital Needs</b>	<b>\$2,596,090</b>	

The major issues contributing to the Immediate Repair Costs and the Current Year FCI ratio are summarized below:

- Storm drainage system repairs
- Accessibility improvements
- Asphalt play surface and sidewalk repairs
- Ceiling replacement at portable classrooms

Further detail on the specific costs that make up the Immediate Repair Costs can be found in the cost tables in the appendices.

### 1.3. SPECIAL ISSUES AND FOLLOW-UP RECOMMENDATIONS

As part of the FCA, a limited assessment of accessible areas of the buildings was performed to determine the presence of suspected fungal growth, conditions conducive to such growth, and/or evidence of moisture. Property personnel were interviewed concerning any known or suspected fungal growth, elevated relative humidity, water intrusion, or mildew-like odors. Sampling is not a part of this assessment.

There are no visual indications of the presence of suspected fungal growth, conditions conducive to such growth, or evidence of moisture or moisture affected material in representative readily accessible areas of the property.

### 1.4. OPINIONS OF PROBABLE COST

Cost estimates are attached at the front of this report (following the cover page).

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means* and *Marshall & Swift*, EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.



Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc. ASTM E2018-15 recognizes that certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

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### 1.4.1. METHODOLOGY

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, EMG opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age. Projections of Remaining Useful Life (RUL) are based on continued use of the Property similar to the reported past use. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be derived from an actual take-off, lump sum costs or allowances are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

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### 1.4.2. IMMEDIATE REPAIRS

Immediate repairs are opinions of probable costs that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) material building or fire code violations, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

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### 1.4.3. REPLACEMENT RESERVES

Replacement Reserves are for recurring probable expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, EMG's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

EMG's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Repair Cost Estimate.

## 2. PURPOSE AND SCOPE

### 2.1. PURPOSE

EMG was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and possible issues or violations of record at municipal offices, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition, and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

#### FORMAT OF THE BODY OF THE REPORT:

Throughout sections 5 through 9 of this report, each report section will typically contain three subsections organized in the following sequence:

- A descriptive table (and/or narrative), which identifies the components assessed, their condition, and other key data points.
- A simple bulleted list of Anticipated Lifecycle Replacements, which lists components and assets typically in Excellent, Good, or Fair condition at the time of the assessment but that will require replacement or some other attention once aged past their estimated useful life. These listed components are typically included in the associated inventory database with costs identified and budgeted beyond the first several years.
- A bulleted cluster of Actions/Comments, which include more detailed narratives describing deficiencies, recommended repairs, and short term replacements. The assets and components associated with these bullets are/were typically problematic and in Poor or Failed condition at the time of the assessment, with corresponding costs included within the first few years.

#### CONDITIONS:

The physical condition of building systems and related components are typically defined as being in one of five conditions: Excellent, Good, Fair, Poor, Failed or a combination thereof. For the purposes of this report, the following definitions are used:

Excellent	=	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	=	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	=	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	=	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	=	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	=	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

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### PLAN TYPES:

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the “why” part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best” fit, typically the one with the greatest significance. The following Plan Types are listed in general weighted order of importance:

Safety	=	An observed or reported unsafe condition that if left unaddressed could result in an injury; a system or component that presents a potential liability risk.
Performance/Integrity	=	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses a risk to overall system stability.
Accessibility	=	Does not meet ADA, CBC and/or other handicap accessibility requirements.
Environmental	=	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Modernization/Adaptation	=	Conditions, systems, or spaces that need to be upgraded in appearance or function to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	=	Any component or system in which future repair or replacement is anticipated beyond the next several years and/or is of minimal substantial early-term consequence.

### PRIORITIZATION SCHEME:

One of EMG’s data-sorting exercises and deliverables of fundamental value is to evaluate and rank the recommendations and needs of the facility via a logical and well-developed prioritization scheme. The factors under consideration and built into the evaluation criteria include Plan Type (the “why”), Uniformat/building component type or system (the “what”), and condition/RUL (the “when”). The facility type or importance is also factored into the overall portfolio if relevant information is provided and applicable. EMG utilizes the following prioritization scheme:

Priority 1	=	<b>Immediate/Critical Items:</b> Require immediate action to either (a) correct a safety hazard or (b) address the most important building performance or integrity issues or failures.
Priority 2	=	<b>Potentially Critical Items:</b> Include (a) those safety/liability, component performance or building integrity issues of slightly less importance not captured in Priority 1 and/or (b) issues that if left unchecked could escalate into Immediate/Critical items. Accessibility and ‘stabilized’ environmental issues are also typically included in this subset.
Priority 3	=	<b>Necessary/Recommended Items:</b> Items of concern that generally either require attention or are suggested as improvements within the near term to: (a) improve usability, marketability, or efficiency; (b) reduce operational costs; (c) prevent or mitigate disruptions to normal operations; (d) modernize the facility; (e) adapt the facility to better meet occupant needs; and/or (f) should be addressed when the facility undergoes a significant renovation.
Priority 4	=	<b>Anticipated Lifecycle Replacements:</b> Renewal items which are generally associated with building components performing acceptably at the present time but will likely require replacement or other future attention within the timeframe under consideration.

## 2.2. SCOPE

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.

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- Provide a general statement of the Subject property's compliance with the Americans with Disability Act (ADA). Compliance with Title 24 California Building Code, Chapter 11B and other California Building Code chapters referenced in Chapter 11B, was not surveyed. This report does not constitute a full accessibility survey, but identifies exposure to selected ADA accessibility issues and the need for further accessibility review.
- Perform a limited assessment of accessible areas of the building(s) for the presence of fungal growth, conditions conducive to fungal growth, and/or evidence of moisture. EMG will also interview Project personnel regarding the presence of any known or suspected fungus, elevated relative humidity, water intrusion, or mildew-like odors. Potentially affected areas will be photographed. Sampling will not be considered in routine assessments.
- List the current utility service providers.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, in order to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report.

### 2.3. PERSONNEL INTERVIEWED

The management and maintenance staff, building engineers, and some key contractors were interviewed for specific information relating to the physical property, available maintenance procedures, historical performance of key building systems and components, available drawings and other documentation. The following personnel from the facility were interviewed in the process of conducting the FCA:

NAME AND TITLE	ORGANIZATION	PHONE NUMBER
Terry Kamibayashi Maintenance and Operations Director	Palos Verdes Peninsula Unified School District	310.544.0045
Tony Pring District Electrician	Palos Verdes Peninsula Unified School District	310.756.5408

The FCA was performed with the assistance of Tony Pring, District Electrician, Palos Verdes Peninsula Unified School District, the onsite Point of Contact (POC), who was cooperative and provided information that appeared to be accurate based upon subsequent site observations. The onsite contact is knowledgeable about the subject property and answered most questions posed during the interview process. The POC's management involvement at the property has been for the past 15 years.

### 2.4. DOCUMENTATION REVIEWED

Prior to the FCA, relevant documentation was requested that could aid in the knowledge of the subject property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions. The review of submitted documents does not include comment on the accuracy of such documents or their preparation, methodology, or protocol. The Documentation Request Form is provided in Appendix E.

Although Appendix E provides a summary of the documents requested or obtained, the following list provides more specific details about some of the documents that were reviewed or obtained during the site visit.

- No documents were provided for review.

### 2.5. PRE-SURVEY QUESTIONNAIRE

A Pre-Survey Questionnaire was sent to the POC prior to the site visit. The questionnaire was not received by EMG.

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### 2.6. WEATHER CONDITIONS

October 3, 2016: Clear, with temperatures in the low 80s (°F) and light winds.

