

Foothill Middle School

Items		Description
Project Name		Foothill Middle School
Property Type		Academic
Full Address		2775 Cedro Lane Walnut Creek, CA 94598
Year Built		1966
Gross Building Area (GSF)		84,742
Current Replacement Value (CRV)		\$63,556,500
CRV/GSF (\$/Sq Ft)		\$750
Number of Classrooms		X
Number of Portables		0
Student population (2018/2019)		976
Site Acreage		19.10
Building Name	Gross Square Footage	Built/Renovated
New PE	17500	1966 / 2016
A2-A8	14500	1966 / 2016
A9-A10	2200	1990 / 2016
E1-E2	2200	2013
D	9500	1966 / 2016
C	9200	1966 / 2016
B	9200	1966 / 2016
T5-T7	3200	1990 / 2016
S	3400	1990 / 2016
Restroom	900	1990 / 2016
T1-T4	5000	1966 / 2016
M-U	11000	1966 / 2016
M	2200	1990 / 2016
BG	900	1966 / 2016
Total SF	84,742	

All 84,742 square feet of the property are occupied by Mount Diablo Unified School District. The spaces are mostly a combination of offices, classrooms, and laboratory spaces with supporting restrooms, administrative offices, and mechanical and other utility spaces.

Foothill Middle School

OVERVIEW

Property Executive Summary

Foothill Middle School is a fully-occupied middle school campus. It is a single-story structure with 14 buildings. Buildings PE, A2-A8, D, C, B, T1-T4, M-U, and BG were constructed in 1966 and had limited renovation in 2016. Buildings A9-A10, T5-T7, S, M and restroom buildings were constructed around 1990. Building E1-E2 was constructed in 2013.

Site Executive Summary

The buildings cover nearly the entire site. Landscaping consists of trees, shrubs, and lawn areas. Landscaped areas are irrigated by an in-ground overhead spray sprinkler system. Fencing is located at the perimeter of the site. Parking is provided in asphalt paved lots with solar carports. There is no service vehicle access. The pedestrian pavement throughout the property is constructed of cast-in-place concrete. General site lighting is provided by pole-mounted HID fixtures. Building perimeter lighting is provided by wall-mounted metal halide fixtures. Pedestrian areas and walkways are lit by metal halide bollards.

Architectural Structural Executive Summary

The foundation system was not able to be directly observed. However, based on similar structures and POC comments, it is assumed to be reinforced concrete slab-on-grade with integral footings. The original building roofs are flat and finished with modified bitumen. New buildings have gabled roofs finished with metal. The exterior walls are painted stucco. Windows are single- and double-glazed, aluminum- and steel-framed units. The buildings interiors generally include painted gypsum board walls and exposed concrete. The floor finishes consist of carpet, vinyl composition tile (VCT), ceramic tile, and concrete. The interior ceilings are finished with acoustic ceiling tile and painted gypsum board.

Mechanical/Electrical/Plumbing Executive Summary

Domestic hot water is provided to the restrooms and break room areas by individual electric and gas-fired water heaters located in the janitor closets adjacent to each area. Heating and cooling is provided by ground-mounted package units and gas-fired furnaces with remote condensing units. Supplemental cooling is provided to the communication rooms by four ductless split systems. Fire protection systems include a fire alarm system, smoke detectors, alarms with strobes, pull stations, extinguishers, and appropriate egress signage. General interior lighting is provided by T-8 and T-12 fluorescent fixtures with compact fluorescent (CFL) and incandescent fixtures in accent locations. Electrical service is provided by a single 2000-amp panel served from a pad-mounted transformer.

SCHOOL SITE ENGAGEMENT

Principal Priorities:

1. facilities for student gathering (lunch and brunch) sitting in and out of the rain. Eating and socializing. Benches outside too.
2. The size of classrooms and lack of space for group work, individual work, as well as the hardscape--lack of storage and surfaces to work on. This is especially true in all but my new science rooms.
3. Bathrooms

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ASSESSMENT OF SITE

Historical Summary

Most buildings were constructed in 1966 and had limited renovation in 2016. Building M, S, T5-T7, A9-A10, and restroom buildings were added around 1990. A new Science Building E1-E2 was constructed in 2013.

Site

The asphalt at the playground and the parking lot area was repaved in 2016. *Originally constructed in 1955, Maintenance indicates deteriorating site utility infrastructure in need of replacement.*

Architectural

A solar system was added at parking lot and open yard in 2014. Limited Interior and exterior painting and some floor finish replacement was completed in 2016. Lifecycle replacements of the interior and exterior finishes are budgeted and anticipated.

Mechanical, Electrical, Plumbing & Fire (MEPF)

The MEPF systems and infrastructure vary significantly in age; while some components were replaced or upgraded in 2016, many remain older, with some original to the construction dates. New HVAC piping was added in 2016 on a rooftop with a protection enclosure. Some of the facility's electrical infrastructure components were replaced in 2002.

