

# FACILITY CONDITION ASSESSMENT

## DLR GROUP

3130 Wilshire Boulevard, 6<sup>th</sup> Floor

Santa Monica, CA 90403

Mr. Kevin Fleming



## FACILITY CONDITION ASSESSMENT

of

## ROBINSON ELEMENTARY

80 South Morningside Drive

Manhattan Beach, CA 90266

### PREPARED BY:

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EMG Project #: 112851.15R-006.017

Date of Report: \*\*\*To be filled in by Production

On-Site Date: February 17, 2015



DECISION INTELLIGENCE

**PRELIMINARY DRAFT 2 - FOR DISCUSSION PURPOSES ONLY**

## Immediate Repairs Report Robinson Elementary School



**4/2/15**

Report Section	ID	Cost Description	Quantity	Unit	Unit Cost	Subtotal	Deficiency Repair Estimate *
1.2	<a href="#">323970</a>	Termite/Vermin/Animal Infestation Consultant	1	Each	\$5,500.00	\$5,500	\$5,500
1.2	<a href="#">323971</a>	Civil Engineer Drainage study	1	EA	\$5,500.00	\$5,500	\$5,500
3.2	<a href="#">325615</a>	ADA Improvement Expense	1	EA	\$2,475.00	\$2,475	\$2,475
5.4	<a href="#">323967</a>	Point brick retaining wall	2	CSF	\$948.00	\$1,896	\$1,896
6.3	<a href="#">326801</a>	Misc. roof gutter repairs	6	Patch	\$375.00	\$2,250	\$2,250
6.3	<a href="#">326800</a>	Built-up roofing minor membrane repairs - (2% of roof area)	10	SQ	\$453.35	\$4,534	\$4,534
6.3	<a href="#">323955</a>	Asphalt shingles, removal and replacement of shingles	50	100 SF	\$337.25	\$16,863	\$16,863
6.4	<a href="#">323957</a>	General painting cost per SF, minor prep work, single story bldg. (up to 15 feet)	1500	SF	\$2.42	\$3,630	\$3,630
8.1	<a href="#">323965</a>	Replace carpet, standard commercial, medium traffic	2300	SY	\$59.90	\$137,770	\$137,770
Immediate Repairs Total							\$180,417
* Location Factor (1.0) included in totals.							

**PRELIMINARY DRAFT 2 - FOR DISCUSSION PURPOSES ONLY**

## Replacement Reserves Report Robinson Elementary School



4/2/15

Report Section	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	Subtotal	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Deficiency		
																														Repair Estimate		
		_0001 Termite/Vermín/Animal Infestation																														
1.2	<a href="#">323970</a>	Consultant	0	0	0	1	Each	\$5,500.00	\$5,500	\$5,500																				\$5,500		
1.2	<a href="#">323971</a>	_0001 Civil Engineer Drainage study	0	0	0	1	EA	\$5,500.00	\$5,500	\$5,500																				\$5,500		
3.2	<a href="#">325615</a>	ADA Improvement Expense	0	0	0	1	EA	\$2,475.00	\$2,475	\$2,475																				\$2,475		
5.2	<a href="#">323953</a>	G2022 Patch, Repair and Seal Coat asphalt	5	3	2	16000	SF	\$0.46	\$7,360			\$7,360					\$7,360					\$7,360					\$7,360			\$29,440		
5.2	<a href="#">323952</a>	G2022 Patch, Repair and Seal Coat asphalt	5	3	2	35000	SF	\$0.46	\$16,100			\$16,100					\$16,100					\$16,100					\$16,100			\$64,400		
5.4	<a href="#">323967</a>	G2042 Point brick retaining wall	20	20	0	2	CSF	\$948.00	\$1,896	\$1,896																				\$1,896		
6.3	<a href="#">323954</a>	B3011 Replace Existing EPDM Roof with PVC Membrane Roofing	20	19	1	2860	SQ	\$1,135.17	\$3,246,586		\$3,246,586																			\$3,246,586		
6.3	<a href="#">326801</a>	B3011 Misc. roof gutter repairs	0	0	0	6	Patch	\$375.00	\$2,250	\$2,250																				\$2,250		
6.3	<a href="#">326800</a>	B3011A Built-up roofing minor membrane repairs - (2% of roof area)	0	0	0	10	SQ	\$453.35	\$4,534	\$4,534																				\$4,534		
6.3	<a href="#">323955</a>	B3011F Asphalt shingles, removal and replacement of shingles	20	20	0	50	100 SF	\$337.25	\$16,863	\$16,863																				\$16,863		
6.4	<a href="#">323957</a>	B2011 General painting cost per SF, minor prep work, single story bldg. (up to 15 feet)	10	10	0	1500	SF	\$2.42	\$3,630	\$3,630										\$3,630										\$7,260		
6.4	<a href="#">323956</a>	B2011 General painting cost per SF, minor prep work, single story bldg. (up to 15 feet)	10	3	7	35000	SF	\$2.42	\$84,700								\$84,700										\$84,700			\$169,400		
6.4	<a href="#">325614</a>	B2011 Wood siding replacement	25	22	3	500	SF	\$13.56	\$6,780				\$6,780																	\$6,780		
6.5	<a href="#">325608</a>	G2035 Install steel pipe railings, 3 rail galvanized at retaining wall	25	24	1	200	LF	\$92.35	\$18,470		\$18,470																			\$18,470		
7.6	<a href="#">325609</a>	D5037 Replace central panel	15	2	13	1	EA	\$2,479.25	\$2,479													\$2,479								\$2,479		
8.1	<a href="#">323964</a>	C3011 Paint and patch interior walls, drywall	7	6	1	35000	SF	\$0.84	\$29,400		\$29,400							\$29,400							\$29,400					\$88,200		
8.1	<a href="#">323966</a>	C3024 Replace Vinyl tile	18	15	3	650	SY	\$67.75	\$44,038				\$44,038																	\$44,038		
8.1	<a href="#">323965</a>	C3025 Replace carpet, standard commercial, medium traffic	8	8	0	2300	SY	\$59.90	\$137,770	\$137,770								\$137,770								\$137,770				\$413,310		
8.2	<a href="#">325611</a>	E1093A Refrigerator/freezer 44CF	20	18	2	2	EA	\$4,326.00	\$8,652			\$8,652																		\$8,652		
8.2	<a href="#">325610</a>	E1093A Range, commercial gas, 4 to 6-burner, with standard oven	20	18	2	1	EA	\$3,738.00	\$3,738			\$3,738																		\$3,738		
8.2	<a href="#">325612</a>	E1094 Microwave	10	8	2	1	EA	\$249.21	\$249			\$249										\$249								\$498		
8.2	<a href="#">325613</a>	E1094 Refrigerator replace with energy star rated model	15	13	2	1	EA	\$500.00	\$500			\$500															\$500			\$1,000		
8.3	<a href="#">325071</a>	D3041 Gas-fired furnace 85 to 100 MBH no AC	25	15	10	22	EA	\$1,698.00	\$37,356										\$37,356											\$37,356		
8.3	<a href="#">325254</a>	D3041 Replace split System Ductless wall mount 2-ton	15	10	5	2	EA	\$2,490.00	\$4,980						\$4,980															\$4,980		
8.3	<a href="#">325072</a>	D3052 Heat Pump air to air, 4 Ton, Replace D2023 50-gallon residential water heater,	20	15	5	4	EA	\$5,725.00	\$22,900						\$22,900															\$22,900		
8.4	<a href="#">325081</a>	gas-fired, replace	12	5	7	1	EA	\$1,410.00	\$1,410								\$1,410											\$1,410		\$2,820		
8.4	<a href="#">325093</a>	D2023 Instantaneous Water Heater installation	15	8	7	3	Each	\$740.00	\$2,220								\$2,220													\$2,220		
8.5	<a href="#">325276</a>	D5021 Fluorescent fixture 80 W	20	17	3	446	EA	\$229.51	\$102,361				\$102,361																	\$102,361		
Totals, Unescalated										\$180,417	\$3,294,456	\$36,599	\$153,179	\$0	\$27,880	\$0	\$111,790	\$167,170	\$0	\$40,986	\$0	\$23,709	\$2,479	\$0	\$29,400	\$137,770	\$108,660	\$0	\$1,410	\$4,315,906		
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
Totals, Escalated (3.0% inflation, compounded annually)										\$180,417	\$3,393,290	\$38,828	\$167,383	\$0	\$32,321	\$0	\$137,488	\$211,766	\$0	\$55,082	\$0	\$33,804	\$3,641	\$0	\$45,804	\$221,080	\$179,598	\$0	\$2,472	\$4,702,974		

**FACILITY CONDITION**

## ASSESSMENT

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### CERTIFICATION

DLR Group retained EMG to perform this Facility Condition Assessment in connection with its Facilities Master Planning Project for the Manhattan Beach Unified School District at Robinson Elementary, 80 South Morningside Drive, Manhattan Beach, 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(s) 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.

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

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

**Reviewed by:**

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**112851.15R-006.017****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.