### 3. ACCESSIBILITY & PROPERTY RESEARCH

#### 3.1. ADA ACCESSIBILITY

Generally, Title II of the Americans with Disabilities Act (ADA) applies to State and local government entities. Title II Subtitle A protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by state and local government entities. Title II extends the prohibition on discrimination established by section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, to all activities of state and local governments, regardless of Federal financial assistance. All state and local government facilities must be maintained and operated in compliance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG). In addition, in the state of California, compliance with the California Building Code (CBC) Chapter 11 *Accessibility to Public Buildings, Public Accommodations, Commercial Buildings, and Publicly Funded Housing* is required.

During the FCA, a limited visual observation for accessibility compliance was conducted. The scope of the visual observation was limited to those areas set forth in EMG's Abbreviated ADA Checklist, provided in Appendix D of this report. It is understood by the Client that the limited observations described herein does not comprise a full Accessibility Compliance Survey, and that such a survey is beyond the scope of EMG's undertaking for this report. The Abbreviated ADA Checklist targets key areas for compliance with 2010 ADA Standards for Accessible Design, and does not include California Building Code accessibility requirements. A full Accessibility Compliance Survey conducted by EMG would include both ADA and State of California accessibility requirements. For the FCA, only a representative sample of areas was observed and, other than those shown on the Abbreviated ADA Checklist, actual measurements were not taken to verify compliance.

The facility does appear to be accessible with respect to with Title II of the Americans with Disabilities Act (ADA). Elements as defined by the ADAAG that are not accessible, as stated within the priorities of Title II, are as follows:

The facility does not appear to be accessible with Title II of the Americans with Disabilities Act. Elements as defined by the ADAAG that are not accessible as stated within the priorities of Title II, are as follows:

##### **Entrances/Exits**

- Stair handrails do not extend beyond the top and bottom risers.

Estimated Cost: 8 landing @ \$316.25 each =..... \$2,530

A full Accessibility Compliance Survey may reveal additional aspects of the property that are not in compliance.

Corrections of these conditions should be addressed from a liability standpoint, but are not necessarily code violations. The Americans with Disabilities Act Accessibility Guidelines concern civil rights issues as they pertain to the disabled and are not a construction code, although many local jurisdictions have adopted the Guidelines as such. The cost to address the achievable items noted above is \$2,530 and is included as a lump sum in the Immediate Repairs Report.

#### 3.2. FLOOD ZONE AND SEISMIC ZONE

According to the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated September 26, 2008, the property is located in Zone X, defined as an area outside the 500-year flood plain with less than 0.2% annual probability of flooding. Annual Probability of Flooding of Less than one percent.

According to the 1997 Uniform Building Code Seismic Zone Map of the United States, the property is located in Seismic Zone 4, defined as an area of high probability of damaging ground motion.

## 4. EXISTING BUILDING ASSESSMENT

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### 4.1. SPACE TYPES

All 30,755 square feet of the building are owned by the Palos Verdes Unified School District, and occupied by Lunada Bay Elementary. The spaces are mostly a combination of offices, classrooms, multi-purpose room, and supporting restrooms, as well as mechanical and other utility spaces.

### 4.2. INACCESSIBLE AREAS OR KEY SPACES NOT OBSERVED

The entire school was observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, exterior of the property and the roof. All areas of the property were available for observation during the site visit.

A "down space" or area is a term used to describe a space that cannot be occupied due to poor conditions such as fire damage, water damage, missing equipment, damaged floor, wall or ceiling surfaces, or other significant deficiencies. There are no down spaces or areas.

## 5. SITE IMPROVEMENTS

### 5.1. UTILITIES

The following table identifies the utility suppliers and the condition and adequacy of the services.

SITE UTILITIES		
UTILITY	SUPPLIER	CONDITION AND ADEQUACY
Sanitary sewer	California Water	Good
Storm sewer	California Water	Good
Domestic water	California Water	Good
Electric service	Southern California Edison	Good
Natural gas service	Southern California Gas Company	Good

#### Actions/Comments:

- According to the POC, the utilities provided are adequate for the property. There are no unique, onsite utility systems such as emergency electrical generators, septic systems, water or waste water treatment plants, or propane gas tanks.

### 5.2. PARKING, PAVING, AND SIDEWALKS

ITEM	DESCRIPTION
Main Ingress and Egress	Paseo Lunado
Access from	North
Additional Entrances	None
Additional Access from	--

PAVING AND FLATWORK			
ITEM	MATERIAL	LAST WORK DONE	CONDITION
Entrance Driveway Apron	Concrete	5+ years	Good
Parking Lot	Asphalt	5+ years	Good
Drive Aisles	Asphalt	5+ years	Good
Service Aisles	None	--	--
Sidewalks	Concrete and Asphalt	10+ years	Fair
Curbs	Concrete	10+ years	Fair
Site Stairs	Cast-in-place concrete	10+ years	Fair
Pedestrian Ramps	Cast-in-place concrete	10+ years	Fair



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PARKING COUNT				
OPEN LOT	CARPORT	PRIVATE GARAGE	SUBTERRANEAN GARAGE	FREESTANDING PARKING STRUCTURE
28	-	--	--	--
Total Number of ADA Compliant Spaces			2	
Number of ADA Compliant Spaces for Vans			2	
Total Parking Spaces			28	
Parking Ratio (Spaces/1,000 SF)			0.91	
Method of Obtaining Parking Count			Physical count	

EXTERIOR STAIRS			
LOCATION	MATERIAL	HANDRAILS	CONDITION
Throughout Property	Concrete stairs	Metal	Fair

### Anticipated Lifecycle Replacements:

- Asphalt seal coating

### Actions/Comments:

- The asphalt sidewalk leading to the east side of the property exhibits significant areas of failure and deterioration, such as alligator cracking and localized depressions. The most severely damaged areas of paving must be cut and patched in order to maintain the integrity of the overall pavement system.

## 5.3. DRAINAGE SYSTEMS AND EROSION CONTROL

DRAINAGE SYSTEM AND EROSION CONTROL		
SYSTEM	EXISTS AT SITE	CONDITION
Surface Flow	<input checked="" type="checkbox"/>	Fair
Inlets	<input checked="" type="checkbox"/>	Fair
Swales	<input checked="" type="checkbox"/>	Fair
Detention pond	<input type="checkbox"/>	--
Lagoons	<input type="checkbox"/>	--
Ponds	<input type="checkbox"/>	--
Underground Piping	<input checked="" type="checkbox"/>	Poor
Pits	<input type="checkbox"/>	--
Municipal System	<input type="checkbox"/>	--
Dry Well	<input type="checkbox"/>	--

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### Anticipated Lifecycle Replacements:

- No components of significance

### Actions/Comments:

- There are two locations of damaged and broken storm drainage at the upper parking lot adjacent to Room 2. These sections of deficient storm drainage require repair. A budgetary cost for repair is included.

## 5.4. TOPOGRAPHY AND LANDSCAPING

ITEM	DESCRIPTION						
Site Topography	Slopes moderately down from the east side of the property to the west property line.						
Landscaping	Trees	Grass	Flower Beds	Planters	Drought Tolerant Plants	Decorative Stone	None
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landscaping Condition	Fair						
Irrigation	Automatic Underground		Drip		Hand Watering		None
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Irrigation Condition	Fair						

RETAINING WALLS		
TYPE	LOCATION	CONDITION
CMU	Throughout Property	Good

### Anticipated Lifecycle Replacements:

- No components of significance

### Actions/Comments:

- The topography and adjacent uses do not appear to present conditions detrimental to the property. There are no significant areas of erosion.

