



# **BUILDING ASSESSMENTS**



MALIBU MIDDLE HIGH SCHOOL  
SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

An aerial photograph showing a large-scale construction project at a school site. In the foreground, there is a dense thicket of dry brush and trees. The middle ground features a large, rectangular construction area with a dirt floor, where several pieces of heavy machinery, including excavators and trucks, are visible. To the right of this area, there are several modern, multi-story school buildings with large windows. In the background, a body of water (likely the ocean) stretches across the horizon under a clear sky. The overall scene depicts a major infrastructure project in progress.

LPA

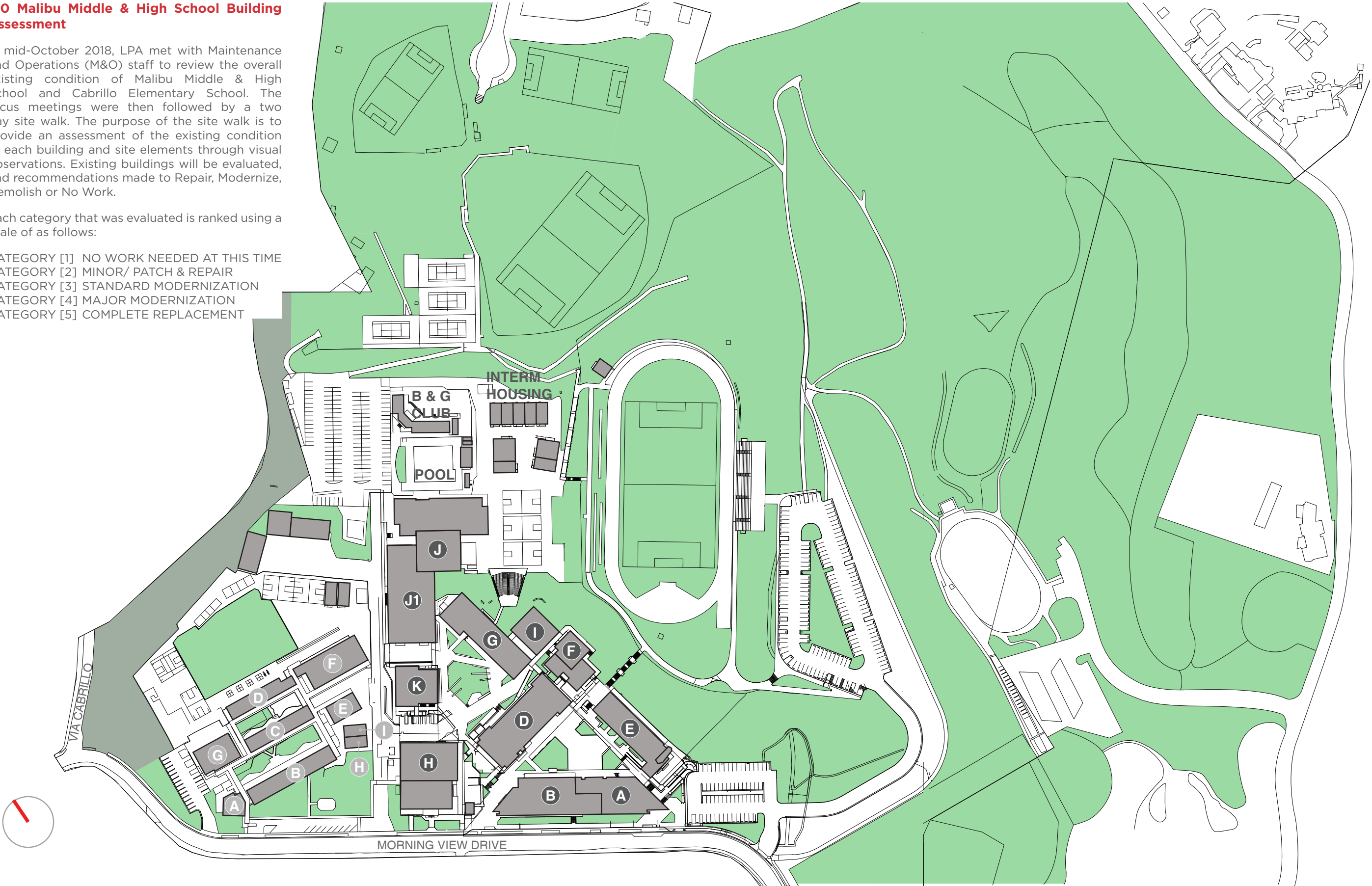


4.0 Malibu Middle & High School Building Assessment

In mid-October 2018, LPA met with Maintenance and Operations (M&O) staff to review the overall existing condition of Malibu Middle & High School and Cabrillo Elementary School. The focus meetings were then followed by a two day site walk. The purpose of the site walk is to provide an assessment of the existing condition of each building and site elements through visual observations. Existing buildings will be evaluated, and recommendations made to Repair, Modernize, Demolish or No Work.