<b>Property Information</b>	
Address:	80 South Morningside Drive, Manhattan Beach, California, 90266
Year constructed:	1953
Current owner of property:	Manhattan Beach Unified School District
Management Point of Contact:	Paul Ruta Director of Maintenance and Operations 310.318.7345 x5302 pruta@mbusd.org
Property type:	Elementary School
Site area:	5.4 Acres
Gross floor area:	25,720 Square Feet
Net Leasable area:	N/A
Number of buildings:	Eight permanent and four modular classroom buildings
Number of stories:	One story
Parking type and number of spaces:	30 spaces in open lots
Building construction:	Conventional wood frame structure on concrete slab and wood-framed roofs.
Bay Column Spacing:	N/A
Interior vertical clearance:	Varies, approximately 10 Feet
Roof construction:	Permanent buildings -flat roofs with built-up membrane and added fiberglass composite spray on coating. Modular classroom buildings – gabled roofs with asphalt shingles.
Exterior Finishes:	Stucco and painted wood trim.



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Property Information	
Heating and/or Air Conditioning:	Heating is provided in the permanent classrooms, office spaces, and cafeteria by individual gas-fired furnaces.  Cooling is provided to the office spaces and electrical room by split AC units. Heating and cooling is provided in the modular classrooms by heat pump units.
Fire and Life/Safety:	Hydrants, smoke detectors, alarms, and extinguishers.
Dates of visit:	February 17, 2015
Point of Contact (POC):	Paul Ruta, Director of Maintenance and Operations
Assessment and Report Prepared by:	Scott Lattimer Valentin Tinajero
Reviewed by:	Kathleen Sullivan Technical Report Reviewer

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 good to fair overall condition.

According to property management personnel, the property has had a limited capital improvement expenditure program over the past three years, primarily consisting of exterior painting, trellis repair, and installation of security fence. Supporting documentation was not provided in support of these claims but some of the work is evident.

According to property management personnel, major capital expenditures planned for next year includes interior painting.

## **1.2. SPECIAL ISSUES AND FOLLOW-UP RECOMMENDATIONS**

As part of the FCA, a limited assessment of accessible areas of the building(s) was performed to determine the presence of mold, conditions conducive to mold growth, and/or evidence of moisture. Property personnel were interviewed concerning any known or suspected mold, 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 mold growth, conditions conducive to mold growth, or evidence of moisture in representative readily accessible areas of the property.



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- It is recommended that a plumber inspect the grease traps and sewer lines to ensure that they have been properly maintained.
- It is recommended that the school district ensure that the commercial kitchen exhaust vents are cleaned regularly to avoid grease fires.
- Per the owner's representative, all buildings have isolated evidence of wood framing deterioration due to insects and several have been serviced. A local, licensed exterminator must be retained to treat the property as required to eliminate the pests and associated threat. The cost of this work is included in the Immediate Repairs Report. In addition to this work, an annual termite and insect inspection program may be recommended.
- It was reported by school personnel that drainage issues are a concern on the north side of the kindergarten building, between the kindergarten building and adjacent buildings, as well as along the asphalt at the first grade playground. The cost of a drainage study has been included in the Immediate Reserves Report.

The following issues should be considered:

- Verify that all warranties are transferable.
- Verify that any alterations, installations, or other improvements since the project was first constructed and occupied have been properly permitted and approved by municipal agencies.
- Verify that no defective materials or equipment are used at the property.

Copies of the documents listed below should be obtained:

- All roof, equipment and system warranties/guarantees and transfers. Manufacturers often levy a warranty transfer fee and require that the equipment or system be in pristine condition in order to provide such transfers. This requirement often necessitates upgrades, repairs, or servicing.
- All available site and building construction drawings and specifications.
- All government documents such as Certificates of Occupancy, permits, zoning variances, easements, tax receipts, and other pertinent records.

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### **1.3. OPINIONS OF PROBABLE COST**

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

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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 E2018-08 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 PCR.

### 1.3.1. Methodology

#### Physical Needs Assessment:

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 tenants 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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The evaluation period identified in this report is defined as 20 years.

The physical condition of building component to be repaired is typically defined as being in one of five categories: Priority One through Five. For the purposes of this report, the following definitions are used:

- Priority One -** These items are to be addressed as Immediate. Items in this category require immediate action and include corrective measures to:
1. Correct life safety and/or code hazards
  2. Repair item permitting water leaks into the building or structure
  3. Repair mold or mildew conditions
  4. Down unit repairs
  5. Further study investigations
- Priority Two -** These items are to be addressed within the next 1 year. Items in this category require corrective measures to:
1. Return a system to normal operation
  2. Stop deterioration to other systems
  3. Stop accelerated deterioration
  4. Replace items that have reached or exceeded their useful service life
  5. ADA/CBC deficiencies
- Priority Three -** These items are to be addressed within the next 2-3 years. Items in this category, if not corrected expeditiously, will become critical in the next several years. Items in this category include corrective measures to:
1. Stop intermittent interruptions
  2. Correct rapid deterioration
  3. Replace items that will reach or exceed their useful service life
  4. Correct functionality and/or aesthetic issues that are not critical
- Priority Four -** These items are to be addressed within the next 3-5 years. Items in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.
- Priority Five -** These items are to be addressed within 6-20 years. Items in this category represent a sensible improvement to the existing conditions. These are not required for the most basic function of the facility; however, Priority 5 projects will improve overall usability and/or reduce long-term maintenance costs.

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**112851.15R-006.017****1.3.2. Immediate Repairs and Short Term Costs**

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.

Short term costs are opinions of probable costs to remedy physical deficiencies, such as deferred maintenance, that may not warrant immediate attention, but that require repairs or replacements, which should be undertaken on a priority basis in addition to routine preventive maintenance. Opinions of probable costs may include costs for testing, exploratory probing, and further analysis should this be deemed warranted by the consultant. The performance of such additional services is beyond the FCA scope of work. Generally, the time frame for such repairs is within one to two years. Short Term costs are included in the Replacement Reserves Report.

**1.3.3. 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.

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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 Repairs Report.

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**112851.15R-006.017****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 material code violations of record at municipal offices that 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.

The physical condition of building components is typically defined as being in one of three categories: Good, Fair, and Poor. For the purposes of this report, the following definitions are used:

- Good = Satisfactory as-is. Requires only routine maintenance during the assessment period. Repair or replacement may be required due to a system's estimated useful life.
- Fair = Satisfactory as-is. Repair or replacement is required due to current physical condition and/or estimated remaining useful life.
- Poor = Immediate repair, replacement, or significant maintenance is required.

**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, Short Term, 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.

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- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- 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 mold, conditions conducive to mold growth, and/or evidence of moisture. EMG will also interview Project personnel regarding the presence of any known or suspected mold, 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 tenant 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 mechanical, electrical and elevator equipment rooms.
- Appropriate inquiries of municipal officials regarding the existence of pending unresolved building or fire code violations on file, and a determination of the current zoning category, flood hazard area, and seismic zone for the Property.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Tenant responsibility for maintenance, repair or replacement of finishes, fixtures, or equipment is not addressed by this scope of services.
- Provide an Executive Summary at the beginning of this report with cost estimates as a quick, user-friendly summary of the Property's condition and the assigned costs by category. These costs are tied to the report sections where reference to the issues are clearly defined and expanded.



**FACILITY CONDITION**

## ASSESSMENT

**112851.15R-006.017****2.3. PERSONNEL INTERVIEWED**

The following personnel from the facility and government agencies were interviewed in the process of conducting the FCA:

Name and Title	Organization	Phone Number
Paul Ruta Director of Maintenance and Operations	Manhattan Beach Unified School District	310.318.7345 x5302
Records Request	State of California Division of the State Architect, Los Angeles Basin Regional Office	213.897.3995
Records Request	Manhattan Beach Fire Department Fire Prevention Bureau	310.802.5206

The FCA was performed with the assistance Paul Ruta, Director of Maintenance and Operations, Manhattan Beach Unified School District, the on-site Point of Contact (POC), who was cooperative and provided information that appeared to be accurate based upon subsequent site observations. The on-site contact is completely 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 approximately five 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.

- Original construction documents by Daniel, Mann, Johnson & Mendenhall, dated 11/17/52.
- Addition construction documents by Daniel, Mann, Johnson & Mendenhall, dated 7/20/55.

**FACILITY CONDITION**

## ASSESSMENT

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- DLR Group letter documenting concerns of the school principal.

**2.5. PRE-SURVEY QUESTIONNAIRE**

A Pre-Survey Questionnaire was sent to the POC prior to the site visit. The questionnaire is included in Appendix E. Information obtained from the questionnaire has been used in preparation of this report.

**2.6. WEATHER CONDITIONS**

Clear, with temperatures in the 70's (°F) and light winds.

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**112851.15R-006.017****3. CODE INFORMATION AND ACCESSIBILITY****3.1. CODE INFORMATION, FLOOD ZONE AND SEISMIC ZONE**

Information from the Building Department was requested but was not available.

Information from the Fire Department was requested but was not available.

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 areas 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.

According to the Wind Zone Map, published by the Federal Emergency Management Agency (FEMA), the property is located in Zone I and is not located in a Hurricane-Susceptible Region or Special Wind Region.

**3.2. 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.

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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//does not 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:

***Parking***

- Adequate number of designated parking stalls and signage for cars are not provided. Provide one additional ADA parking space adjacent to the main office.

Estimated Cost: 1 @ \$165 each = .....\$165

- Signage indicating accessible parking spaces for cars and vans are not provided.