## 5.5. GENERAL SITE IMPROVEMENTS

PROPERTY SIGNAGE	
Property Signage	Monument
Street Address Displayed?	Yes

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SITE AND BUILDING LIGHTING					
Site Lighting	None	Pole Mounted	Bollard Lights	Ground Mounted	Parking Lot Pole Type
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Overall Site Lighting Condition			Fair	
Building Lighting	None		Wall Mounted		Recessed Soffit
	<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>
	Overall Building Lighting Condition			Fair	

SITE FENCING		
TYPE	LOCATION	CONDITION
Chain link with metal posts	Throughout Property	Fair
Tube steel	Northeast parking lot and west property line	Fair

REFUSE DISPOSAL				
Refuse Disposal			Common area dumpsters	
Dumpster Locations	Mounting	Enclosure	Contracted?	Condition
Northeast Parking Lot	Asphalt paving	Chain link fence	Yes	Fair

OTHER SITE AMENITIES			
	DESCRIPTION	LOCATION	CONDITION
Playground Equipment	Metal	Play Area	Fair
Tennis Courts	None	--	--
Basketball Court	Asphalt	Open Play Area	Poor
Swimming Pool	None	--	--

### Anticipated Lifecycle Replacements:

- Exterior lighting
- Site fencing
- Basketball/volleyball court seal and coat
- Playground equipment
- Playground surfaces

### Actions/Comments:

- The basketball court and asphalt playground surfaces have isolated areas of failure and deterioration, such as alligator cracking and transverse cracking at the northeast part of the playground and at the southwest combination volleyball/basketball courts. The most severely damaged areas of paving must be cut and patched in order to maintain the integrity of the overall pavement system. Complete milling and overlay of the entire playground is also recommended.
- On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

## 6. BUILDING ARCHITECTURAL AND STRUCTURAL SYSTEMS

### 6.1. FOUNDATIONS

BUILDING FOUNDATION		
ITEM	DESCRIPTION	CONDITION
PERMANENT STRUCTURES		
Foundation	Slab on grade with integral footings	Fair
Basement and Crawl Space	None	--
PORTABLE STRUCTURES		
Foundation	Piles (wood)	Fair
Basement and Crawl Space	Crawl Space, Asphalt Floor	Fair

#### **Anticipated Lifecycle Replacements:**

- No components of significance

#### **Actions/Comments:**

- The foundation systems are concealed. There are no significant signs of settlement, deflection, or movement. The crawl space walls appear intact and structurally sound. There is no evidence of movement or water infiltration.

### 6.2. SUPERSTRUCTURE

BUILDING SUPERSTRUCTURE		
ITEM	DESCRIPTION	CONDITION
PERMANENT STRUCTURES		
Framing / Load-Bearing Walls	Masonry walls	Fair
Ground Floor	Concrete slab	Fair
Upper Floor Framing	None	--
Upper Floor Decking	None	--
Roof Framing	Wood joists, purlins, rafters	Fair
Roof Decking	Plywood or OSB	Fair
PORTABLE STRUCTURES		
Framing / Load-Bearing Walls	Light-gauge steel	Fair
Ground Floor	Raised wood	Fair
Upper Floor Framing	None	--
Upper Floor Decking	None	--
Roof Framing	Steel beams or girders	Fair
Roof Decking	Metal decking	Fair

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### **Anticipated Lifecycle Replacements:**

- No components of significance

### **Actions/Comments:**

- The superstructure is concealed. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.

## 6.3. ROOFING

PRIMARY ROOF			
Type / Geometry	Gabled	Finish	Concrete/clay tiles
Maintenance	In-house staff	Roof Age	20+ years at Classrooms 9-16 4 years everywhere else
Flashing	Sheet metal	Warranties	No
Parapet Copings	NA; no parapet walls	Roof Drains	Gutters and downspouts
Fascia	Metal	Insulation	Fiberglass batts
Soffits	Concealed	Skylights	No
Attics	Yes	Ponding	No
Ventilation Source-1	Gravity vents	Leaks Observed	No
Ventilation Source-2	Soffit vents	Roof Condition	Fair

The primary roof is located at the permanent buildings.

SECONDARY ROOF			
Type / Geometry	Flat or low-sloping	Finish	Metal
Maintenance	In-house staff	Roof Age	18 years
Flashing	Sheet metal	Warranties	No
Parapet Copings	NA; no parapet walls	Roof Drains	Gutters and downspouts
Fascia	Metal	Insulation	Rigid board
Soffits	Concealed	Skylights	No
Attics	No	Ponding	No
Ventilation Source-1	None	Leaks Observed	No
Ventilation Source-2	--	Roof Condition	Fair

The secondary roof is located at the modular buildings.

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SECONDARY ROOF			
Type / Geometry	Gabled	Finish	Asphalt shingles
Maintenance	In-house staff	Roof Age	20+ years
Flashing	Sheet metal	Warranties	No
Parapet Copings	NA; no parapet walls	Roof Drains	Gutters and downspouts
Fascia	Metal	Insulation	Fiberglass batts
Soffits	Concealed	Skylights	Yes
Attics	Yes	Ponding	No
Ventilation Source-1	Gable end vents	Leaks Observed	No
Ventilation Source-2	--	Roof Condition	Fair

The tertiary roof is located at classrooms 17 and 18, as well as the restrooms. The skylights are located at the restrooms.

### **Anticipated Lifecycle Replacements:**

- Asphalt shingles
- Metal roofs
- Roof flashings (included as part of overall membrane replacement)
- Skylights

### **Actions/Comments:**

- The roof finishes vary in age. Information regarding roof warranties or bonds was not available. The roofs are maintained by the in-house maintenance staff.
- The property owner reported that roof leaks have occurred in the past. No evidence of active roof leaks was observed at the time of the assessment.
- There is no evidence of roof deck or insulation deterioration. The roof substrate and insulation should be inspected during any future roof repair or replacement work.
- Roof drainage appears to be adequate. Clearing and minor repair of drain system components should be performed regularly as part of the property management's routine maintenance and operations program.
- There is no evidence of moisture, water intrusion, or excessive daylight in the attics. The insulation in the attics appears to be adequate.

## 6.4. EXTERIOR WALLS

BUILDING EXTERIOR WALLS		
TYPE	LOCATION	CONDITION
Primary Finish	Painted Brick veneer	Fair
Secondary Finish	Wood siding	Fair
Accented with	Wood trim	Fair
Soffits	Concealed	Fair

Building sealants (caulking) are located between dissimilar materials, at joints, and around window and door openings.

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### **Anticipated Lifecycle Replacements:**

- Exterior paint
- Plywood siding
- Wood trim (included with siding)

### **Actions/Comments:**

- The property owner reported that water infiltration at the exterior walls has occurred in the past. No evidence of active water infiltration was observed at the time of the assessment.
- The property owner reported that some areas of the building envelope are poorly insulated. The on-site POC was unable to identify specific, significant areas of insufficient insulation at the time of the assessment. It is recommended that areas of damaged, inadequate, and missing insulation are repaired as part of the property manager's routine maintenance plan.
- No significant actions are identified at the present time. On-going periodic maintenance, including patching repairs, graffiti removal, and re-caulking, is highly recommended. Future lifecycle replacements of the components listed above will be required.

## 6.5. EXTERIOR AND INTERIOR STAIRS

Not applicable. There are no exterior or interior stairs.

## 6.6. EXTERIOR WINDOWS AND DOORS

BUILDING WINDOWS				
WINDOW FRAMING	GLAZING	LOCATION	WINDOW SCREEN	CONDITION
Steel framed, operable	Single pane	Permanent Buildings	<input type="checkbox"/>	Fair
Aluminum framed, operable	Double pane	Modular Classrooms	<input checked="" type="checkbox"/>	Fair

BUILDING DOORS		
CATEGORY	DOOR TYPE	CONDITION
Main Entrance Doors	Metal, insulated	Good
Secondary Entrance Doors	Metal, insulated	Good
Service Doors	Metal, insulated	Fair
Overhead Doors	None	--

### **Anticipated Lifecycle Replacements:**

- No components of significance

### **Actions/Comments:**

- The property owner reported that water infiltration at the exterior windows has occurred in the past. No evidence of active water infiltration was observed at the time of the assessment.
- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended.