Each category that was evaluated is ranked using a scale of as follows:

- CATEGORY [1] NO WORK NEEDED AT THIS TIME
- CATEGORY [2] MINOR/ PATCH & REPAIR
- CATEGORY [3] STANDARD MODERNIZATION
- CATEGORY [4] MAJOR MODERNIZATION
- CATEGORY [5] COMPLETE REPLACEMENT







## 4.1 Malibu Middle HS - Buildings A, B, E



### Building A & B: Administration/ Library/ Classrooms Building

#### General Information:

Year Built: 2018  
Year Modernized: N/A  
Story: 2 plus basement  
Square Footage: 35,315  
Use: Administration Offices, Library, Classrooms, Science Classrooms

Fire Sprinklers: Yes  
Type: V-B  
Structural: Metal frame

### Building E: Classrooms Building

#### General Information:

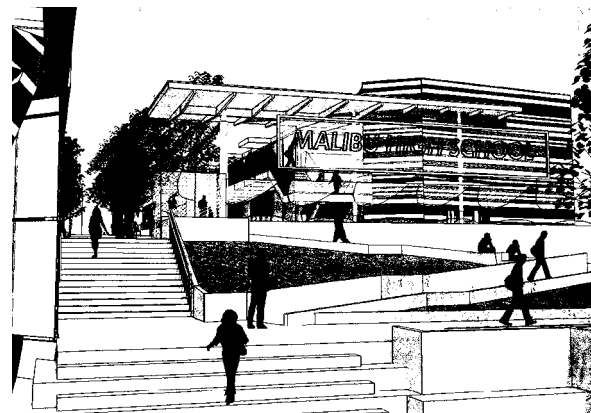
Year Built: 2018  
Year Modernized: N/A  
Story: 2  
Square Footage: 13,515  
Use: Classrooms

Fire Sprinklers: Yes  
Type: V-B  
Structural: Metal frame

#### Overall

Buildings A, B and E are currently under construction. These buildings are to remain, with no work identified for this master plan.

Figure 4.1 Building E Rendering





## 4.2 Malibu Middle & High School | Building D

### 4.2 Malibu Middle & High School - Building D



#### Building D (100 Building): Classroom/ Science Lab Building

##### General Information:

Year Built: 1963

Year Modernized: 1990 comprehensive modernization; 2017 (Restrooms & ADA upgrades only)

Story: 2

Square Footage: 26,952

Use: Classrooms, Science Labs, Staff Lounge

Fire Sprinklers: No

Occupancy: E-1

Type V-N

#### 4.2-1 Architectural

##### Exterior

- The exterior finish is brick and in fair condition. Various areas with efflorescence and faded graffiti.
- At the enclosed stairs, the metal pan is corroding. The glue down ceiling tiles appear to be original to the building are in poor condition, are mismatched and coming unglued.
- Underside of second floor walkway is concrete coffered ceiling. This is in good condition.
- The exterior guardrail and posts are faded and need to be repainted. The metal mesh infill is bent and warped and should be replaced.
- The plaster soffit appears in acceptable condition.
- Exterior lockers need to be refinished/replaced; paint in poor condition, showing signs of corrosion. Lockers on 2nd floor have been removed, but the curbs remain.
- Exterior lights are wall mounted.

##### Paint

- Paint at plaster soffit above the 2nd floor

walkway appears in good condition.

- Paint at all metal guardrail, posts, doors and frames are chipped, worn, faded and need to be repainted.

##### Doors & Frames

- Door frames are hollow metal and showing signs of corrosion.
- Wood doors show wear and tear, paint is badly chipped; need to be refinished and painted.
- Door louvers are corroded.
- Majority of thresholds do not appear to meet today's code and will need to be replaced if there is a modernization.

##### Windows

- Classroom doors have side lights with fixed, dual-pane glazing. Glazing is dark tinted.
- There are no other windows on the building.

##### Roof

- Per District roofing report by Tremco, the asphalt built up roofing with aggregate surfacing was installed in 1999 and needs minor repairs.

##### ADA Compliance

- ADA compliant door hardware.
- Restrooms were modernized in 2017 and appear to be ADA compliant.
- Many classrooms have missing or non-compliant signage.
- A more detailed assessment and survey will need to be performed as projects come online.

##### Interiors

- Interior VCT Floor finish is in fair condition with various areas near lab equipment that are badly stained. VCT in hallway is in poor condition.





- Interior gypsum board painted walls are in fair to poor condition; needs to be painted.
- Rubber wall base is faded, chipped/ peeling and in poor condition.
- Acoustical ceiling is in poor condition with warping, chips and stains.
- Lab casework appears to be in good condition.

#### 4.2-2 Structural Overview

##### General:

Two story concrete and masonry classroom building.

##### Gravity Load Resisting System:

The existing floor framing consists of a cast-in-place concrete waffle slab which spans to load bearing masonry walls.

##### Lateral Load Resisting System:

The existing lateral force resisting systems consists of load bearing masonry shear walls.

##### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing masonry walls. The existing interior slab is a reinforced concrete slab on grade.

#### 4.2-3 Mechanical + Plumbing

##### Mechanical:

##### Overall Category Rating by M&O: [3]

The base mechanical system is unit ventilators and water source heat pumps. The cooling tower was recently replaced. All other equipment appears to be in the middle of its useful life. The controls system appears to have limited functionality and in need of replacement. The current mechanical system has limited to no economizer function and does not give the district the ability to take advantage of the mild climate and over ventilate spaces.

##### Plumbing:

##### Overall Category [2]

The restroom fixtures in Building D appeared to have been modernized recently and were in very good condition at time of observation.

- Water Closets: The existing water closets were found to be in good shape at time of observation, no need for replacement.
- Urinals: The existing urinals were found to be in good shape at time of observation, no need for replacement. It should be noted that the urinal flush valves did not match any of the other urinal flush valves found on campus.
- Lavatories: The existing lavatories were found to be in good shape at time of observation, no need for replacement.

- Drinking Fountains: The existing drinking fountains were found to be in good shape at time of observation, no need for replacement. It should be noted that a bottle filling hydration station was observed at the first-floor drinking fountain. Suggest installing hi/low water coolers with integral bottle fillers if existing fountains are to be replaced in the future.
- Classroom Sinks: The existing science classroom sinks appeared to be new and in good working order, no need for replacement.