Estimated Cost: 1 @ \$120 each = .....\$120

***Restrooms***

- Existing unisex restroom in cafeteria doors are not wide enough to accommodate wheelchair access, and clear floor space beside the door swing is lacking.

Estimated Cost: 1 @ \$1,250 each = .....\$1,250

- Lever action hardware is not provided at all accessible locations.

Estimated Cost: 1 @ \$65 each = .....\$65

- Install grab bars in accessible stalls at 36" above the floor.

Estimated Cost: 1 @ \$325 each = .....\$325

- Modify existing toilet room accessories and mirrors.

Estimated Cost: 1 @ \$200 each = .....\$200

## FACILITY CONDITION

## ASSESSMENT

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- Modify existing lavatory faucets to paddle type faucets.

Estimated Cost: 1 @ \$300 each = .....\$300

- Wrap drainpipes below lavatory with insulation; protect against contact with hot, sharp, or abrasive surfaces.

Estimated Cost: 1 @ \$50 each = .....\$50

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 \$2,475 and is included as a lump sum in the Immediate Repairs Report.

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### 4. EXISTING BUILDING ASSESSMENT

#### 4.1. BUILDING/SPACE TYPES

All 25,720 square feet of the building are owned by the Manhattan Beach School District, and occupied by Robinson Elementary School.

The following table identifies the reported space types and mix at the subject property.

Space Types and Mix			
Quantity	Type	Vacant Spaces	Down Spaces
18	Classroom	0	0
1	Learning center	0	0
1	Media Center/Library	0	0
1	Cafeteria	0	0
1	Kitchen	0	0
2	Office	0	0
1	Teacher's lounge	0	0
5	Restrooms	0	0
5	Storage	0	0
22	Mechanical	0	0
57	<b>TOTAL</b>	0	0

#### 4.2. BUILDINGS/SPACES OBSERVED

The entire facility was observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the exterior of the property and the roof.

All areas of the property were available for observation during the site visit.

## FACILITY CONDITION

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## 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 & Adequacy
Sanitary sewer	City of Manhattan Beach, Utilities Division	Fair to Poor
Storm sewer	City of Manhattan Beach, Utilities Division	Good
Domestic water	City of Manhattan Beach, Utilities Division	Good
Electric service	Southern California Edison	Good
Natural gas service	Southern California Gas	Good

***Observations/Comments:***

- According to the owners representative the sanitary sewer is original to the property and is problematic. All other utilities appear to be adequate for the property. There are no unique, on-site 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

The main entrance drive is located along Morningside Drive on the west side of the property. Additional entrance drives are located along adjacent city streets. The parking areas, and drive aisles are paved with asphalt pavement. The entrance driveway aprons are paved with concrete.

Based on a physical count, parking is provided for 30 cars. The parking ratio is 1.17 spaces per thousand square feet of floor area. All of the





## FACILITY CONDITION

## ASSESSMENT

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parking stalls are located in open lots. There is one handicapped-accessible parking stall, which is van accessible.

The sidewalks throughout the property are constructed of cast-in-place concrete. Cast-in-place concrete steps with metal handrails are located at grade changes.

The curbs and gutters are constructed of cast-in-place concrete. Surface runoff is directed to landscaped areas, which border the paved areas.

***Observations/Comments:***

- The property does not have a dedicated paving repair and maintenance contractor. On-site personnel maintain the paving and flatwork or a contractor is retained when required.
- The asphalt pavement is in good condition. There are no significant signs of cracks or surface deterioration. In order to maximize the pavement life, pothole patching, crack sealing, seal coating, and re-striping of the asphalt paving will be required during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- The concrete pavement is in good condition. There are no significant signs of cracks or surface deterioration. Epoxy sealing of minor cracks will be required during the assessment period as part of the property management's routine maintenance program.
- The concrete curbs and sidewalks throughout the property are in good condition. Routine cleaning and maintenance will be required during the assessment period.

**5.3. DRAINAGE SYSTEMS AND EROSION CONTROL**

Storm water from the roofs, landscaped areas, and paved areas flows into on-site inlets and catch basins with underground piping connected to the municipal storm water management system.

***Observations/Comments:***

- There is no evidence of storm water runoff from adjacent properties. The storm water system appears to provide adequate runoff capacity. There is no evidence of major ponding or erosion.
- It was reported by school personnel that drainage issues are a concern on the north side of the kindergarten building, between the kindergarten building and adjacent buildings, as well as along the asphalt at the first grade playground. See Section 1.2.

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**112851.15R-006.017****5.4. TOPOGRAPHY AND LANDSCAPING**

The property slopes gently down from the west side of the property to the east property line.

The landscaping consists of trees, shrubs, and grasses. Flower beds are located throughout the site.

Landscaped areas are irrigated by an in-ground sprinkler system, which consists of underground piping, shut-off valves, pop-up sprinkler heads, and automatic timers.

Surrounding properties are primarily residential developments.

Concrete masonry unit (CMU) and brick masonry retaining walls are located at grade changes throughout the site.

***Observations/Comments:***

- The topography and adjacent uses do not appear to present conditions detrimental to the property.
- The landscape materials are in good to fair condition and will require routine maintenance during the assessment period.
- The underground irrigation system appears to be in good working order. Replacement of sprinkler heads and minor repairs will be required during the assessment period. This work is considered to be routine maintenance.
- The retaining walls are in good to fair condition. The retaining walls will require repointing during the assessment period. The cost of this work is included in the Replacement Reserves Report.

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**5.5. GENERAL SITE IMPROVEMENTS**

Property identification is provided by an internally illuminated pylon sign adjacent to the main entrance drive.

Site lighting is provided by metal street light standards. The light standards are spaced along the drive aisles throughout the parking areas. Metal pole-mounted light fixtures are located along walkways and drive aisles throughout the property.

Exterior building illumination is provided by light fixtures surface-mounted on the exterior walls.

A perimeter fence is located along the property lines. The fence is constructed of chain link with metal posts and in some locations painted metal tube steel.

***Observations/Comments:***

- The property and tenant identification signs are in good condition. Routine maintenance will be required during the assessment period.
- The exterior site and building light fixtures are in good condition. Routine maintenance will be required during the assessment period.
- The site fencing is in good condition and will require routine maintenance during the assessment period. Painting is considered to be routine maintenance.

## 6. BUILDING ARCHITECTURAL AND STRUCTURAL SYSTEMS

### 6.1. FOUNDATIONS

Based on structures of similar size, configuration, and geographic location, it is assumed that the foundations consist of conventional reinforced concrete spread footings, which support wall and column loads.

#### *Observations/Comments:*

- The foundations and footings could not be directly observed during the site visit. There is no evidence of movement that would indicate excessive settlement.

### 6.2. SUPERSTRUCTURE

Each building is a conventional wood-framed structure and has wood stud-framed exterior and interior bearing walls, which support the roof diaphragms. The roof diaphragms are constructed of wood rafters and are sheathed with plywood.



#### *Observations/Comments:*

- The superstructure is exposed in some locations, which allows for limited observation. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.
- Per the owner's representative, all buildings have isolated evidence of wood framing deterioration due to insect and several have been serviced. A local, licensed exterminator must be retained to treat the property as required to eliminate the pests and associated threat. See Section 1.2.

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**6.3. ROOFING**

The primary roofs are classified as flat roofs. The roofs are finished with a mineral-surfaced cap sheet over a multi-ply bituminous built-up membrane. The roofs are insulated with rigid insulation boards and added fiberglass composite spray on coating.

There are no attics. The roof structures are exposed.

***Observations/Comments:***

- The property does not have a dedicated roof repair and maintenance contractor. On-site personnel maintain the roofs or a contractor is retained when required. or
- According to the owner's representative, the roof finishes were recoated in 1996, approximately 19 years ago. Information regarding roof warranties or bonds were requested but are not available.
- The roof membranes are in good to fair condition. Based on their estimated Remaining Useful Life (RUL), the roof membranes will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- According to the owner's representative, there are active roof leaks primarily isolated to the covered walkways, library modular building, and a few classrooms. The cost of this work is included in the Immediate Repairs Report.
- 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.
- There is no evidence of fire retardant treated plywood (FRT).
- The roof flashings are in good to fair condition. Some areas will need repair and the cost of this work is included in the Replacement Reserves Report with the roof membrane replacement.
- 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 program. Some gutters and downspouts are rusted and will need replacement. The cost of this work is included in the Replacement Reserves Report.

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#### 6.4. EXTERIOR WALLS

The exterior walls are finished with stucco. The soffits are concealed and are finished with stucco. Portions of the exterior walls are accented with painted wood.

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

##### *Observations/Comments:*

- The exterior finishes are in good condition. Painting and patching will be required during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- The sealant is flexible, smooth, and in good condition and will require routine maintenance during the assessment period.



#### 6.5. EXTERIOR AND INTERIOR STAIRS

The exterior stairs and ramps are constructed of reinforced concrete. The handrails and balusters are constructed of metal.

##### *Observations/Comments:*

- The exterior stairs and ramps are in good condition and will require routine maintenance during the assessment period.
- The exterior balusters and handrails are in fair to poor condition. Sections are rusted and will need to be repaired or replaced. The cost of this work is included in the Replacement Reserves Report.





## FACILITY CONDITION

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#### 6.6. EXTERIOR WINDOWS AND DOORS

The windows are metal-framed units with single-glazed panes of tinted glazing.