## 6.7. PATIO, TERRACE, AND BALCONY

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BUILDING PATIO, TERRACE AND BALCONY			
TYPE	DESCRIPTION	LOCATION	CONDITION
Ground Floor Patio	Concrete and Asphalt Paving	Lunch areas outside MPR	Good
Upper Balcony Structure	None	--	--
Balcony Decks	None	--	--
Balcony Deck Toppings	None	--	--
Balcony Guardrails	None	--	--

### ***Anticipated Lifecycle Replacements:***

- No components of significance

### ***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.



## 7. BUILDING MECHANICAL AND PLUMBING SYSTEMS

### 7.1. BUILDING HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

INDIVIDUAL UNITS	
Primary Components	Furnaces
Cooling (if separate from above)	None
Quantity and Capacity Ranges	23 furnace units ranging from 66MBH to 150 MBH.
Total Heating or Cooling Capacity	2,300,000 BTUH
Heating Fuel	Natural gas
Location of Equipment	Throughout interior spaces
Space Served by System	Permanent buildings
Age Ranges	All units dated 2000
Primary Component Condition	Fair

SUPPLEMENTAL COMPONENTS	
Supplemental Component #1	Package units heat pumps
Location / Space Served by Heat Pumps	Modular Classrooms
Heat Pump Condition	Fair
Supplemental Component #2	Duct furnace
Location / Space Served by Duct Furnace	MPR
Duct Furnace Condition	Fair

CONTROLS AND VENTILATION	
HVAC Control System	Individual programmable thermostats/controls
HVAC Control System Condition	Fair
Building Ventilation	Rooftop exhaust fans
Ventilation System Condition	Fair

#### **Anticipated Lifecycle Replacements:**

- Heat pump package units
- Forced-Air Furnaces
- Duct Furnace
- Rooftop exhaust fans

#### **Actions/Comments:**

- The HVAC systems are maintained by the in-house maintenance staff. Records of the installation, maintenance, upgrades, and replacement of the HVAC equipment at the property have not been maintained since the property was first occupied.
- The HVAC equipment varies in age, although most equipment was replaced in 2000, during a major renovation. HVAC equipment is replaced on an "as needed" basis.

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- The HVAC equipment appears to be functioning adequately overall. The maintenance staff were interviewed about the historical and recent performance of the equipment and systems. No chronic problems were reported and an overall sense of satisfaction with the systems was conveyed. However, due to the inevitable failure of parts and components over time, some of the equipment will require replacement.
- The forced-air furnace units at classrooms 18 & 19 appear to be more than 30 years old. Although the units appear to be functioning properly, it is recommended that they are replaced within the next few years, due to their age.

### 7.2. BUILDING PLUMBING AND DOMESTIC HOT WATER

BUILDING PLUMBING SYSTEM		
TYPE	DESCRIPTION	CONDITION
Water Supply Piping	Galvanized iron	Fair
Waste/Sewer Piping	Clay and Cast Iron	Poor
Vent Piping	Cast iron	Fair
Water Meter Location	Front Sidewalk	

DOMESTIC WATER HEATERS OR BOILERS	
Components	Water Heaters
Fuel	Natural gas
Quantity and Input Capacity	3 units at 40,000 BTUH each
Storage Capacity	30 gallons each
Boiler or Water Heater Condition	Fair
Supplementary Storage Tanks?	No
Storage Tank Quantity & Volume	None
Quantity of Storage Tanks	0
Storage Tank Condition	--
Domestic Hot Water Circulation Pumps (3 HP and over)	No
Adequacy of Hot Water	Adequate
Adequacy of Water Pressure	Adequate

PLUMBING FIXTURES	
Water Closets	Commercial
Toilet (Water Closet) Flush Rating	1.6 GPF
Common Area Faucet Nominal Flow Rate	2.2 GPM
Condition	Fair

#### **Anticipated Lifecycle Replacements:**

- Water heaters

## FACILITY CONDITION ASSESSMENT

LUNADA BAY ELEMENTARY  
520 PASEO LUNADO  
PALOS VERDES ESTATES, CALIFORNIA 90274

EMG PROJECT NO: 119663.16R000-001.017

### Actions/Comments:

- The domestic water lines are galvanized iron original to the 1957 construction. To date there has been no history of chronic leaks or water pressure problems. However, it is quite common for galvanized iron piping to develop problems due to long-term corrosion with thinning walls and/or interior mineral deposit accumulation, especially once it has aged 40 or 50 years. As such, EMG recommends replacing all the plumbing supply lines with copper. A budgetary cost allowance is included.
- The owner reported that the sanitary sewer collection system has a history of frequent clogging. Sections of the sanitary sewer are reported to be original to the 1957 building construction. Maintenance and repairs of the on-site sanitary sewer system are the responsibility of the property owner. The sanitary sewer collection system requires replacement. A budgetary cost allowance is included.

## 7.3. BUILDING GAS DISTRIBUTION

Gas service is supplied from the gas main on the adjacent public street. The gas meters and regulators are located along the exterior walls of the buildings. The gas distribution piping within each building is malleable steel (black iron).

### Anticipated Lifecycle Replacements:

- No components of significance

### Actions/Comments:

- The pressure and quantity of gas appear to be adequate.
- The gas meters and regulators appear to be functioning adequately and will require routine maintenance.
- Only limited observation of the gas distribution piping can be made due to hidden conditions.

## 7.4. BUILDING ELECTRICAL

BUILDING ELECTRICAL SYSTEMS			
Electrical Lines	Underground	Transformer	Pad-mounted
Main Service Size	1,600 Amps	Volts	120/208 Volt, three-phase
Meter & Panel Location	Electrical Room	Branch Wiring	Copper
Conduit	Metallic	Step-Down Transformers?	No
Security / Surveillance System?	No	Building Intercom System?	No
Lighting Fixtures	T-8		
Main Distribution Condition	Fair		
Secondary Panel and Transformer Condition	Fair		
Lighting Condition	Fair		

BUILDING EMERGENCY SYSTEM			
Size	None	Fuel	Choose an item.
Generator / UPS Serves	NA	Tank Location	NA
Testing Frequency	NA	Tank Type	Choose an item.
Generator / UPS Condition	--		

## FACILITY CONDITION ASSESSMENT

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### **Anticipated Lifecycle Replacements:**

- Interior light fixtures

### **Actions/Comments:**

- The onsite electrical systems up to the meters are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- The panels and switchboards were installed in 2000. The electrical service is reportedly adequate for the facility's needs. However, due to the age of the switchboard and increasing difficulty of obtaining replacement parts over time, lifecycle replacements are recommended per above.
- The electrical panels and light fixtures at classrooms 17 and 18 were not replaced during the 2000 renovation and appear to be more than 25 years old. Due to their age, replacement of these components is recommended during the next several years.

## 7.5. BUILDING ELEVATORS AND CONVEYING SYSTEMS

BUILDING ELEVATORS			
Manufacturer	None	Machinery Location	N/A
Safety Stops	--	Emergency Equipment	No
Cab Floor Finish	N/A	Cab Wall Finish	N/A
Hydraulic Elevators	None		
Overhead Traction Elevators	None		
Freight Elevators	None		
Machinery Condition	--		
Controls Condition	--		
Cab Finish Condition	--		
Other Conveyances	Wheelchair Lift		
Other Conveyance Condition	Fair		

### **Anticipated Lifecycle Replacements:**

- Wheelchair lift

### **Actions/Comments:**

- The wheelchair lift is serviced on a routine basis. The wheelchair lift appears to be more than 10 years old.
- The wheelchair lift appears to provide adequate service. The wheelchair lift will require continued periodic maintenance.
- The wheelchair lift is inspected on an annual basis by the municipality, and a certificate of inspection is displayed on the lift. The inspection certificate has expired. It is common for inspections to occur behind schedule. A new inspection should be scheduled as soon as possible.