#### 4.2-4 Electrical, Low Voltage, + Fire Alarm

##### Electrical Distribution Equipment:

##### Category [3]

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be to replace old equipment with newer equipment from a similar manufacturer, for better maintenance and ease of finding replacement parts.

##### Lighting and Lighting Control System:

##### Category [5]

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

##### Fire Alarm System:

##### Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended to update the entire fire alarm system to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.



## 4.2 Malibu Middle & High School | Building D

### 4.2-5 Technology

#### IDF Room:

Observation: Not installed per:

- ANSI/TIA 607-B 2013 Building grounding (earthing) and bonding
- ASTM E119, UL 263, NFPA 251 Fire Stopping barrier standards

#### Category [3]

Observation: No entrance protection panels present for all underground termination. No visible fire stop protection, environmental climate control not present, inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling, conduits over 40% ratio industry standard cable fill requirements. No TGB bus, inadequate bonding to telecommunications hardware.

Recommendation: Install air conditioning wall unit to achieve ambient room temperature between 64-81 degrees at all times. Install Districts standard Category 6 cable for IP-base network devices and Category 6A for wireless devices. Install earth grounding TGB and bond hardware and equipment.

#### Intercom/ Clock/ Speaker/ Bell:

#### Category [5]

Manufacturer: Simplex Integrated Communications System.

Observation: Existing paging is operable. PAS system is out of date (installed 10+ years), out of warranty. Exterior/interior speakers throughout Malibu campus provides inadequate coverage as per M & O. Clock/speaker combo: is an Analog system. Reported by M & O; inadequate coverage, inconsistent function throughout the campus.

Recommendation: Complete replacement with district standards. LPA suggestion: Bogen Nyquist 7000 and/or Valcom IP6000 IP-base system. Install and update with UPS backup, bonded, and protected in a locked room, climate-controlled environment. Additional speaker locations will be provided as need to accommodate the changes in Public address requirements and need.

#### Phone System:

#### Category [2]

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

#### Classroom Technology:

#### Category [1]

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

#### Security Intrusion:

#### Category [2]

Manufacturer: Bay Alarms/Altronix Control Panel (10+ years old)

Observation: Motion detectors present and visible. M & O shared inconsistencies with the detection system and is not IP base system.

Recommendation: Intrusion system upgrade with the next modernization. It is recommended to upgrade the Security Intrusion system in its entirety (Campus-Wide) to a District Standard of one manufacture such as Bosch and or DMP as a reference. All Security Intrusion devices and associated wiring in existing building can remain, with the installation of new expansion panels in each existing buildings, rewiring, and retesting will be required.

#### Security Surveillance:

#### Category [5]

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced/ upgraded with the next modernization.

#### Data Networks:

#### Category [1] - WAP

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.



**Infrastructure Low Voltage Cabling****Category [5]**

Observation: Cabling not industry standards. Existing Category 5e cable present. Manufacture warranty is dated and possibly void. Installation of Low Voltage cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Replacement of network cabling to devices that have Category 5e. Replace one-for-one and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.



4.2-6 Photos



First floor exterior.



Second floor exterior.



Enclosed exterior stair.



Typical classroom door.



Typical science lab.



Typical lab classroom.



Typical restroom, boys.



Utility room door and drinking fountain.



### 4.3 Malibu Middle HS - Building F



#### Building F (300 Building): Music/ Band/ Choral Building

##### General Information:

Year Built: 1963  
 Modernized: 2017 (Minor Modernization)  
 Story: 1  
 Square Footage: 6,720  
 Use: Music and Lecture

Fire Sprinklers: No  
 Occupancy: E-1  
 Type V-N

#### 4.3-1 Architectural

##### Exterior

- The exterior finish is plaster and in good condition. The bottom of the plaster at some areas is uneven, which may be due to poor construction.

##### Paint

- Paint at exterior plaster walls is in good condition.
- Paint at doors and frames are in good condition.

##### Doors & Frames

- Doors and frames are hollow metal and were replaced in the last modernization. They are in good condition.

##### Windows

- Windows are aluminum system, typically clerestory, and operable with single-pane glazing. These were replaced in the last modernization and are in good condition.

##### Roof

- Per District roofing report by Tremco, the asphalt built up roof with aggregate surfacing was installed approximately in 1999. One third of the roof needs minor repairs; the rest of the roof is in fair condition and just needs regular housekeeping.

##### ADA Compliance

- ADA compliant door hardware.
- There are no restrooms in this building.
- Signage appears to be compliant.
- There is an elevation change at exterior and within the building. ADA access will need to be further evaluated.
- Interior stair handrails are not compliant to today's code.
- A more detailed assessment and survey will need to be performed as projects come online.

##### Interiors

- Interior VCT floor finish is in fair condition. VCT in Choir Room showing signs of separation at seams. Carpet in band room is worn and faded. Carpet in practice rooms appear to have been replaced recently.
- Interior gypsum board painted walls are in fair condition; needs to be repainted. Gluedown acoustical tiles are mismatched and chipped; should be replaced.
- Rubber wall base is in acceptable condition; however missing in various areas.
- Gluedown acoustical ceiling tiles are in poor condition; chipped and peeling.
- Acoustical ceiling system is in fair condition.
- Casework appears original and is showing it's age; the plastic laminate is chipped.





## 4.3 Malibu Middle & High School | Building F

### 4.3-2 Structural Overview

#### General:

Single story music building.

#### Gravity Load Resisting System:

The existing roof framing consists of long span "Inland Type" 18 gauge metal deck which spans to load bearing wood walls and steel wide flange beams which span to 6x6 wood posts or steel pipe columns.