Recommended Additional Studies

The M Building was constructed below grade, causing the main entrance to be flooded during heavy rain. A professional engineer must be retained to analyze the existing condition, provide recommendations and, if necessary, estimate the scope and cost of any required repairs. The cost of this study is included in the cost tables.

Facility Condition Index

In this report we have calculated the Facility Condition Index (FCI) which is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities. The FCI is primarily used to support asset management initiatives of federal, state, and local government facilities organizations.

The FCI is the ratio of accumulated Total Cost (TC) (Deferred Maintenance, Capital Renewal and Plant Adaptation) to the Current Replacement Value (CRV) for a constructed asset calculated by dividing the TC by the CRV. The range is from zero for a newly constructed asset, to one for a constructed asset with a TC value equal to its CRV. Acceptable ranges vary by "Asset Type", but as a general guideline the FCI scoring system is as follows:

Condition	Definition	Percentage Value
GOOD	In a new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0% to 5%
FAIR	Subject to wear and soiling but is still in a serviceable and functioning condition.	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 10%
V-POOR	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal now necessary.	Greater than 60%

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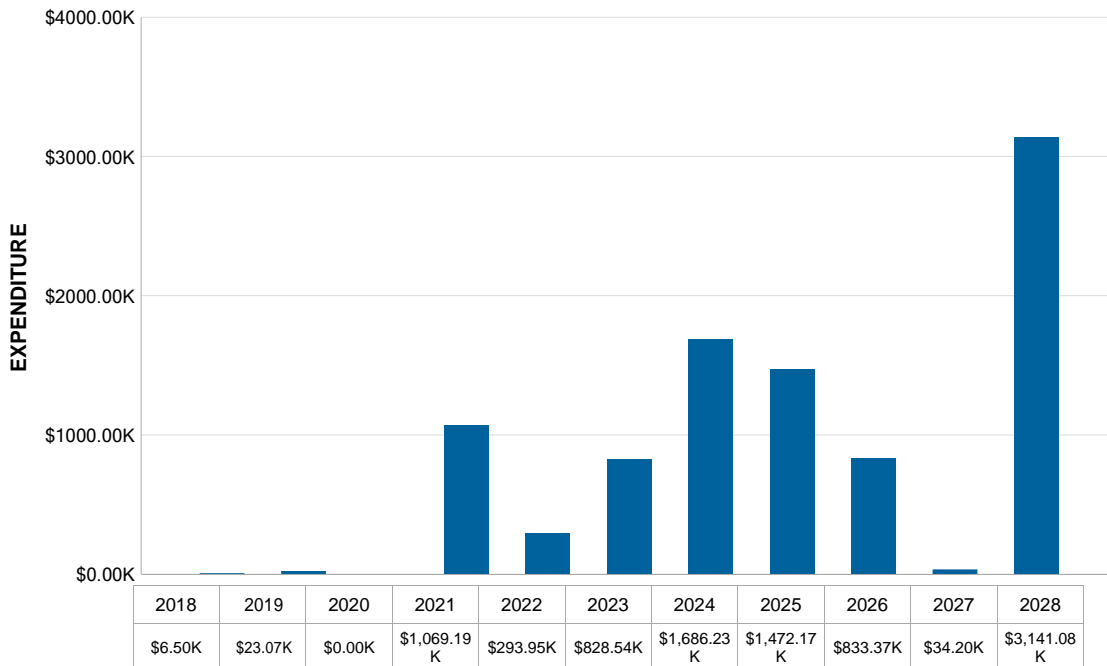
Summary of Findings

This report represents summary-level findings for the Property Condition Assessment. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall Long Term Capital Needs Plan that can be the basis for a facility wide capital improvement funding strategy. Key findings from the Assessment include:

Key Findings	Metric
Facility Condition Index (FCI)	0.01 %
Current Replacement Value (CRV)	\$63,556,500
Immediate Capital Needs (Current Year or Year 0)	\$6,500
Short Term Capital Needs (Year 1 to 5)	\$2,214,748
Long Term Capital Needs (Year 6 to 10)	\$7,167,050
TOTAL Capital Needs (Year 0 to Year 10)	\$9,388,298
Average Capital Needs Per Year	\$938,830

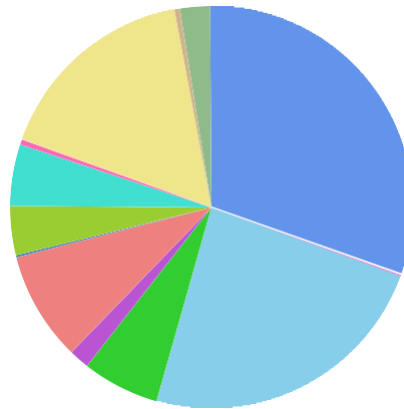
The building expenditure summary section provides an executive overview of the findings from the assessment. The chart below provides a summary of yearly anticipated expenditures over the study period for the Foothill Middle School building. In addition, we have scheduled key findings highlighting key items of greater than \$5,000 and their anticipated failure year. Further details of these expenditures are included within each respective report section and within the expenditure forecast, in Appendix A of this report. The results illustrate a total anticipated expenditure over the study period of approximately \$9,388,298.