## 7.6. FIRE PROTECTION AND SECURITY SYSTEMS

ITEM	DESCRIPTION
Type	None

# FACILITY CONDITION ASSESSMENT

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ITEM	DESCRIPTION					
Type	None					
Fire Alarm System	Central Alarm Panel	<input checked="" type="checkbox"/>	Battery-Operated Smoke Detectors	<input type="checkbox"/>	Alarm Horns	<input checked="" type="checkbox"/>
	Annunciator Panels	<input checked="" type="checkbox"/>	Hard-Wired Smoke Detectors	<input checked="" type="checkbox"/>	Strobe Light Alarms	<input checked="" type="checkbox"/>
	Pull Stations	<input checked="" type="checkbox"/>	Emergency Battery-Pack Lighting	<input type="checkbox"/>	Illuminated EXIT Signs	<input checked="" type="checkbox"/>
Alarm System Condition	Fair					
Sprinkler System	None	<input checked="" type="checkbox"/>	Standpipes	<input checked="" type="checkbox"/>	Backflow Preventer	<input checked="" type="checkbox"/>
	Hose Cabinets	<input type="checkbox"/>	Fire Pumps	<input type="checkbox"/>	Siamese Connections	<input type="checkbox"/>
Suppression Condition	--					
Central Alarm Panel System	Location of Alarm Panel			Installation Date of Alarm Panel		
	Office Heater Room			Unknown		
Fire Extinguishers	Last Service Date			Servicing Current?		
	8/3/2016			Yes		
Hydrant Location	South Parking Lot					
Siamese Location	None					
Special Systems	Kitchen Suppression System		<input type="checkbox"/>	Computer Room Suppression System		<input type="checkbox"/>

## Anticipated Lifecycle Replacements:

- Central alarm panel

## Actions/Comments:

- The central alarm panel appears to be in good condition and is serviced regularly by a qualified fire equipment contractor. Equipment testing is not within the scope of a Facility Condition Assessment. Based on inspection documents displayed by the panel, the central alarm panel has been inspected within the last year. Fire alarm panels contain sophisticated electronic circuits that are constantly energized. Over time, circuit components deteriorate or become obsolete. Even though an alarm panel may continue to function well past its estimated design life, replacement parts may become difficult to obtain and in many cases the alarm panel will not communicate with new devices it is supposed to monitor. Replacement is recommended during the reserve time.
- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

## 8. INTERIOR SPACES

### 8.1. INTERIOR FINISHES

The facility is used as an elementary school by the Palos Verdes School District.

The most significant interior spaces include classrooms, offices, a multipurpose room, a library, and a main entrance lobby. Supporting areas include hallways, administrative offices, restrooms, employee break room, mechanical rooms, and utility closets.

The following table generally describes the locations and typical conditions of the interior finishes within the facility:

TYPICAL FLOOR FINISHES		
FLOOR FINISH	LOCATIONS	GENERAL CONDITION
Carpet	Offices, breakroom, corridor, workroom, offices, classrooms	Fair
Vinyl tile	Lobby, kitchen, janitor closet, multipurpose room	Fair
Ceramic tile	Restrooms	Fair
TYPICAL WALL FINISHES		
WALL FINISH	LOCATIONS	GENERAL CONDITION
Painted brick	Kitchen, classrooms	Fair
Painted drywall	Lobby, office, breakroom, corridor, workroom, restrooms, janitor closet	Fair
Ceramic tile	Wainscot at restrooms	Fair
TYPICAL CEILING FINISHES		
CEILING FINISH	LOCATIONS	GENERAL CONDITION
Suspended T-Bar (acoustic tile)	Classrooms	Fair
Hard (glued) tiles	Classrooms 17 & 18, MPR	Poor
Painted drywall	Restrooms, lobby, office, breakroom, corridor, workroom, offices, mechanical room, kitchen, janitor closets	Good
INTERIOR DOORS		
ITEM	TYPE	CONDITION
Interior Doors	Hollow core wood	Fair
Door Framing	Metal	Good
Fire Doors	No	--

#### **Anticipated Lifecycle Replacements:**

- Carpet
- Vinyl tile
- Ceramic tile
- Interior paint

## FACILITY CONDITION ASSESSMENT

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- Suspended acoustic ceiling tile
- Hard tile ceilings
- Kitchenette appliances

### **Actions/Comments:**

- Most of the interior areas throughout the school were last renovated in 2000.
- The ceiling finishes at classrooms 17 & 18, as well as the MPR were not replaced during the renovation in 2000. As such, the ceilings in these buildings are old and outdated, with damaged and loose ceiling tiles. Replacement of the ceilings is recommended at these buildings.
- No other significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

## 8.2. FURNITURE, FIXTURES AND EQUIPMENT (FF&E)

The school's furniture, fixtures and equipment (FF&E) consist of casework, marker and tack boards, screens and projectors, shelving, desks, tables and chairs, computers, task lights and bleachers. Other than casework, assessment of FF&E is not included in the scope of work.

### **Anticipated Lifecycle Replacements:**

- Classroom cabinets

### **Actions/Comments:**

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required
- The school's FF&E vary in age and are in fair condition. Based on the estimated Remaining Useful Life (RUL), the FF&E will require replacement over the assessment period. This work is considered routine maintenance and is part of the school's operational expense.

## 8.3. COMMERCIAL KITCHEN & LAUNDRY EQUIPMENT

The multipurpose room kitchen has a variety of commercial kitchen appliances, fixtures, and equipment. The equipment is owned and maintained in-house.

The multipurpose room kitchen includes the following major appliances, fixtures, and equipment:

COMMERCIAL KITCHEN		
APPLIANCE	COMMENT AND CONDITION	
Refrigerators	Up-right	Fair
Freezers	Up-right	Fair
Ranges	N/A	--
Ovens	Gas	Fair
Griddles / Grills	N/A	--
Fryers	N/A	--
Hood	Exhaust ducted to exterior	Fair
Dishwasher	None	--
Microwave	☒	Fair

## FACILITY CONDITION ASSESSMENT

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COMMERCIAL KITCHEN		
APPLIANCE	COMMENT AND CONDITION	
Ice Machines	<input type="checkbox"/>	--
Steam Tables	<input type="checkbox"/>	--
Work Tables	<input checked="" type="checkbox"/>	Fair
Shelving	<input checked="" type="checkbox"/>	Fair

The school does not contain any commercial laundry equipment.

### ***Anticipated Lifecycle Replacements:***

- Convection ovens
- Freezer
- Cooler
- Microwave
- Food warmers

### ***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.



## 9. OTHER STRUCTURES

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Wooden storage sheds are located throughout the property. The storage sheds are pre-manufactured wood structures set on the asphalt pavement.

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

## 10. CERTIFICATION

DLR Group retained EMG to perform this Facility Condition Assessment in connection with its Facilities Master Planning Project for the Palos Verdes Peninsula Unified School District at Lunada Bay Elementary, 520 Paseo Lunado, Palos Verdes Estates, California, the "Property". It is our understanding that the primary interest of DLR Group is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in depth studies were performed unless specifically required under Section 2 of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas were observed (See Section 4.2 for areas observed). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of DLR Group for the purpose stated within Section 2 of this report. The report, or any excerpt thereof, shall not be used by any party other than DLR Group or for any other purpose than that specifically stated in our agreement or within Section 2 of this report without the express written consent of EMG.

Any reuse or distribution of this report without such consent shall be at DLR Group and the recipient's sole risk, without liability to EMG.