#### Lateral Load Resisting System:

The existing lateral force resisting systems consists of plywood sheathed wood shear walls in both the longitudinal and transverse directions.

#### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing wood walls. The existing concrete slab on grade is a 4 inch thick slab on grade reinforced with #3 rebar at 18 inches on center each way at center of slab.

### 4.3-3 Mechanical + Plumbing

#### Mechanical:

Overall Category Rating by M&O: [4]

This building has heating and some areas with cooling. Heating system was reported to be oversized. Cooling functionality is limited. No energy management system is in place.

#### Plumbing:

Overall Category [3]

- Band Room: The existing plumbing fixture in the Band Room appeared to be outdated. Suggest removing and replacing sink with CPC, Cal Green and ADA compliant sink.

### 4.3-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

Category [3]

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be to replace old equipment and to go with similar manufacturer as the newer equipment, for better maintenance and ease of finding replacement

parts.

#### Lighting and Lighting Control System:

Category [5]

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.3-5 Electrical, Low Voltage, + Fire Alarm

See same notes on other buildings.

#### IDF Room:

Category [3]

See same notes on other buildings.

Observation: No Report due to school being in Session

Recommendation: Redundant observation is typical per each IDF.



4.3-6 Photos



Entryway.



Typical clerestory windows.



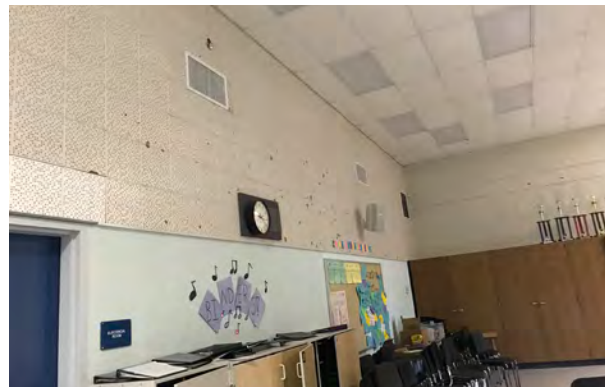
Band Classroom.



Typical casework.



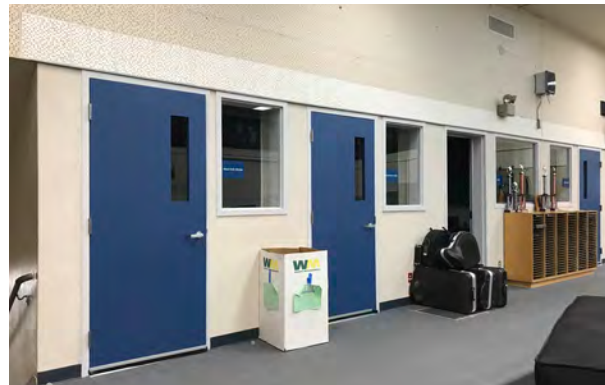
Music Classroom.



Typical glued-down acoustical wall panels.



Office under renovation.



Practice Rooms.





## 4.4 Malibu Middle & High School | Building G

### 4.4 Malibu Middle HS - Building G



#### Building G (500 Building): Art, “Woodshop” Building

##### General Information:

Year Built: 1963  
 Modernized: 2017 (Special Ed Suite, Doors & Windows)  
 Story: 1  
 Square Footage: 9,972  
 Use: 3D Art (Ceramics), Makerspace, Special Ed  
 Fire Sprinklers: No  
 Occupancy: E-1  
 Type V-N

#### 4.4-1 Architectural

- Overall Category Rating by M&O: [5]

##### Exterior

- The exterior finish is plaster and in good condition.

##### Paint

- Paint at exterior plaster walls is in good condition.
- Paint at doors and frames are in good condition.

##### Doors & Frames

- Doors and frames are hollow metal and were replaced in the last modernization. They are in good condition.

##### Windows

- Windows are aluminum system, typically clerestory, and operable with single-pane glazing. These were replaced in the last modernization and are in good condition.

##### Roof

- Per District roofing report by Tremco, the asphalt built up roofing with aggregate surfacing was installed in 1998 and needs minor repairs.

##### ADA Compliance

- ADA compliant door hardware. Makerspace door thresholds may need to be evaluated.
- Restrooms were modernized in 2017 and appear to be ADA compliant.
- Signage appears to be compliant.
- The kiln was brought up to code in 2017.
- A more detailed assessment and survey will need to be performed as projects come online.

##### Interiors

- Interior wood parquet flooring in the Makerspace appears original and is in poor condition. Floor is uneven, areas are sanded down but not refinished.
- Sealed concrete floor at Ceramics is in fair condition; needs to be resealed.
- Sheet resilient flooring at Special Ed is in good condition.
- Interior gypsum board painted walls and plywood paneling in Makerspace and Ceramics are in poor condition; good condition at Special Ed.
- Rubber wall base is in poor condition in Makerspace and Ceramics; good condition at Special Ed.
- Exposed ceiling with acoustical panels between painted steel beams appear in acceptable condition.
- Acoustical ceiling panels at Special Ed are in poor condition with stains and warping.
- Casework at Makerspace and Ceramic appear original and in poor condition; casework at Special Ed in good condition.

#### 4.4-2 Structural Overview



**General:**

Single story wood and steel framed woodshop and art classroom building.

**Gravity Load Resisting System:**

The existing roof framing consists of long span 2x wood framed joists spanning to load bearing wood walls and steel tapered steel girders which span to wood posts or steel columns.

**Lateral Load Resisting System:**

The existing lateral force resisting systems consists of light-framed wood shear walls in both the longitudinal and transverse directions.