The exterior doors are painted solid-core wood doors set in wood frames. The entrance doors have cylindrical locksets with lever handle hardware and keyed deadbolts.

The classrooms have metal-framed exterior sliding doors that operate on metal tracks. The sliding doors have fixed lever handle hardware and manual locks.



##### *Observations/Comments:*

- There is no evidence of window leaks or window condensation. The windows are in good condition and will require routine maintenance during the assessment period.
- The exterior doors and door hardware are in good condition and will require routine maintenance during the assessment period.
- The exterior sliding doors and hardware are in fair condition being that they are generally difficult to open. The sliding doors will require routine maintenance during the assessment period.

#### 6.7. PATIO, TERRACE, AND BALCONY

Patios are located adjacent to the cafeteria and serve as an outdoor dining area as well as adjacent to the sliding doors of many of the classrooms.

##### *Observations/Comments:*

- The concrete patio slabs are in good condition. There are no significant signs of movement, settlement, or cracking. The patios will require routine maintenance during the assessment period.

#### 6.8. COMMON AREAS, ENTRANCES, AND CORRIDORS

Not applicable. There are no interior common areas.



## 7. BUILDING MECHANICAL AND PLUMBING SYSTEMS

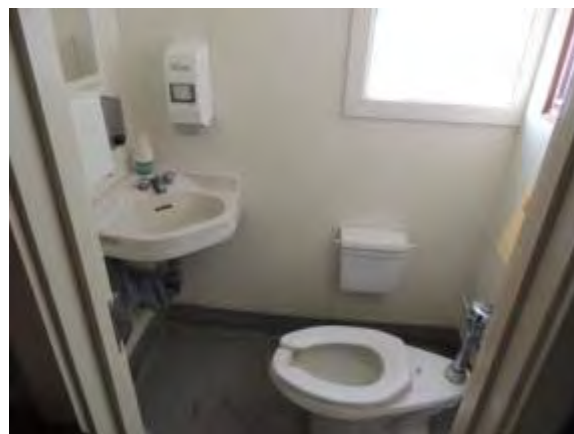
### 7.1. BUILDING HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

There are no interior common areas. See Section 8.3. for descriptions and comments regarding the interior spaces' HVAC systems.

### 7.2. BUILDING PLUMBING AND DOMESTIC HOT WATER

The plumbing systems include the incoming water service, the cold water piping system, and the sanitary sewer and vent system. The risers and the horizontal distribution piping are copper. The soil piping is cast iron, and the vent systems are PVC.

The water meters are located in vaults adjacent to the public streets. There are two water meters. One meter serves the potable water and the second meter serves the reclaimed water system that is used for irrigation.



There are no central hot water systems. See Section 8.4. for descriptions and comments regarding individual building or space hot water systems.

The common area restrooms have commercial-grade fixtures and accessories including water closets and lavatories.

#### *Observations/Comments:*

- The plumbing systems appear to be well maintained and in good condition. The water pressure appears to be adequate. The plumbing systems will require routine maintenance during the assessment period.
- There is no evidence that the property uses polybutylene piping for the domestic water distribution system.

## FACILITY CONDITION

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- The pressure and quantity of hot water appear to be adequate.

The accessories and fixtures in the restrooms are in good condition and will require routine maintenance during the assessment period.

### 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).

#### *Observations/Comments:*

- The pressure and quantity of gas appear to be adequate.
- The gas meters and regulators appear to be in good condition and will require routine maintenance during the assessment period.
- Only limited observation of the gas distribution piping can be made due to hidden conditions. The gas piping appears to be in good condition.

### 7.4. BUILDING ELECTRICAL

The electrical supply lines run underground to pad-mounted transformer, which feed interior-mounted electrical meters.

The main electrical service size is 800 amps, 120/208 volt three-phase four-wire alternating current (AC). The electrical wiring is copper, installed in metallic conduit. Circuit breaker panels are located throughout the campus.



#### *Observations/Comments:*

- The on-site electrical systems up to the meter are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- The switchgear, circuit breaker panels, and electrical meters appear to be in good condition and will require routine maintenance during the assessment period.

## FACILITY CONDITION

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**7.5. BUILDING ELEVATORS AND CONVEYING SYSTEMS**

Not applicable. There are no elevators or conveying systems.

**7.6. FIRE PROTECTION AND SECURITY SYSTEMS**

The fire protection system consists of portable fire extinguishers and smoke detectors, pull stations, and alarm horns. Fire extinguishers are located throughout the school. Hard-wired smoke detectors are located throughout the classrooms. The nearest fire hydrants are located along the public streets bordering the property.

Classrooms and corridors are equipped with battery back-up exit lights, illuminated exit signs, pull stations, alarm horns, and strobe light alarms.



A central fire alarm panel is located in the office building and monitors the pull stations and smoke detectors. The alarm panel also sounds the alarm and automatically notifies the monitoring service or the fire department in the event of trouble.

***Observations/Comments:***

- Information regarding fire department inspections is included in Section 3.1.
- The fire extinguishers are serviced annually and appear to be in good condition. The fire extinguishers were serviced and inspected within the last year.
- The pull stations and alarm horns appear to be in good condition and will require routine maintenance during the assessment period.
- Smoke detector replacement is considered to be routine maintenance.
- Exit sign and emergency light replacement is considered to be routine maintenance.

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- 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. Based on its estimated Remaining Useful Life (RUL), replacement is recommended during the reserve term. The estimated cost of this work is included in the Replacement Reserves Report. Note that replacement of a fire alarm panel or other components may trigger a requirement to update to a fully automatic system to comply with current codes.

## FACILITY CONDITION

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## 8. INTERIOR SPACES

### 8.1. INTERIOR FINISHES

The following table generally describes the interior finishes in interior spaces:

Typical Interior Finishes			
Room	Floor	Walls	Ceiling
Office Area	Carpet	Painted drywall	Painted exposed structure
Classrooms	Carpet	Painted drywall	Acoustical tiles
Modular Classrooms	Carpet	Wall panels	Suspended T-bar system with acoustical tiles
Cafeteria	Vinyl tile	Painted drywall	Acoustical tiles
Kitchens	Vinyl tile	Painted drywall	Acoustical tiles
Restrooms	Travertine	Painted drywall	Painted drywall

The entry doors are painted wood doors set in wood frames. The interior doors have cylindrical locksets with lever handle hardware.

***Observations/Comments:***

- The interior finishes are in good to fair condition. The cost of this work is included in the Replacement Reserves Report.
- The interior doors and door hardware are in good condition and will require routine maintenance during the assessment period.



## FACILITY CONDITION

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**8.2. COMMERCIAL KITCHEN EQUIPMENT**

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



Appliance	Comment
Refrigerators	Up-right
Freezers	Up-right
Ranges	No
Ovens	Gas
Griddles / Grills	No
Fryers	No
Hood	Exhaust ducted to exterior
Dishwasher	No
Microwave	Yes
Ice Machines	No
Steam tables	No
Work tables	Stainless steel
Shelving	Stainless steel

***Observations/Comments:***

- The kitchen appliances appear to be in good condition. Based on their estimated Remaining Useful Life (RUL), some of the kitchen appliances will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.

## FACILITY CONDITION

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**8.3. HVAC**

Heating is provided in the permanent classrooms, office spaces, and cafeteria by individual gas-fired furnaces. There are a total of 22 gas-fired units, with an average capacity of 100 MBH. The furnaces are located in mechanical closets within each space.

The permanent classrooms are not cooled.

Cooling is provided to the office spaces and electrical room by split AC units. There are two AC units with an average capacity of 2 tons. The type of refrigerant could not be determined.

Heating and cooling is provided in the modular classrooms by heat pump units. There are a total of four heat pumps with 4-tons cooling capacity and 34,130 MBH heating capacity each. The heat pumps use R-22 as a refrigerant.

Air distribution is provided to supply air registers by ducts concealed above the ceilings. Return air grilles are located in each space. The heating and cooling system are controlled by local thermostats.

The bathrooms are ventilated by mechanical exhaust fans. Low capacity ventilation fans are mounted on the roof and are connected by concealed ducts to each ventilated space.

***Observations/Comments:***

- The property does not have a dedicated HVAC repair and maintenance contractor. School District personnel maintain the HVAC equipment or a contractor is retained when required.
- Maintenance personnel were contacted to provide information on maintenance practices and recent replacements. According to the maintenance personnel, the mechanical equipment serving the permanent classrooms, offices, cafeteria, and lounge areas was installed in 1998. Two heat pumps serving modular buildings were installed in 2004, one in 2008, and the last one in 2014.
- Records of filter replacements and annual furnace maintenance have been maintained since the units were installed in 1998.
- The HVAC equipment appears to be in good condition. Based on its estimated Remaining Useful Life (RUL), the gas-fired furnaces and split AC units will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- The mechanical ventilation system and equipment appear to be in good condition and will require routine maintenance during the assessment period. Equipment or component replacements can be performed as part of the property management's routine maintenance program.

## FACILITY CONDITION

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**8.4. PLUMBING**

Each permanent classroom and three of the modular classrooms include at least one sink and faucet. A 2½-gallon electric water heater is located in three of the modular classrooms. A 50-gallon gas heater is located in the cafeteria. The permanent classrooms have only cold water faucets.