**Prepared by:** Valentin Tinajero,  
Project Manager

**Reviewed by:**



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Mark Surdam, RA  
Program Manager  
[msurdam@emgcorp.com](mailto:msurdam@emgcorp.com) 800.733.0660 x6251

## 11. APPENDICES

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APPENDIX A: PHOTOGRAPHIC RECORD

APPENDIX B: SITE PLAN

APPENDIX C: SUPPORTING DOCUMENTATION

APPENDIX D: EMG ABBREVIATED ADA CHECKLIST

APPENDIX E: PRE-SURVEY QUESTIONNAIRE

## FACILITY CONDITION ASSESSMENT

LUNADA BAY ELEMENTARY  
520 PASEO LUNADO  
PALOS VERDES ESTATES, CALIFORNIA 90274

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## APPENDIX A: PHOTOGRAPHIC RECORD

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FACILITIES CONDITION ASSESSMENT  
PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

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Photo #1: Main entrance



Photo #2: Classroom front elevation



Photo #3: Side elevation



Photo #4: Classrooms back elevation



Photo #5: Modular classroom front elevation



Photo #6: Modular classroom back elevation

FACILITIES CONDITION ASSESSMENT  
PHOTOGRAPHIC RECORD

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Photo  
#7: Parking lot



Photo  
#8: Accessible parking spaces



Photo  
#9: Soccer fields



Photo  
#10: Play structure



Photo  
#11: Site storm drain



Photo  
#12: Basketball courts



FACILITIES CONDITION ASSESSMENT  
PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

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Photo #13: Patio area



Photo #14: Playground area



Photo #15: Site stairs



Photo #16: Retaining wall



Photo #17: Chain link fence



Photo #18: Metal tube fence

FACILITIES CONDITION ASSESSMENT  
PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

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Photo #19: Clay tile roof



Photo #20: Asphalt shingle roof



Photo #21: Modular classroom window



Photo #22: Permanent classroom windows



Photo #23: Permanent classroom windows



Photo #24: Exterior doors



FACILITIES CONDITION ASSESSMENT  
PHOTOGRAPHIC RECORD

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Photo #25: Modular classroom exterior finishes



Photo #26: Restroom building soffit



Photo #27: Permanent classroom soffit



Photo #28: Permanent classroom soffit



Photo #29: Walkway shade structure



Photo #30: Walkway shade structure

# FACILITIES CONDITION ASSESSMENT PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

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Photo #31: Main electrical equipment



Photo #32: Main transformer



Photo #33: Classroom lighting



Photo #34: MPR lighting



Photo #35: Circuit breaker panel



Photo #36: Gas meter

FACILITIES CONDITION ASSESSMENT  
PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

EMG PROJECT NO: 119663.16R000-001.017



Photo #37: Package heat pump



Photo #38: Forced-air furnace



Photo #39: Duct furnace



Photo #40: Fire alarm



Photo #41: Backflow preventer



Photo #42: Water heater



# FACILITIES CONDITION ASSESSMENT PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

EMG PROJECT NO: 119663.16R000-001.017



Photo #43: Permanent classroom interior



Photo #44: Permanent classroom interior



Photo #45: Modular classroom interior



Photo #46: Modular classroom interior



Photo #47: Student restroom

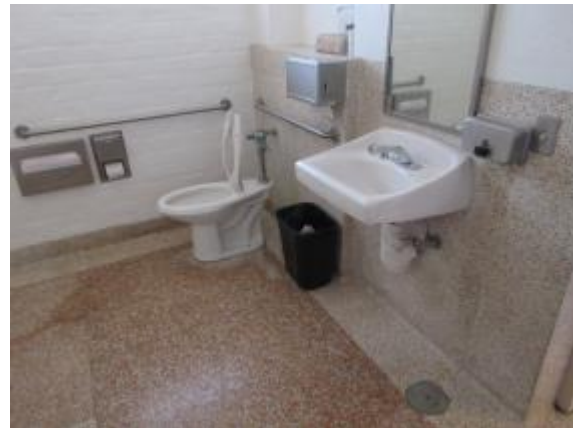


Photo #48: Staff restroom

# FACILITIES CONDITION ASSESSMENT PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

EMG PROJECT NO: 119663.16R000-001.017



Photo #49: MPR interior



Photo #50: Kitchen area



Photo #51: Main lobby



Photo #52: Breakroom



Photo #53: Workroom



Photo #54: Health office

FACILITIES CONDITION ASSESSMENT  
PHOTOGRAPHIC RECORD

LUNADA BAY ELEMENTARY

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Photo #55: Non-compliant handrails



Photo #56: Pedestrian sidewalk in poor condition



Photo #57: Playground asphalt in poor condition



Photo #58: Basketball/volleyball court asphalt in poor condition



Photo #59: Ceiling in poor condition at classroom 17



Photo #60: Ceiling in poor condition at classroom 18



## FACILITY CONDITION ASSESSMENT

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## APPENDIX B: SITE PLAN

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FACILITIES CONDITION ASSESSMENT  
AERIAL SITE PLAN

LUNADA BAY ELEMENTARY

EMG PROJECT NO: 119663.16R000-001.017



SOURCE:  
Google Maps: Imagery ©2016 Google, Map data ©2016 Google



ON-SITE DATE:  
October 3, 2016



## FACILITY CONDITION ASSESSMENT

LUNADA BAY ELEMENTARY  
520 PASEO LUNADO  
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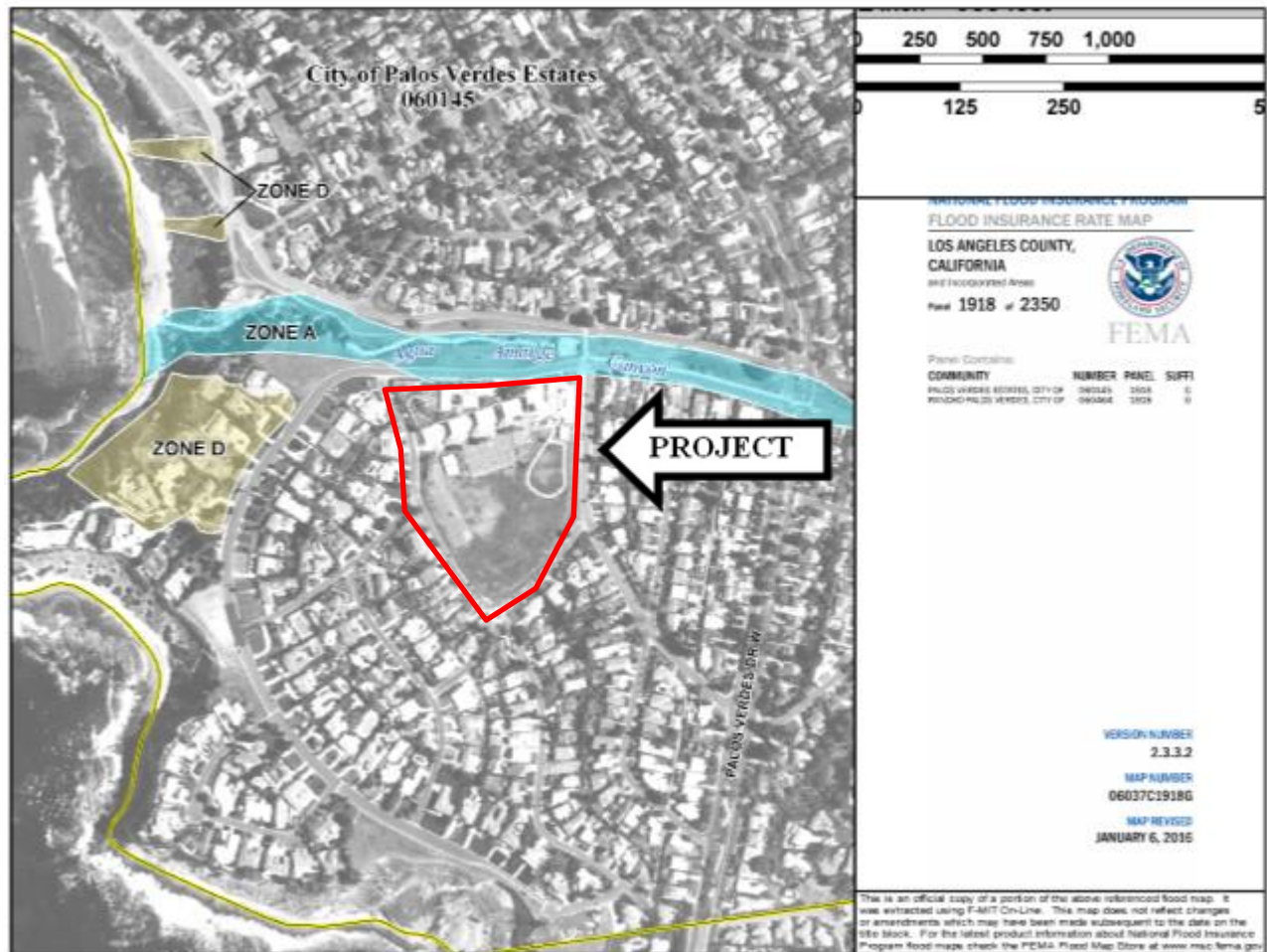
## APPENDIX C: SUPPORTING DOCUMENTATION