**Foundation System:**

The existing foundation system consists of continuous reinforced concrete footings below the load bearing wood walls. The existing interior slab is a reinforced concrete slab on grade.

**4.4-3 Mechanical + Plumbing****Mechanical:****Overall Category [4]**

Art and Wood shop building with heating only. No energy management system was installed. HVAC systems are controlled by local thermostats only. Dust collection systems ducting appeared to be in good condition, no issues with the dust collection system were reported. Base building mechanical systems have exceeded their useful life. Ceramics area has limited dust collection. Fine silica is a major health concern and dust collection is required. Kiln Room needs to be properly ventilated.

**Plumbing:****Overall Category [3]**

Observation: The existing plumbing fixtures were found to be old, not in compliance with the California Green Building Code (Cal Green) and in some cases not in compliance with the current California Plumbing Code (CPC).

- The existing Wood Shop sink was found to be outdated and not compliant with Cal Green or ADA requirements.
- Life Skills: The plumbing fixtures in the Life Skills classroom were found to be in good shape and not in need of replacement.

**4.4-4 Electrical, Low Voltage, + Fire Alarm****Electrical Distribution Equipment:****Category [3]**

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be to replace old equipment and to go with similar manufacturer as the newer equipment, for better maintenance and ease of finding replacement parts.

**Lighting and Lighting Control System:****Category [5]**

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

**Fire Alarm System:****Category [3]**

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

**4.4-5 Technology****IDF Room:**

Observation: Not installed per:

- ANSI/TIA 607-B 2013 Building grounding (earthing) and bonding
- ASTM E119, UL 263, NFPA 251 Fire Stopping barrier standards

**Category [3]**

Observation: Portables being fed from Building G for network connectivity. No entrance protection panels present for all underground termination. No visible fire stop protection, environmental climate control not present, inadequate access (hard cap ceiling) to rooms and walls for new installation of



## 4.4 Malibu Middle & High School | Building G

cabling within building G, conduits over 40% ratio industry standard cable fill requirements. No TGB bus, inadequate bonding to telecommunications hardware.

Recommendation: Install air conditioning wall unit to achieve ambient room temperature between 64-81 degrees at all times. Install Districts standard Category 6 cable for IP-base network devices and Category 6A for wireless devices. Install earth grounding TGB and bond hardware and equipment.

### Intercom/ Clock/ Speaker/ Bell:

#### Category [5]

Manufacturer: Simplex Integrated Communications System

Observation: Existing paging is operable. PAS system is out of date (installed 10+ years), out of warranty. Exterior/interior speakers throughout Malibu campus does not provide adequate coverage as per M & O. Clock/speaker combo: is an Analog system. Reported by M & O; inadequate coverage, inconsistent function throughout the campus.

Recommendation: Complete replacement with district standards. LPA suggestion: Bogen Nyquist 7000 and/or Valcom IP6000 IP-base system. Install and update with UPS backup, bonded, and protected in a locked room, climate-controlled environment. Additional speaker locations will be provided as need to accommodate the changes in Public address requirements and need.

### Phone System:

#### Category [2]

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

### Classroom Technology:

#### Category [1]

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

### Security Intrusion:

#### Category [2]

Manufacturer: Bay Alarms/Altronix Control Panel (10+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with the next modernization. It is recommended to upgrade the Security Intrusion system in its entirety (Campus-Wide) to a District Standard of one manufacture such as Bosch and or DMP as a reference. All Security Intrusion devices and associated wiring in existing building can remain, with the installation of new expansion panels in each existing buildings, rewiring, and retesting will be required.

### Security Surveillance:

#### Category [5]

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with the next modernization.

### Data Networks:

#### Category [1] - WAP

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

### Infrastructure Low Voltage Cabling

#### Category [5]

Observation: Cabling not industry standards. Existing Category 5e cable present. Manufacture warranty is dated and possible void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Replacement of network cabling to devices that have Category 5e. Replace one-for-one and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.





4.4-6 Photos



Covered walkway along building.



Typical classroom door.



Typical original parquet flooring.



Typical casework.



3D Art - Ceramics.



3D Art Classroom.



Kiln Room.



Special Education Suite.





## 4.5 Malibu Middle & High School | Building H

### 4.5 Malibu Middle HS - Building H



#### Building H (600 Building): Cafetorium

##### General Information:

Year Built: 1963

Modernized: 1994 (Convert to Theater and Kitchen)

Story: 1

Square Footage: 14,478

Use: Food Service, Kitchen, Auditorium (350 seat capacity)

Fire Sprinklers: No

Occupancy: A-2.1

Type III-N

#### 4.5-1 Architectural

- Overall Category Rating by M&O: [4.5]

##### Exterior

- The exterior finish is brick and in fair condition. Various areas with efflorescence and faded graffiti.

##### Paint

- Paint at plaster trim, plaster soffits and metal coping and canopies are faded with some areas of corrosion at metal canopies; could use a new coat of paint.

##### Doors & Frames

- Doors and frames are hollow metal and appear to be replaced in the last modernization. They are in good condition with normal wear and tear. They should be re-painted.

##### Windows

- Windows are aluminum system, operable with single-pane glazing. They appear to be original to the building and are in poor condition.

##### Roof

- Per District roofing report by Tremco, the asphalt built-up roofing with aggregate surfacing was installed in 1998/99 and needs minor repairs.

##### ADA Compliance

- ADA compliant door hardware.
- ADA compliant restrooms.
- Signage appears to be compliant.
- There is an ADA lift for stage and orchestra pit access.
- Exterior ramp access will need to be further evaluated for compliance with new codes.
- A more detailed assessment and survey will need to be performed as projects come online.