***Observations and Comments***

- The classroom plumbing accessories and fixtures are in good condition.
- The pressure and quantity of hot water appear to be adequate.

The water heaters appear to be in good condition. Based on their estimated Remaining Useful Life (RUL), the water heaters will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.

**8.5. ELECTRICAL**

The electrical service to each classroom ranges upward from 100 amps. A circuit breaker panel inside each classroom supplies the HVAC system, receptacles, and light fixtures.

The classrooms have fluorescent light fixtures.

***Observations and Comments***

- The electrical service to each space appears to be adequate.
- The interior light fixtures appear to be in good condition. Based on their estimated Remaining Useful Life (RUL), the light fixtures will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.

**8.6. 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, fire extinguishers and bleachers.

- The school's common area FF&E **vary in age** and are in good condition. Based on the estimated Remaining Useful Life (RUL), the some FF&E will require replacement over the assessment period. This cost is an operational expense and not subject to this assessment.



## 9. OTHER STRUCTURES

A total of four modular classrooms are located on at the southeast area of the property. The modular classrooms are pre-manufactured wood structures set on concrete slabs. The exteriors are clad with wood siding and have flat roofs.

A total of five maintenance and storage sheds are located at the southeast area of the property. The sheds are pre-manufactured wood structure set on asphalt pavement.



### *Observations/Comments:*

- The modular classrooms are in good to fair condition and will require routine maintenance during the assessment period.
- The maintenance and storage sheds are in fair to poor condition, the roofing and siding are exhibiting signs of deterioration. The cost of this work is included in the Immediate Reserves Report.

## 10. APPENDICES

APPENDIX A: Photographic Record

APPENDIX B: Site Plan

APPENDIX C: Supporting Documentation

APPENDIX D: EMG Abbreviated Accessibility Checklist

APPENDIX E: Pre Survey Questionnaires and Documentation Request Checklist

APPENDIX F: Terminology

APPENDIX G: Glossary of Terms-Energy Audits

APPENDIX H: Energy Conservation Measures

**FACILITY CONDITION**  
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**APPENDIX A:  
PHOTOGRAPHIC RECORD**

EMG

## EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-006.017

Project Name: Robinson Elementary



Photo #1:	Property signage
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Photo #2:	Main entrance
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Photo #3:	Exterior of kitchen/cafeteria
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Photo #4:	Exterior of cafeteria and cafeteria outdoor seating
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Photo #5:	Cafeteria outdoor seating
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Photo #6:	Exterior of classroom
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## EMG PHOTOGRAPHIC RECORD

**Project No.: 112851.15R-006.017**

**Project Name: Robinson Elementary**



Photo #7: Exterior of classroom



Photo #8: Exterior of classroom



Photo #9: Exterior of kindergarten classroom



Photo #10: Exterior of kindergarten classroom



Photo #11: Stair to kindergarten building



Photo #12: Ramp to teachers' lounge entry

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## EMG PHOTOGRAPHIC RECORD

**Project No.: 112851.15R-006.017**

**Project Name: Robinson Elementary**



Photo #13: Portable classroom



Photo #14: Maintenance and storage



Photo #15: Maintenance and storage roofs



Photo #16: Walkway



Photo #17: ADA ramp



Photo #18: Playground

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## EMG PHOTOGRAPHIC RECORD

**Project No.: 112851.15R-006.017**

**Project Name: Robinson Elementary**



Photo #19:	Playground
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Photo #20:	Playground
---------------	------------



Photo #21:	Playground
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Photo #22:	Playground
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Photo #23:	Retaining walls
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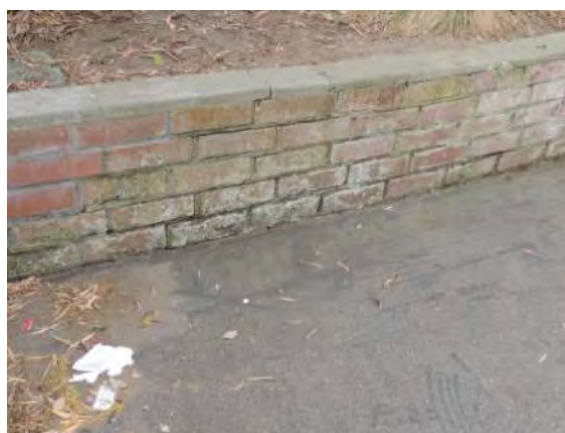


Photo #24:	Retaining wall
---------------	----------------



## EMG PHOTOGRAPHIC RECORD

**Project No.: 112851.15R-006.017**

**Project Name: Robinson Elementary**

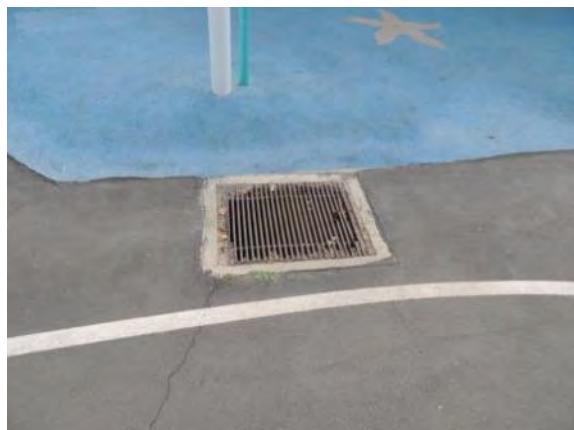


Photo #25:	Site drainage
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Photo #26:	Site drainage
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Photo #27:	Roofing
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Photo #28:	Roofing
---------------	---------



Photo #29:	Roofing
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Photo #30:	Flashing and gutters
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## EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-006.017

Project Name: Robinson Elementary



Photo #31: Flashing



Photo #32: Downspout



Photo #33: Office area



Photo #34: Nurse's office

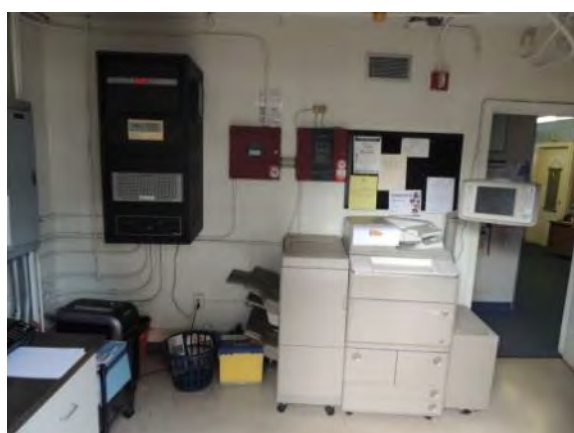


Photo #35: Back office



Photo #36: Teachers' lounge

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## EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-006.017

Project Name: Robinson Elementary



Photo #37: Teachers' lounge



Photo #38: Cafeteria



Photo #39: Cafeteria kitchen



Photo #40: Cafeteria kitchen



Photo #41: Cafeteria kitchen



Photo #42: Library

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## EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-006.017

Project Name: Robinson Elementary



Photo #43: Classroom



Photo #44: Classroom

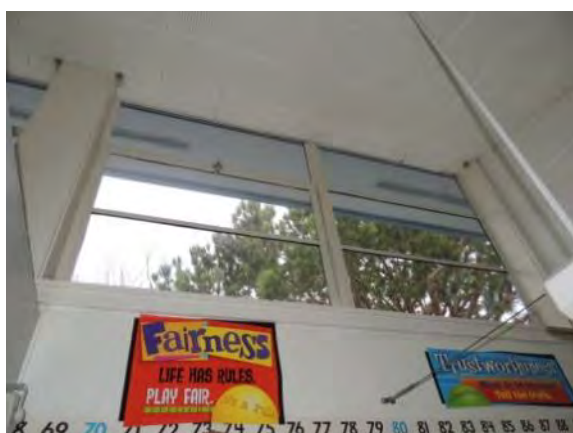


Photo #45: Classroom window



Photo #46: Classroom sliding door



Photo #47: Portable classroom



Photo #48: Portable classroom

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# EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-006.017

Project Name: Robinson Elementary



Photo #49: Portable classroom heat pump unit



Photo #50: Classroom thermostat and timer



Photo #51: Cafeteria heating gas furnaces



Photo #52: Split AC unit



Photo #53: Portable classroom diffuser



Photo #54: Electrical meter





# EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-006.017

Project Name: Robinson Elementary



Photo #55: Portable classroom electrical panel



Photo #56: Classroom diffusers and lighting



Photo #57: Outdoor lighting



Photo #58: Restroom sinks



Photo #59: Restroom toilet

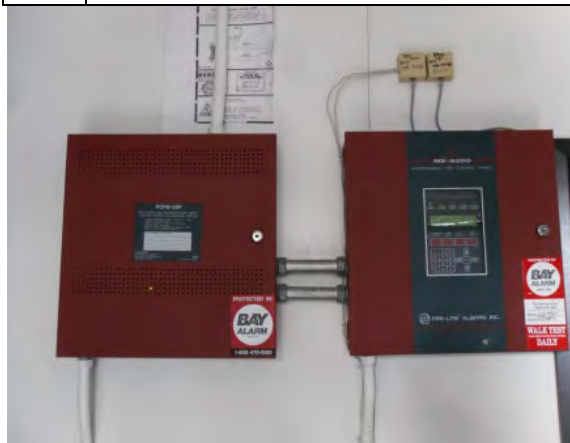


Photo #60: Fire alarm panels

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**FACILITY CONDITION**  
ASSESSMENT

**112851.15R-006.017**

**APPENDIX B:  
SITE PLAN**

## Site Plan

**FACILITY CONDITION**  
ASSESSMENT

**112851.15R-006.017**

**APPENDIX C:  
SUPPORTING DOCUMENTATION**



## Aerial Map



EMG

**Key:**

- - Project Boundary



Not drawn to scale. The north arrow indicator is an approximation of 0° North.