Expenditure Forecast Over Study Period



Foothill Middle School
Distribution of Future (Year 1-Year 10) Needs by Building System

Distribution of Capital Needs by Building System



- B20 Exterior Enclosure
- B30 Roofing
- C10 Interior Construction
- C30 Interior Finishes
- D10 Conveying
- D20 Plumbing
- D30 HVAC
- D40 Fire Protection
- D50 Electrical
- E10 Equipment
- E20 Furnishings
- G20 Site Improvements
- G40 Site Electrical Utilities

Building System	Estimated Cost	Percentage of Total Cost
B20 Exterior Enclosure	\$2,236,972	23.84 %
B30 Roofing	\$582,046	6.20 %
C10 Interior Construction	\$153,122	1.63 %
C30 Interior Finishes	\$823,812	8.78 %
D10 Conveying	\$16,653	0.18 %
D20 Plumbing	\$369,042	3.93 %
D30 HVAC	\$463,616	4.94 %
D40 Fire Protection	\$39,164	0.42 %
D50 Electrical	\$1,553,144	16.55 %
E10 Equipment	\$41,705	0.44 %
E20 Furnishings	\$225,500	2.40 %
G20 Site Improvements	\$2,863,540	30.52 %
G40 Site Electrical Utilities	\$13,481	0.14 %
Total	\$9,381,798	100 %

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Building Type 1 Information



Building Type 1 Information		
Building Locations	New PE, A2-A8, D, C, B, T1-T4, M-U, E1-E2 and BG	
Constructed/ Renovated	1966 / 2016	
Total Area	64,150 SF	
Number of Stories	1	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Concrete bearing walls on concrete slabs	Fair
Façade	Stucco with aluminum- and steel-framed windows	Fair
Roof	Primary: Gable construction with metal finish	Fair
Interiors	Walls: Painted gypsum board and unfinished concrete Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT	Fair
Elevators	None	Fair
Plumbing	Copper supply, cast iron waste and vent Gas and electric water heaters	Fair
HVAC	Individual package and split-system units and furnaces Supplemental components: ductless split-systems	Fair
Fire Suppression	Hydrants, fire extinguishers, hose cabinets	Fair
Electrical	Source & Distribution: Main switchboard and distribution panels Interior Lighting: T-8, T-12, incandescent Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Key Issues & Findings	Building lacks fire suppression.	

Foothill Middle School
 Building Type 2 Information



Building Type 2 Information		
Building Locations	Buildings M, S, T5-T7, A9-A10, and restroom buildings	
Constructed/ Renovated	1990 / 2016	
Building Size	20,590 SF	
Number of Stories	1	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Conventional wood-framed structure on concrete slabs	Fair
Façade	Stucco with aluminum-framed windows	Fair
Roof	Primary: Gable construction with metal finish	Fair
Interiors	Walls: Painted gypsum board Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT	Fair
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Electric water heaters	Fair
HVAC	Split systems	Fair
Fire Suppression	Hydrants, fire extinguishers, hose cabinets	Fair
Electrical	Source & Distribution: Main switchboard and distribution panels Interior Lighting: T-8, T-12, incandescent Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations	Fair
Equipment/Special	None	Good
Key Issues & Findings	Building M was constructed below grade, and the entry floods during rain. Engineer study and evaluation is recommended.	

Foothill Middle School
 Site Summary Information



Site Information		
Lot Size	19.1 acres (estimated)	
Parking Spaces	94 total spaces all in open lots; 4 of which are accessible 1 accessible (included in total above), 3 van-accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with areas of concrete and concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Property entrance signage, Chain Link fencing, Chain Link dumpster enclosures Sports courts, fencing, and site lights	Fair
Landscaping & Topography	Moderate landscaping features Irrigation present No retaining walls Low to moderate site slopes throughout	Fair
Draining Systems and Erosion Control	Surface flow, inlets, swales, underground piping	Fair
Utilities	Municipal water and sewer Local utility-provided electricity and natural gas	Fair
Site Lighting	Pole-mounted: metal halide Building-mounted: metal halide	Fair
Ancillary Structures	Steel-framed carports for solar system.	Good
Key Issues & Findings	None	