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# FACILITIES CONDITION ASSESSMENT FLOOD MAP

LUNADA BAY ELEMENTARY

EMG PROJECT NO: 119663.16R000-001.017



SOURCE:  
FEMA Map No.: 06037C1918G Dated: January 6, 2016

ON-SITE DATE:  
October 3, 2016

## FACILITY CONDITION ASSESSMENT

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520 PASEO LUNADO  
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## **APPENDIX D:** **EMG ABBREVIATED ADA CHECKLIST**

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# FACILITY CONDITION ASSESSMENT

LUNADA BAY ELEMENTARY  
520 PASEO LUNADO  
PALOS VERDES ESTATES, CALIFORNIA 90274

EMG PROJECT NO: 119663.16R000-001.017

**PROPERTY NAME:** LUNADA BAY ELEMENTARY  
**DATE:** OCTOBER 3, 2016  
**PROJECT NUMBER:** 119663.16R000.001.017

EMG ABBREVIATED ADA CHECKLIST					
	BUILDING HISTORY	YES	NO	N/A	COMMENTS
1.	Has the management previously completed an ADA review?			X	Unknown
2.	Have any ADA improvements been made to the property?		X		
3.	Does a Barrier Removal Plan exist for the property?		X		
4.	Has the Barrier Removal Plan been reviewed/approved by an arms-length third party such as an engineering firm, architectural firm, building department, other agencies, etc.?			X	
5.	Has building ownership or management received any ADA related complaints that have not been resolved?		X		
6.	Is any litigation pending related to ADA issues?		X		
	PARKING	YES	NO	N/A	COMMENTS
1.	Are there sufficient parking spaces with respect to the total number of reported spaces?	X			
2.	Are there sufficient van-accessible parking spaces available (96" wide/ 96" aisle for van)?	X			
3.	Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessible" at van spaces?	X			
4.	Is there at least one accessible route provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones, if provided, and public streets and sidewalks?	X			
5.	Do curbs on the accessible route have depressed, ramped curb cuts at drives, paths, and drop-offs?	X			
6.	Does signage exist directing you to accessible parking and an accessible building entrance?	X			
	RAMPS	YES	NO	N/A	COMMENTS
1.	If there is a ramp from parking to an accessible building entrance, does it meet slope requirements? (1:12)	X			
2.	Are ramps longer than 6 ft. complete with railings on both sides?	X			
3.	Is the width between railings at least 36 inches?	X			
4.	Is there a level landing for every 30 ft. horizontal length of ramp, at the top and at the bottom of ramps and switchbacks?	X			
	ENTRANCES/EXITS	YES	NO	N/A	COMMENTS
1.	Is the main accessible entrance doorway at least 32 inches wide?	X			
2.	If the main entrance is inaccessible, are there alternate accessible entrances?	X			

# FACILITY CONDITION ASSESSMENT

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EMG ABBREVIATED ADA CHECKLIST					
	ENTRANCES/EXITS	YES	NO	N/A	COMMENTS
3.	Can the alternate accessible entrance be used independently?	X			
4.	Is the door hardware easy to operate (lever/push type hardware, no twisting required, and not higher than 48 inches above the floor)?	X			
5.	Are main entry doors other than revolving door available?	X			
6.	If there are two main doors in series, is the minimum space between the doors 48 inches plus the width of any door swinging into the space?	X			
	PATHS OF TRAVEL	YES	NO	N/A	COMMENTS
1.	Is the main path of travel free of obstruction and wide enough for a wheelchair (at least 36 inches wide)?	X			
2.	Does a visual scan of the main path reveal any obstacles (phones, fountains, etc.) that protrude more than 4 inches into walkways or corridors?	X			
3.	Are floor surfaces firm, stable, and slip resistant (carpets wheelchair friendly)?	X			
4.	Is at least one wheelchair-accessible public telephone available?			X	
5.	Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage?	X			
6.	Is there a path of travel that does not require the use of stairs?	X			
7.	If audible fire alarms are present, are visual alarms (strobe light alarms) also installed in all common areas?	X			
	ELEVATORS	YES	NO	N/A	COMMENTS
1.	Do the call buttons have visual signals to indicate when a call is registered and answered?			X	No Elevators
2.	Are there visual and audible signals inside cars indicating floor change?			X	
3.	Are there standard raised and Braille marking on both jams of each host way entrance?			X	
4.	Do elevator doors have a reopening device that will stop and reopen a car door if an object or a person obstructs the door?			X	
5.	Do elevator lobbies have visual and audible indicators of car arrival?			X	
6.	Does the elevator interior provide sufficient wheelchair turning area (51" x 68")?			X	
7.	Are elevator controls low enough to be reached from a wheelchair (48 inches front approach/54 inches side approach)?			X	
8.	Are elevator control buttons designated by Braille and by raised standard alphabet characters (mounted to the left of the button)?			X	

# FACILITY CONDITION ASSESSMENT

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520 PASEO LUNADO  
PALOS VERDES ESTATES, CALIFORNIA 90274

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EMG ABBREVIATED ADA CHECKLIST					
	ELEVATORS	YES	NO	N/A	COMMENTS
9.	If a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication?			X	
	RESTROOMS	YES	NO	N/A	COMMENTS
1.	Are common area public restrooms located on an accessible route?	X			
2.	Are pull handles push/pull or lever type?	X			
3.	Are there audible and visual fire alarm devices in the toilet rooms?	X			
4.	Are corridor access doors wheelchair-accessible (at least 32 inches wide)?	X			
5.	Are public restrooms large enough to accommodate a wheelchair turnaround (60" turning diameter)?	X			
6.	In unisex toilet rooms, are there safety alarms with pull cords?		X		
7.	Are stall doors wheelchair accessible (at least 32" wide)?	X			
8.	Are grab bars provided in toilet stalls?	X			
9.	Are sinks provided with clearance for a wheelchair to roll under (29" clearance)?	X			
10.	Are sink handles operable with one hand without grasping, pinching or twisting?	X			
11.	Are exposed pipes under sink sufficiently insulated against contact?	X			
12.	Are soap dispensers, towel, etc. reachable (48" from floor for frontal approach, 54" for side approach)?	X			
13.	Is the base of the mirror no more than 40" from the floor?	X			
	POOLS	YES	NO	NA	COMMENTS
1	Are public access pools provided? If the answer is no, please disregard this section.			X	No Pools
2	How many accessible access points are provided to each pool/spa?			X	
3	Is at least one fixed lift or sloped entry to the pool provided?			X	
	PLAY AREA	YES	NO	NA	COMMENTS
1	Has the play area been reviewed for accessibility? All public playgrounds are subject to ADAAG standards.		X		
2	Are play structures accessible?	X			
	EXERCISE EQUIPMENT	YES	NO	NA	COMMENTS
1	Does there appear to be adequate clear floor space around the machines/equipment (30" by 48" minimum)?			X	No Exercise Equipment

*\*Based on visual observation only. The slope was not confirmed through measurements.*

## FACILITY CONDITION ASSESSMENT

LUNADA BAY ELEMENTARY  
520 PASEO LUNADO  
PALOS VERDES ESTATES, CALIFORNIA 90274

EMG PROJECT NO: 119663.16R000-001.017

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# APPENDIX E: PRE-SURVEY QUESTIONNAIRE

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# Facility Condition Assessment Pre-Survey Questionnaire

120/208V 3Ø  
1600Amp  
Copper

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. If the form is not completed, EMG's Project Manager will require **additional time** during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final report.