**Project Number:**

112851.15R-006.017

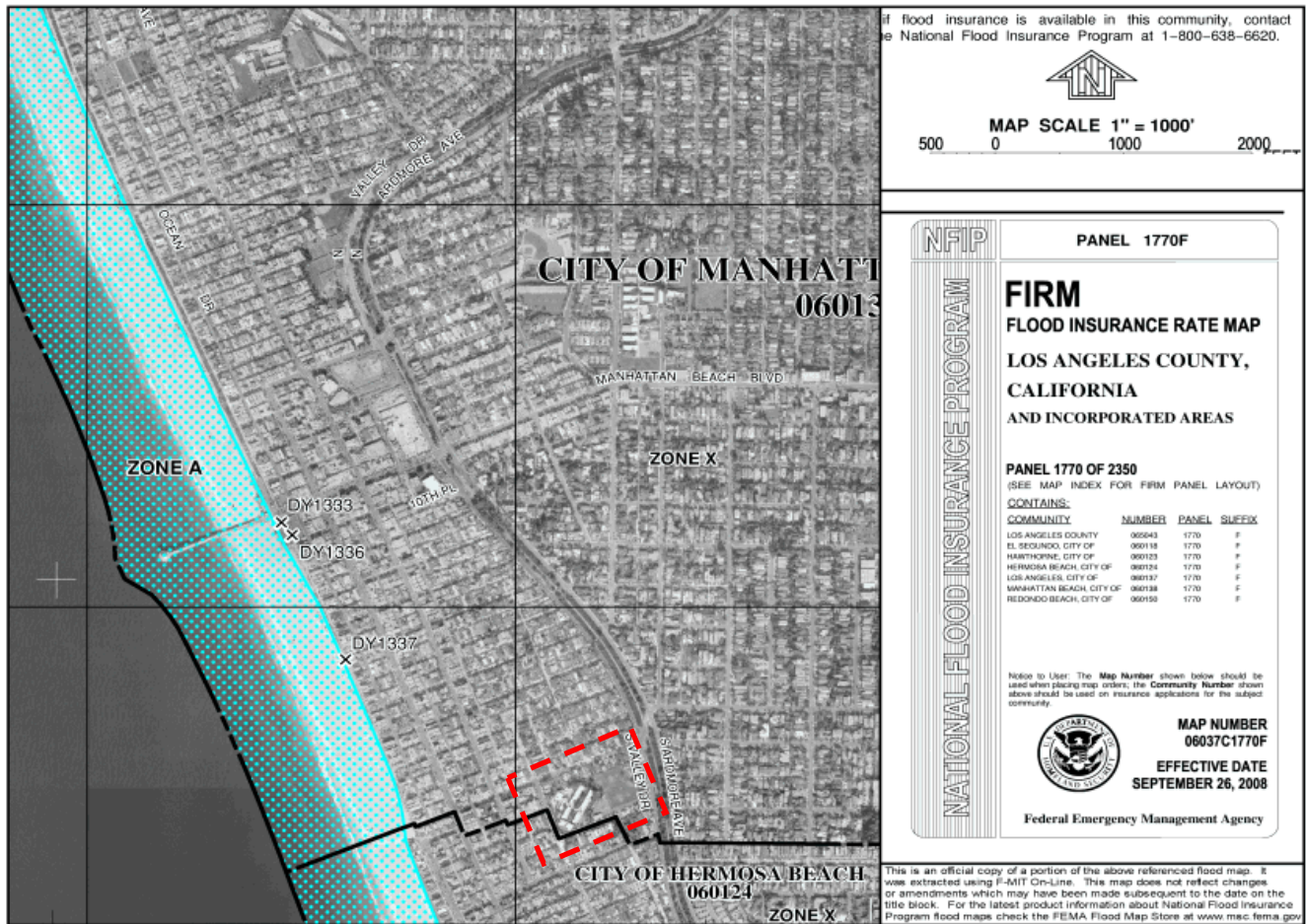
**Project Name:**

Robinson Elementary

**On-Site Date:**

February 17, 2015

## Floodplain Map



### Key:

-- Project Boundary



Not drawn to scale. The north arrow indicator is an approximation of 0° North.

### Project Number:

112851.15R-006.017

### Project Name:

Robinson Elementary

### On-Site Date:

February 17, 2015

**FACILITY CONDITION**  
ASSESSMENT

112851.15R-006.017

**APPENDIX D:**  
**EMG ABBREVIATED ACCESSIBILITY CHECKLIST**





## FACILITY CONDITION

## ASSESSMENT

112851.15R-006.017

**Property** Robinson Elementary**Name:****Date:** March 9, 2015**Project** 112851.15R-006.017**Number:**

EMG Abbreviated Accessibility Checklist					
	Building History	Yes	No	N/A	Comments
1.	Has the management previously completed an ADA review?		✓		Not disclosed
2.	Have any ADA improvements been made to the property?	✓			
3.	Does a Barrier Removal Plan exist for the property?		✓		Not disclosed
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.?			✓	
5.	Has building ownership or management received any ADA related complaints that have not been resolved?		✓		Not disclosed
6.	Is any litigation pending related to ADA issues?		✓		Not disclosed
	Parking	Yes	No	N/A	Comments
1.	Are there sufficient parking spaces with respect to the total number of reported spaces?		✓		One additional space required
2.	Are there sufficient van-accessible parking spaces available (96" wide/ 96" aisle for van)?	✓			

## FACILITY CONDITION

## ASSESSMENT

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3.	Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessible" at van spaces?		✓		Proper signage required
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?	✓			
5.	Do curbs on the accessible route have depressed, ramped curb cuts at drives, paths, and drop-offs?	✓			
6.	Does signage exist directing you to accessible parking and an accessible building entrance?			✓	
	<b>Ramps</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Comments</b>
1.	If there is a ramp from parking to an accessible building entrance, does it meet slope requirements? (1:12)	✓			
2.	Are ramps longer than 6 ft complete with railings on both sides?	✓			
3.	Is the width between railings at least 36 inches?	✓			
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?	✓			
	<b>Entrances/Exits</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Comments</b>
1.	Is the main accessible entrance doorway at least 32 inches wide?	✓			
2.	If the main entrance is inaccessible, are there alternate accessible entrances?			✓	
3.	Can the alternate accessible entrance be used independently?			✓	

## FACILITY CONDITION

## ASSESSMENT

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4.	Is the door hardware easy to operate (lever/push type hardware, no twisting required, and not higher than 48 inches above the floor)?	✓			
5.	Are main entry doors other than revolving door available?	✓			
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?			✓	
	<b>Paths of Travel</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Comments</b>
1.	Is the main path of travel free of obstruction and wide enough for a wheelchair (at least 36 inches wide)?	✓			
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?		✓		
3.	Are floor surfaces firm, stable, and slip resistant (carpets wheelchair friendly)?	✓			
4.	Is at least one wheelchair-accessible public telephone available?			✓	
5.	Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage?	✓			
6.	Is there a path of travel that does not require the use of stairs?	✓			
7.	If audible fire alarms are present, are visual alarms (strobe light alarms) also installed in all common areas?	✓			
	<b>Elevators</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Comments</b>
1.	Do the call buttons have visual signals to indicate when a call is registered and answered?			✓	

## FACILITY CONDITION

## ASSESSMENT

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2.	Are there visual and audible signals inside cars indicating floor change?			✓	
3.	Are there standard raised and Braille marking on both jambs of each host way entrance?			✓	
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?			✓	
5.	Do elevator lobbies have visual and audible indicators of car arrival?			✓	
6.	Does the elevator interior provide sufficient wheelchair turning area (51" x 68")?			✓	
7.	Are elevator controls low enough to be reached from a wheelchair (48 inches front approach/54 inches side approach)?			✓	
8.	Are elevator control buttons designated by Braille and by raised standard alphabet characters (mounted to the left of the button)?			✓	
9.	If a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication?			✓	
	<b>Restrooms</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Comments</b>
1.	Are common area public restrooms located on an accessible route?	✓			
2.	Are pull handles push/pull or lever type?	✓			
3.	Are there audible and visual fire alarm devices in the toilet rooms?	✓			
4.	Are corridor access doors wheelchair-accessible (at least 32 inches wide)?	✓			

## FACILITY CONDITION

## ASSESSMENT

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5.	Are public restrooms large enough to accommodate a wheelchair turnaround (60" turning diameter)?	✓			
6.	In unisex toilet rooms, are there safety alarms with pull cords?		✓		
7.	Are stall doors wheelchair accessible (at least 32" wide)?			✓	
8.	Are grab bars provided in toilet stalls?	✓			
9.	Are sinks provided with clearance for a wheelchair to roll under (29" clearance)?	✓			
10.	Are sink handles operable with one hand without grasping, pinching or twisting?	✓			
11.	Are exposed pipes under sink sufficiently insulated against contact?	✓			
12.	Are soap dispensers, towel, etc. reachable (48" from floor for frontal approach, 54" for side approach)?	✓			
13.	Is the base of the mirror no more than 40" from the floor?	✓			



# FACILITY CONDITION

ASSESSMENT

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## APPENDIX E: PRE SURVEY QUESTIONNAIRE AND DOCUMENTATION REQUEST CHECKLIST

## FACILITY CONDITION

## ASSESSMENT

112851.15R-006.017

## PRE-SURVEY QUESTIONNAIRE

## PHYSICAL NEEDS ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. **The completed form must be presented to EMG's Field Observer prior to or on the day of the site visit.** 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 Property Condition Report.