##### Interiors

- Carpet in the Theater appears to be in fair condition showing normal wear.
- Quarry tile at Kitchen and Food Serving appears to be in acceptable condition; some cracking noted at door threshold.
- VCT at Theater support spaces seems to be mismatched and have areas that are missing tiles and scuffing.
- Fixed seating in the Theater appears to be in good condition.
- Gluedown tiles and plaster ceiling in the Theater appear to be in acceptable condition.
- Acoustical ceiling panels in Food Serving are in good condition.
- Gluedown ceiling tiles in the dressing room are in poor condition with many peeling.
- Wood paneling at Theater Stage is in good condition.
- All gyp board wall surfaces could use new paint; some patching at support areas.
- Ceramic tile in Restrooms appear to be in acceptable condition.
- Kitchen equipment is original to the building.



- Food Service Director noted there is lack of space for trash bins and therefore lack of access to the loading dock.
- Food Service Director noted the kitchen is not laid out well to support workflow and kitchen smells traveling into the Theater are a constant issue.
- Rubber wall base is in fair condition.

### 4.5-2 Structural Overview

#### General:

Two story steel and masonry auditorium and food service building.

#### Gravity Load Resisting System:

The existing roof framing consists of bare metal roof deck which spans to load bearing CMU walls, steel framed trusses or steel roof beams, which span to load bearing CMU walls or steel columns. The existing floor framing at the stage/platform consists of ¾ inch thick hard wood flooring over 2x6 T&G subfloor which spans to 2x solid sawn floor joists which span to wood floor beams, wood bearing walls or steel wide flange beams. The existing steel wide flange beams span to steel pipe columns. The existing floor framing at the auditorium seating consist of reinforced concrete filled metal deck which spans to load bearing masonry walls.

#### Lateral Load Resisting System:

The existing lateral force resisting systems consists of load bearing masonry shear walls.

#### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing masonry walls. The existing interior slab is a reinforced concrete slab on grade.

### 4.5-3 Mechanical + Plumbing

#### Mechanical:

##### Overall Category [4]

The base heating system is heating only. The system appears to have exceeded its useful life and is in need of replacement. Kitchen ventilation systems are old and in need of being upgraded.

#### Plumbing:

##### Overall Category [4]

Observation: The existing plumbing fixtures were found to be old, not in compliance with the California Green Building Code (Cal Green) and in some cases not in compliance with the current

California Plumbing Code (CPC).

- Water Closets: The existing water closets are 1.6 GPF (Gallons Per Flush) and do not comply with current Cal Green standards. It was also observed that the flush valves from one restroom did not match the other. Some water closets have Sloan flush valves while others have Zurn. Suggest removing and replacing the existing water closets with Cal Green compliant water closets and flush valves and standardizing the flush valves with one manufacturer.
- Urinals: The stall type urinals observed do not comply with current ADA standards nor Cal. Green. There was one (1) water-less urinal observed that does comply with Cal Green but is undesirable with the district. Suggest removing all the urinals and replacing them with Cal Green compliant 0.125 GPF urinals all of the same manufacturer and model number.
- Lavatories: The existing lavatories were found to be in fair condition, however there was no consistency with regards to the faucets serving them. The metering faucets were Cal Green compliant but old. The ADA lavatory faucet was not in compliance with Cal Green. Suggest removing and replacing all lavatories with new Cal Green compliant fixtures. Student restrooms should have metering push button type faucets and staff lavatories should have manual 0.5 GPM (Gallons Per Minute) hot and cold faucets.
- Hand Sinks: The hand sink found in the Storage/Make-Up Room was found to be in extremely poor condition and coming off the wall. It appeared the chair in front of the sink was the only thing supporting the sink at time of observation. The sink itself was found to have debris, rust and a non-compliant faucet. Suggest removing and replacing this sink immediately before it comes off the wall causing a flood in this room.
- Drinking Fountains: The existing drinking fountains appeared out of date at time of observation. Suggest removing and replacing them with new hi/low water coolers with bottle fillers. It was also observed that the drinking fountains throughout the campus were not consistent, some buildings had enameled cast iron fountains while others had stainless steel fountains.
- Kitchen: The existing kitchen equipment appeared to be in fair but old condition. Suggest modernizing the kitchen equipment to bring it up to current code standards.



## 4.5 Malibu Middle & High School | Building H

### 4.5-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

##### Category [3]

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be to replace old equipment and to go with similar manufacturer as the newer equipment, for better maintenance and ease of finding replacement parts.

#### Lighting and Lighting Control System:

##### Category [5]

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

##### Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.5-5 Technology

#### IDF Room:

Observation: Not installed per:

- ANSI/TIA 568-C.1 2012 Telecommunications cabling for customer premise.
- ANSI/TIA 568-C.2 2010 Balanced twisted-pair telecommunications cabling and components.
- ANSI/TIA 569-C 2012 Telecommunications pathway and spaces.
- ANSI/TIA 607-B 2013 Building grounding

(earthing) and bonding.

- ASTM E119, UL 263, NFPA 251 Fire Stopping barrier standards.

##### Category [5]

Observation: No entrance protection panels present for all underground termination. No growth and/or expansion available in wall mount rack, no visible fire stop protection, environmental climate control not present, sharing room with electrical, inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling, conduits over 40% ratio industry standard cable fill requirements. PVC cable being used, using household power strips, no TGB bus, inadequate bonding to telecommunications hardware. Abandoned cable.