<b>NAME OF INSTITUTION:</b>		LUNADA BAY ELEMENTARY
Name of Building:	Building #:	
Name of person completing questionnaire: TERRY KAMIBAYASHI		
Length of Association With the Property:	1 YEAR	Phone Number: 424-903-5241

SITE INFORMATION	
Year of Construction?	1957
No. of Stories?	Floors
Total Site Area?	Acres
Total Building Area?	30755

INSPECTIONS	DATE OF LAST INSPECTION	LIST OF ANY OUTSTANDING REPAIRS
1. Elevators	2013	LAST SERVICE 4-13-2016
2. HVAC Mechanical, Electric, Plumbing?		
3. Life-Safety/Fire?	9-3-2015	
4. Roofs?		

KEY QUESTIONS	RESPONSE
Major Capital Improvements in Last 3 yrs.	
Planned Capital Expenditure For Next Year?	
Age of the Roof?	
What bldg. Systems Are Responsibilities of Tenants? (HVAC/Roof/Interior/Exterior/Paving)	District Responsible for ALL

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. (NA indicates "Not Applicable", Unk indicates "Unknown")

QUESTION	Y	N	UNK	NA	COMMENTS
<b>ZONING, BUILDING, DESIGN AND LIFE SAFETY ISSUES</b>					
1 Are there any unresolved building, fire, or zoning code issues?		/			
2 Is there any pending litigation concerning the property?		/			
3 Are there any other significant issues/hazards with the property?		/			





# Facility Condition Assessment Pre-Survey Questionnaire

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. (NA indicates "Not Applicable", UNK indicates "Unknown")

	QUESTION	Y	N	UNK	NA	COMMENTS
4	Are there any unresolved construction defects at the property?		/			
5	Has any part of the property ever contained visible suspect mold growth?			/		
6	Is there a mold Operations and Maintenance Plan?			/		
7	Are there any recalled fire sprinkler heads (Star, GEM, Central, and Omega)?		/			
8	Have there been indoor air quality or mold related complaints from tenants?			/		
GENERAL SITE						
9	Are there any problems with erosion, storm water drainage or areas of paving that do not drain?		/			
10	Are there any problems with the landscape irrigation systems?		/			
BUILDING STRUCTURE						
11	Are there any problems with foundations or structures?		/			
12	Is there any water infiltration in basements or crawl spaces?		/			
13	Has a termite/wood boring insect inspection been performed within the last year?					
14	Are there any wall, or window leaks?	/				
BUILDING ENVELOPE						
15	Are there any roof leaks?	/				
16	Is the roofing covered by a warranty or bond?		/			
17	Are there any poorly insulated areas?	/				
18	Is Fire Retardant Treated (FRT) plywood used?		/			



# Facility Condition Assessment Pre-Survey Questionnaire

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. (NA indicates "Not Applicable", UNK indicates "Unknown")

	QUESTION	Y	N	UNK	NA	COMMENTS
19	Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?	/				
<b>BUILDING HVAC &amp; ELECTRICAL</b>						
20	Are there any leaks or pressure problems with natural gas service?		/			
21	Does any part of the electrical system use aluminum wiring?		/			
22	Do Residential units have a less than 60-Amp service?				/	
23	Do Commercial units have less than 200-Amp service?				/	
24	Are there any problems with the utilities, such as inadequate capacities?					120/208VOLTS 3Ø 1600AMPS COPPER CONDUCTORS. UPGRADED 5 YEARS
<b>ADA</b>						
25	Has the management previously completed an ADA review?	/				
26	Have any ADA improvements been made to the property?	/				
27	Does a Barrier Removal Plan exist for the property?		/			
28	Has the Barrier Removal Plan been approved by an arms-length third party?		/			
29	Has building ownership or management received any ADA related complaints?		/			
30	Does elevator equipment require upgrades to meet ADA standards?		/			
<b>PLUMBING</b>						
31	Is the property served by private water well?		/			
32	Is the property served by a private septic system or other waste treatment systems?		/			
33	Is polybutylene piping used?		/			
34	Are there any plumbing leaks or water pressure problems?					



# Facility Condition Assessment Pre-Survey Questionnaire

2 locations specifically  
Broken storm drain  
upper parking lot, by Room 2 outside

## ADDITIONAL ISSUES OR CONCERNS THAT EMG SHOULD KNOW ABOUT?

- 1 MULTIPLE SEWER AND DRAIN ISSUES, ALSO STORM DRAIN FAILURES
- 2 ORIGINAL GALVANIZED WATER PIPE IN ALL BUILDINGS
- 3 ROOMS 18 & 19 NEED NEW HEATERS

## ITEMS PROVIDED TO EMG AUDITORS

	YES	NO	NA	ADDITIONAL COMMENTS
Access to All Mechanical Spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Access to Roof/Attic Space	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Access to Building As-Built Drawings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site plan with bldg., roads, parking and other features	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Contact Details for Mech, Elevator, Roof, Fire Contractors:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
List of Commercial Tenants in the property	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Previous reports pertaining to the physical condition of property.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ADA survey and status of improvements implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Current / pending litigation related to property condition.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Any brochures or marketing information.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Signature of person interviewed or completing form

Date

## FACILITY CONDITION ASSESSMENT

LUNADA BAY ELEMENTARY

520 PASEO LUNADO

PALOS VERDES ESTATES, CALIFORNIA 90274

EMG PROJECT NO: 119663.16R000-001.017

On the day of the site visit, provide EMG's Field Observer access to all of the available documents listed below. Provide copies if possible.

### INFORMATION REQUIRED

1. All available construction documents (blueprints) for the original construction of the building or for any tenant improvement work or other recent construction work.
2. A site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features.
3. For commercial properties, provide a tenant list which identifies the names of each tenant, vacant tenant units, the floor area of each tenant space, and the gross and net leasable area of the building(s).
4. For apartment properties, provide a summary of the apartment unit types and apartment unit type quantities, including the floor area of each apartment unit as measured in square feet.
5. For hotel or nursing home properties, provide a summary of the room types and room type quantities.
6. Copies of Certificates of Occupancy, building permits, fire or health department inspection reports, elevator inspection certificates, roof or HVAC warranties, or any other similar, relevant documents.
7. The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies.

8. The company name, phone number, and contact person of all outside vendors who serve the property, such as mechanical contractors, roof contractors, fire sprinkler or fire extinguisher testing contractors, and elevator contractors.
9. A summary of recent (over the last 5 years) capital improvement work which describes the scope of the work and the estimated cost of the improvements. Executed contracts or proposals for improvements. Historical costs for repairs, improvements, and replacements.
10. Records of system & material ages (roof, MEP, paving, finishes, furnishings).
11. Any brochures or marketing information.
12. Appraisal, either current or previously prepared.
13. Current occupancy percentage and typical turnover rate records (for commercial and apartment properties).
14. Previous reports pertaining to the physical condition of property.
15. ADA survey and status of improvements implemented.
16. Current / pending litigation related to property condition.

Your timely compliance with this request is greatly appreciated.