Name of person completing  
questionnaire: \_\_\_\_\_

Association with property: \_\_\_\_\_

Length of association with property: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Property Name: MBUSD ROBINSON ELEMENTARY SCHOOL

EMG Project Number: \_\_\_\_\_

**Directions:** Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any Yes responses.

INSPECTIONS		DATE LAST INSPECTED	LIST ANY OUTSTANDING REPAIRS REQUIRED
1	Elevators	NA	
2	HVAC, Mechanical, Electric, Plumbing	as needed PM work in summer	
3	Life-Safety/Fire	Summer 2014	
4	Roofs	as needed	Roof Flashing edge metal needs repair
QUESTION		RESPONSE	
5	List any major capital improvement within the last three years.	exerior paint + railis repair new portable security fence install	
6	List any major capital expenditures planned for the next year.	interior painting	
7	What is the age of the roof(s)?	re-coated in 10/96	
8	What building systems (HVAC, roof, interior/exterior finishes, paving, etc.) are the responsibilities of the tenant to maintain and replace?	none	

## FACILITY CONDITION

## ASSESSMENT

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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		RESPONSE				COMMENTS
		Y	N	Unk	NA	
9	Are there any unresolved building, fire, or zoning code issues?		✓			
10	Are there any "down" or unusable units?		✓			
11	Are there any problems with erosion, stormwater drainage or areas of paving that do not drain?		✓			
12	Is the property served by a private water well?		✓			
13	Is the property served by a private septic system or other waste treatment systems?		✓			
14	Are there any problems with foundations or structures?		✓			
15	Is there any water infiltration in basements or crawl spaces?				✓	
16	Are there any wall, or window leaks?	✓				(off-line) old wood windows
17	Are there any roof leaks?	✓				walkways
18	Is the roofing covered by a warranty or bond?	✓				
19	Are there any poorly insulated areas?		✓			
20	Is Fire Retardant Treated (FRT) plywood used?		✓			
21	Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?		✓			
22	Are there any problems with the utilities, such as inadequate capacities?	✓				original sewer lines
23	Are there any problems with the landscape irrigation systems?		✓			
24	Has a termite/wood boring insect inspection been performed within the last year?	✓				some wings have been serviced all have evidence of termites
25	Do any of the HVAC systems use R-11, 12, or 22 refrigerants?	✓	✓			Possible in portables
26	Has any part of the property ever contained visible suspect mold growth?		✓			



## FACILITY CONDITION

## ASSESSMENT

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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	RESPONSE				COMMENTS
	Y	N	Unk	NA	
27 Is there a mold Operations and Maintenance Plan?		✓			
28 Have there been indoor air quality or mold related complaints from tenants?		✓			
29 Is polybutylene piping used?		✓			
30 Are there any plumbing leaks or water pressure problems?	✓				See report for info on water damage
31 Are there any leaks or pressure problems with natural gas service?		✓			
32 Does any part of the electrical system use aluminum wiring?		✓			
33 Do Residential units have a less than 60-Amp service?				✓	
34 Do Commercial units have less than 200-Amp service?		✓			
35 Are there any recalled fire sprinkler heads (Star, GEM, Central, Omega)?				✓	
36 Is there any pending litigation concerning the property?		✓			
37 Has the management previously completed an ADA review?	✓				back of subject report available
38 Have any ADA improvements been made to the property?		✓			
39 Does a Barrier Removal Plan exist for the property?			✓		
40 Has the Barrier Removal Plan been approved by an arms-length third party?			✓		
41 Has building ownership or management received any ADA related complaints?		✓			
42 Does elevator equipment require upgrades to meet ADA standards?				✓	
43 Are there any problems with exterior lighting?	✓				Police lights and street lights at North of entrance
44 Are there any other significant issues/hazards with the property?	✓				Hand rails near entrance Sewer Line/Tree Issues

## FACILITY CONDITION

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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		RESPONSE				COMMENTS
		Y	N	Unk	NA	
45	Are there any unresolved construction defects at the property?					

Signature of person interviewed or completing form

Date

## FACILITY CONDITION

## ASSESSMENT

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## REQUEST FOR DOCUMENTATION

On the day of the site visit, provide EMG's Field Observer the documents listed below. Signify which documents will be copied, available for review at the site, not available, or not applicable by placing a check mark in the appropriate columns. Also provide this completed checklist.

		Copies Provided	Reviewed at Site	Not Available	Not Applicable
1	<b>Maintenance Contractor List.</b> Provide the company name, phone number, and contact person of all maintenance contractors who serve the property, such as mechanical contractors, roof contractors, fire sprinkler and fire alarm testing contractors, and elevator contractors.			✓	
2	<b>Construction Documents (Blueprints).</b> Provide all available construction documents for the original construction of the building or for any tenant improvement work or other recent construction work.		✓		
3	<b>Site plan.</b> Provide a site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features.			✓	
4	<b>Certificates of Occupancy</b> and original <b>Building Permits.</b>			✓	
5	<b>Tenant List.</b> 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).				✓
6	<b>Apartment Unit Summary.</b> For apartment properties, provide a summary of the apartment unit types and quantities, including the floor area of each apartment unit as measured in square feet.				✓
7	<b>Hotel &amp; Nursing Home Room Summary.</b> For hotel or nursing home properties, provide a summary of the room types and room type quantities, including the floor area of each room type.				✓
8	<b>Occupancy Percentage.</b> Provide the current occupancy percentage and typical turnover rate records (for commercial and apartment properties).				✓
9	<b>Inspection Documents and Certificates.</b> Fire, building, and health department inspection reports and elevator inspection certificates.			✓	
10	<b>Warranties.</b> Roof and HVAC warranties, or any other similar relevant documents.			✓	
11	<b>Utility Companies.</b> The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies.	✓			

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## FACILITY CONDITION

## ASSESSMENT

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12	<b>Capital Improvement Summary.</b> A summary of recent (over the last 5 years) capital improvement work which describes the scope of the work and the cost of the improvements.	✓			
13	<b>Proposed Improvements.</b> Pending contracts or proposals for future improvements.			✓	
14	<b>Historical Costs.</b> Costs for repairs, improvements, and replacements.				✓
15	<b>Records.</b> Records of system & material ages (roof, MEP, paving, finishes, furnishings).				✓
16	<b>Brochures or Marketing Information.</b>				✓
17	<b>Appraisal,</b> either current or previously prepared.				✓
18	<b>Previous reports</b> pertaining to the physical condition of property.			✓	
19	<b>ADA survey</b> and status of improvements implemented.			✓	
20	<b>Litigation.</b> Current / pending litigation related to property condition.				✓

**FACILITY CONDITION**  
ASSESSMENT

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**APPENDIX F:  
TERMINOLOGY**



**FACILITY CONDITION**

## ASSESSMENT

**112851.15R-006.017**

The following are definitions of terms utilized in this report.

<b>TERMINOLOGY</b>	
Actual Knowledge	Information or observations known first hand by EMG.
ADA	The Americans with Disabilities Act
Ancillary Structures	Structures that are not the primary improvements of the Property but which may have been constructed to provide support uses.
Appropriate Inquiry	A request for information from appropriate entity conducted by a Freedom of Information Letter (FOIL), verbal request, or by written request made either by fax, electronic mail, or mail. A good-faith one time effort conducted to obtain the information in light of the time constraints to deliver the FCA.
ASTM	American Society for Testing and Materials
Base Building	That portion of the building (common area) and its systems that are not typically subject to improvements to suit tenant requirements.
Baseline	A minimum scope level of observation, inquiry, research, documentation review, and cost estimating for conducting a Facility Condition Assessment as normally conducted by EMG.
BOMA	Building Owners & Managers Association
Building	Referring to the primary building or buildings on the Property, which are within the scope of the FCA as defined under Section 2.
Building Codes	A compilation of rules adopted by the municipal, county and/or state governments having jurisdiction over the Property that govern the property's design &/or construction of buildings.
Building Department Records	Information concerning the Property's compliance with applicable Building, Fire and Zoning Codes that is readily available for use by EMG within the time frame required for production of the Facility Condition Assessment.
Building Systems	Interacting or interdependent components that comprise a building such as structural, roofing, side wall, plumbing, HVAC, water, sanitary sewer and electrical systems.
BUR	Built Up Roof
Client	The entity identified on the cover of this document as the Client.