Recommendation: Relocate IDF room and all associate cabling and telecommunications equipment to an alternate location due to sharing with electrical room. Reuse underground conduit pathway for pass through of cabling to new IDF room. Install air conditioning wall unit to achieve ambient room temperature between 64-81 degrees at all times. Remove existing wall mount cabinet and replace with (2) free standing 2-post racks for expansion and growth to your fiber/copper network. Install new fiber with multimode OM3 & singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards. Install Districts standard Category 6 cable for IP-base network devices and Category 6A for wireless devices. Install earth grounding TGB and bond hardware and equipment. Update cable to all devices and security wiring.

#### Intercom/ Clock/ Speaker/ Bell:

##### Category [5]

Manufacturer: Simplex Integrated Communications System.

Observation: Existing paging is operable. PAS system is out of date (installed 10+ years), out of warranty. Exterior/interior speakers throughout Malibu campus does not provide adequate coverage as per M & O. Clock/speaker combo: is an Analog system. Reported by M & O; inadequate coverage, inconsistent function throughout the campus.

Recommendation: Complete replacement with district standards. LPA suggestion: Bogen Nyquist 7000 and/or Valcom IP6000 IP-base system. Install and update with UPS backup, bonded, and protected in a locked room, climate-controlled environment. Additional speaker locations will be provided as need to accommodate the changes in Public address requirements and need.



**Phone System:****Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

**Classroom Technology:****Category Rating [1]**

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

**Security Intrusion:****Category [2]**

Manufacturer: Bay Alarms/Altronix Control Panel (10+ years old).

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with the next modernization. It is recommended to upgrade the Security Intrusion system in its entirety (Campus-Wide) to a District Standard of one manufacture such as Bosch and or DMP as a reference. All Security Intrusion devices and associated wiring in existing building can remain, with the installation of new expansion panels in each existing buildings, rewiring, and retesting will be required.

**Security Surveillance:****Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with the next modernization.

**Data Networks:****Category [1] - WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old).

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

**Infrastructure Low Voltage Cabling****Category [5]**

Observation: Cabling not industry standards. Existing Category 5e cable present. Manufacture warranty is dated and possible void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Replacement of network cabling to devices that have Category 5e. Replace one-for-one and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.



## 4.5-6 Photos



Entry.



Outdoor covered eating area.



Delivery and trash area.



Theater and stage.



Theater.



Dressing Room.



Corridor to support spaces; ADA lift to stage.



Food serving.



## 4.6 Malibu Middle HS - Building I



### Building I (400 Building): Graphic Arts

#### General Information:

Year Built: 1963  
Modernized: 2017  
Story: 1  
Square Footage: 4,561  
Use: Photo and Art Classrooms

Fire Sprinklers: No  
Occupancy: E-1  
Type V-N

asphalt built up roofing with aggregate surfacing was installed in 1999 and needs minor repairs.

#### ADA Compliance

- ADA compliant door hardware.
- There are no restrooms in this building.
- Signage appears to be compliant.
- Thresholds should be further evaluated for compliance with new codes.
- A more detailed assessment and survey will need to be performed as projects come online.

### 4.6-1 Architectural

- Overall Category Rating by M&O: [4.5]

#### Exterior

- The exterior finish is plaster and in acceptable condition.

#### Paint

- Paint at exterior plaster walls is in acceptable condition.
- Paint at doors and frames are in good condition.

#### Doors & Frames

- Doors and frames are hollow metal and were replaced in the last modernization. They are in good condition.

#### Windows

- Windows are aluminum system, mostly fixed with portions that are operable; dual-pane glazing. These were replaced in the last modernization and are in good condition.

#### Roof

- Per District roofing report by Tremco, the

#### Interiors

- The Photography Room and Dark Room appear to have had some minor upgrades to the finishes (flooring, T-bar ceiling, some casework).
- VCT floor finish in the Art room is in poor condition; worn, uneven and showing cracks.
- Interior gypsum board painted walls need to be re-painted.
- Acoustical ceiling in Photography Room is in fair condition.
- Gluedown ceiling tiles in Art Room appears original and in poor condition with many areas of chipping.
- There is still original wood casework in both rooms. These are showing signs of age with chipping in the plastic laminate top and wood.
- Rubber wall base in the Art room is in poor condition.

### 4.6-2 Structural Overview

#### General:

Single story art building.

#### Gravity Load Resisting System:

The existing roof framing consist of bare metal





## 4.6 Malibu Middle & High School | Building I

roof deck which spans to steel wide flange beams, steel joists spaced at 6 feet on center or reinforced masonry load bearing walls. The existing steel beams span to steel columns or reinforced masonry load bearing walls.

### Lateral Load Resisting System:

The existing lateral force resisting systems consists of load bearing masonry shear walls.

### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing masonry walls. Isolated reinforced concrete spread footings are located at steel columns which do not bear directly on continuous footings. The existing concrete slab on grade is a 6 inch thick slab on grade reinforced with #4 rebar at 16 inches on center each way at center of slab.

### 4.6-3 Mechanical + Plumbing

#### Mechanical:

##### Overall Category [4]

Ducted fan powered systems were retrofit into several of these spaces in this building. Cooling is a requirement for many of the uses in these rooms. Code required exhaust and ventilation is not provided in many spaces. Art and dark room spaces didn't appear to have exhaust.

#### Plumbing:

##### Overall Category [4]

Observation: The existing plumbing fixtures were found to be outdated and not in compliance with the California Green Building Code (Cal Green) and in some cases not in compliance with the current California Plumbing Code (CPC).

- The existing Photo Lab fixtures appeared to be outdated and not in compliance with Cal Green or ADA requirements. Due to chemical reactions some fixtures such as floor sinks were found to have a considerable amount of corrosion and need replacement.