## FACILITY CONDITION

## ASSESSMENT

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TERMINOLOGY	
Commercial Real Estate	Real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes, and property used for residential purposes that has more than four (4) residential dwelling units.
Commercial Real Estate Transaction	The transfer of either a mortgage, lease, or deed; the re-financing of a commercial property by an existing mortgagee; or the transferring of an equity interest in commercial property.
Component	A piece of equipment or element in its entirety that is part of a system.
Consultant	The entity or individual that prepares the Facility Condition Assessment and that is responsible for the observance of, and reporting on the physical condition of Commercial Property.
Dangerous or Adverse Conditions	Situations which may pose a threat or possible injury to the Project Manager, or those situations which may require the use of special protective clothing, safety equipment, access equipment, or any precautionary measures.
Deferred Maintenance	Deficiencies that result from postponed maintenance, or repairs that have been put off until a later time and that require repair or replacement to an acceptable condition relative to the age of the system or property.
Dismantle	To take apart; disassemble; tear down any component, device or piece of equipment that is bolted, screwed, secured, or fastened by other means.
DWV	Drainage Waste Ventilation
EIFS	Exterior Insulation and Finish System
EMS	Energy Management System
Engineering	Analysis or design work requiring extensive formal education, preparation and experience in the use of mathematics, chemistry, physics, and the engineering sciences as provided by a Professional Engineer licensed to practice engineering by any state of the 50 states.
Expected Useful Life (EUL)	The average amount of time in years that a system or component is estimated to function when installed new.
FEMA	Federal Emergency Management Agency
FFHA	Federal Fair Housing Act
Fire Department Records	Information generated or acquired by the Fire Department having jurisdiction over the Property, and that is readily available to EMG within the time frame required for production of the FCA.
FIRM	Flood Insurance Rate Maps

**FACILITY CONDITION**

## ASSESSMENT

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TERMINOLOGY	
FM	Factory Mutual
FOIA	U.S. Freedom of Information Act (5 USC 552 et seq.)
FOIL	Freedom of Information Letter
FRT	Fire Retardant Treated
Guide	A series of options or instructions that do not recommend a specific course of action.
His	Referring to either a male or female Project Manager, or individuals interviewed by the Project Manager.
HVAC	Heating, Ventilating & Air Conditioning
IAQ	Indoor Air Quality
Immediate Repairs	Physical deficiencies that require immediate action as a result of: (i) existing or potentially material unsafe conditions, (ii) significant negative conditions impacting tenancy/marketability, (iii) material building code violations, or (iv) poor or deteriorated condition of critical element or system, or (v) a condition that if left "as is", with an extensive delay in addressing same, has the potential to result in or contribute to critical element or system failure within one (1) year.
Interviews	Interrogatory with those knowledgeable about the Property.
Material	Having significant importance or great consequence to the asset's intended use or physical condition.
MEP	Mechanical, Electrical, and Plumbing
NFPA	National Fire Protection Association
Observations	The results of the Project Manager's Walk-through Survey.
Observe	The act of conducting a visual, unaided survey of items, systems or conditions that are readily accessible and easily visible on a given day as a result of the Project Manager's walk-through.
Obvious	That which is plain or evident; a condition that is readily accessible and can be easily seen by the Project Manager as a result of his Walk-through without the removal of materials, moving of chattel, or the aid of any instrument, device, or equipment.
Owner	The entity holding the deed to the Property that is the subject of the FCA.
FCA	Facility Condition Assessment, the Purpose and Scope of which is defined in Section 2. of this report.

**FACILITY CONDITION**

## ASSESSMENT

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<b>TERMINOLOGY</b>	
Physical Deficiency	<p>Patent, conspicuous defects, or significant deferred maintenance of the Property's material systems, components, or equipment as observed during the Project Manager's Walk-through Survey.</p> <p>Material systems, components, or equipment that are approaching, have realized, or have exceeded their typical Expected Useful Life (EUL); or, that have exceeded their useful life result of abuse, excessive wear and tear, exposure to the elements, or lack of proper or adequate maintenance.</p> <p>This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous repairs, normal operating maintenance, and conditions that do not present a material deficiency to the Property.</p>
PML	Probable Maximum Loss
Practically Reviewable	Information that is practically reviewable means that the information is provided by the source in a manner and form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data.
Practice	A definitive procedure for performing one or more specific operations or functions that does not produce a test result.
Primary Improvements	The site and building improvements that are of fundamental importance with respect to the Property.
Project Manager	The individual Professional Engineer or Registered Architect having a general, well rounded knowledge of all pertinent site and building systems and components that conducts the on site visit and walk-through observation.
Property	The site and building improvements, which are specifically within the scope of the FCA to be prepared in accordance with the agreement between the Client and EMG.
Readily Accessible	Those areas of the Property that are promptly made available for observation by the Project Manager without the removal of materials or chattel, or the aid of any instrument, device, or equipment at the time of the Walk-through Survey.
Reasonably Ascertainable	Information that is publicly available, provided to EMG's offices from either its source or an information research/retrieval concern, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding.
Recreational Facilities	Spas, saunas, steam baths, swimming pools, tennis courts, playground equipment, and other exercise, entertainment, or athletic facilities.

## FACILITY CONDITION

## ASSESSMENT

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TERMINOLOGY	
Remaining Useful Life (RUL)	<p>The consultant's professional opinion of the number of years before a system or component will require replacement or reconditioning. The estimate is based upon observation, available maintenance records, and accepted EUL's for similar items or systems.</p> <p>Inclement weather, exposure to the elements, demand on the system, quality of installation, extent of use, and the degree and quality of preventive maintenance exercised are all factors that could impact the RUL of a system or component. As a result, a system or component may have an effective age greater or less than its actual age. The RUL may be greater or less than its Expected Useful Life (EUL) less actual age.</p>
Replacement Costs	Costs to replace the system or component "in kind" based on Invoices or Bid Documents provided by the current owner or the client, construction costs developed by construction resources such as <i>Means</i> and <i>Dodge</i> , EMG's experience with past costs for similar properties, or the current owner's historical incurred costs.
Replacement Reserves	Major recurring probable expenditures, which are neither commonly classified as an operation or maintenance expense. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, they may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within the reserve term.
RTU	Rooftop Unit
RUL	Remaining Useful Life (See definition)
Short Term Repair Costs	Opinions of Costs to remedy Physical Deficiencies, such as deferred maintenance, that may not warrant immediate attention, but requiring repairs or replacements that should be undertaken on a priority basis, taking precedence over routine preventive maintenance work within a zero to one year time frame. Included are such Physical Deficiencies resulting from improper design, faulty installation and/or substandard quality of original system or materials. Components or systems that have realized or exceeded their Expected Useful Life (EUL) that may require replacement to be implemented within zero to one-year time frame are also included.
Shut-Down	Equipment or systems that are not operating at the time of the Project Manager's Walk-through Survey. Equipment or systems may be considered shutdown if it is not in operation as a result of seasonal temperatures.
Significant	Important, material, and/or serious.

**FACILITY CONDITION**

## ASSESSMENT

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<b>TERMINOLOGY</b>	
Site Visit	The visit to the property by EMG's Project Manager including walk-through visual observations of the Property, interviews of available project personnel and tenants (if appropriate), review of available documents and interviews of available municipal personnel at municipal offices, all in accordance with the agreement for the Facility Condition Assessment.
Specialty Consultants	Practitioners in the fields of engineering, architecture; or, building system mechanics, specialized service personnel or other specialized individuals that have experience in the maintenance and repair of a particular building component, equipment, or system that have acquired detailed, specialized knowledge in the design, assessment, operation, repair, or installation of the particular component, equipment, or system.
Structural Component	A component of the building, which supports non-variable forces or weights (dead loads) and variable forces or weights (live loads).
Suggested Remedy	A preliminary opinion as to a course of action to remedy or repair a physical deficiency. There may be alternate methods that may be more commensurate with the Client's requirements. Further investigation might make other schemes more appropriate or the suggested remedy unworkable. The suggested remedy may be to conduct further research or testing, or to employee Specialty Consultants to gain a better understanding of the cause, extent of a deficiency (whether observed or highly probable), and the appropriate remedy.
Survey	Observations as the result of a walk-through scan or reconnaissance to obtain information by EMG of the Property's readily accessible and easily visible components or systems.
System	A combination of interacting or interdependent components assembled to carry out one or more functions.
Technically Exhaustive	The use of measurements, instruments, testing, calculations, exploratory probing or discover, and/or other means to discover and/or troubleshoot Physical Deficiencies, develop scientific or Engineering findings, conclusions, and recommendations. Such efforts are not part of this report unless specifically called for under Section 2.2.
Term	Reserve Term: The number of years that Replacement Reserves are projected for as specified in the Replacement Reserves Cost Estimate.
Timely Access	Entry provided to the Project Manager at the time of his site visit.
UST	Underground Storage Tank



# FACILITY CONDITION

## ASSESSMENT

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TERMINOLOGY	
Walk-through Survey	The Project Manager's site visit of the Property consisting of his visual reconnaissance and scan of readily accessible and easily visible components and systems. This definition connotes that such a survey should not be considered in depth, and is to be conducted without the aid of special protective clothing, exploratory probing, removal of materials, testing, or the use of special equipment such as ladders, scaffolding, binoculars, moisture meters, air flow meters, or metering/testing equipment or devices of any kind. It is literally the Project Manager's walk of the Property and observations.