### 4.6-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

##### Category [3]

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be

to replace old equipment and to go with similar manufacturer as the newer equipment, for better maintenance and ease of finding replacement parts.

#### Lighting and Lighting Control System:

##### Category [5]

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

##### Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.6-5 Technology

See same notes on other buildings.

#### IDF Room:

##### Category [3]

Observation: No Report due to school being in Session.

Recommendation: Redundant observation is typical per each IDF.



## 4.6-6 Photos



Typical door and storefront window system.



Typical exterior wall.



Digital photography classroom.



Digital photography classroom.



Dark room/ developing room.



Typical casework/ cabinets.



Art classroom.



Casework/ cabinets in art classroom.





## 4.7 Malibu Middle & High School | Buildings J & J1

### 4.7 Malibu Middle HS - Building J & J1



#### Building J (Building 700): Gymnasium

##### General Information:

Year Built: 1963  
Modernized: 1993  
Story: 1  
Square Footage: 20,758  
Use: Gymnasium and Locker Rooms

Fire Sprinklers: No  
Occupancy: A-2.1  
Type III-N

#### Building J1: 'New' Gymnasium

##### General Information:

Year Built: 2002  
Story: 2  
Square Footage: 18,835  
Use: Gymnasium and Team Locker Rooms

Fire Sprinklers: No  
Occupancy: A-2.1  
Type II-F.R.

#### 4.7-1 Architectural

##### Exterior

##### **J**

- The exterior finish is mainly brick with some areas of plaster. Overall, the exterior walls appear to be in good to fair condition with some areas of staining from removed graffiti. M&O has reported areas of cracking on the East and West sides.

##### **J1**

- The exterior finish is concrete masonry (CMU) and is in good condition.

##### Paint

- At Building J, paint on plaster areas appear to be in good condition.
- Paint at metal coping, metal gutters and canopies are faded; should be repainted.
- Paint on exterior hollow metal doors and frames appear faded and should be repainted.

##### Doors & Frames

- Doors and frames are hollow metal. They appear to be in fair (J1) to poor (J) condition but at minimum need to be repainted. Some doors appear more worn than others with heavy corrosion. A handful of doors appear to have been replaced and are in good condition.
- Interior doors are hollow metal frame and wood door. Building J doors and frames are in acceptable condition; Building J1 doors and frames are in good condition.

##### Windows

##### **J**

- Windows are aluminum system, typically fixed with single-pane glazing, in poor condition.

##### **J1**

- There are no windows on this building.

##### Roof

- Per District roofing report by Tremco, the roof on J1 is asphalt built up roofing with white capsheet was installed approximately in 2004. The roof needs minor repairs.
- Per District roofing report by Tremco, the roof on J above the locker rooms is asphalt built up roof with white capsheet and was installed approximately in 2005. The roof needs minor repairs.
- Per District roofing report by Tremco, the roof on J above the old gym is asphalt built up roof with white capsheet and was installed in 2002.





The roof needs to be restored immediately.

#### **ADA Compliance**

- ADA compliant door hardware
- Restrooms appear to have had ADA upgrade in J; showers were not upgraded.
- ADA compliant restrooms in J1.
- ADA compliant signage where present; but many doors are missing signage.
- There is elevator access to second level at J1.
- A more detailed assessment and survey will need to be performed as projects come online.

#### **Interiors**

##### **J**

- Locker room finishes (sealed concrete flooring, painted gypsum, brick walls, ceramic tiles at showers and restrooms) are in poor condition. Lockers are in good condition. Benches are worn and aged. Rubber wall base is in poor condition.
- Wood sports floor at gym is original and well maintained. Classroom wood flooring appears original, but maintained.
- Acoustical ceiling system and tiles in Classrooms and various vestibules are in poor condition. Ceilings are mostly acoustical metal deck with perforated metal panel.

##### **J1**

- Interior finishes in the gym and team rooms are in good condition; the gym has a wood sports floor/ Sealed concrete at Locker Rooms/ VCT at circulation areas.
- Metal lockers are in good condition.
- Bleachers are in good condition.

#### **4.7-2 Structural Overview**

##### **General:**

Single story steel and masonry.

##### **Gravity Load Resisting System:**

The existing roof framing consist of bare metal roof deck which spans to steel wide flange beams, steel joists spaced at 6 feet on center or reinforced masonry load bearing walls. The existing steel beams span to steel columns or reinforced masonry load bearing walls.

##### **Lateral Load Resisting System:**

The existing lateral force resisting systems consists of load bearing masonry shear walls.

##### **Foundation System:**

The existing foundation system consists of continuous reinforced concrete footings below the load bearing masonry walls. Isolated reinforced concrete spread footings are located at steel

columns which do not bear directly on continuous footings. The existing concrete slab on grade is a 6 inch thick slab on grade reinforced with #4 rebar at 16 inches on center each way at center of slab.

#### **4.7-3 Mechanical + Plumbing**

##### **Mechanical:**

J & J1: Overall Category [2]

Gym mechanical systems appear to be functional and appropriate for there use. No Ems system was installed. Large fans should be considered to improve comfort by increased air movement without providing full cooling.

##### **Plumbing:**

J: Overall Category [2]

Observation: The existing plumbing fixtures were found to be new in most cases, no modernization needed for the water closets, urinals and lavatories.

- Water Closets: The existing water closets were found to be in good shape at time of observation, no need for replacement.
- Lavatories: The existing lavatories were found to be in good shape at time of observation, no need for replacement.
- Drinking Fountains: The existing drinking fountains appeared out of date at time of observation. Suggest removing and replacing them with new hi/low water coolers with bottle fillers.
- Gang Showers: The existing showers were found to be outdated and do not comply with Cal Green or the current CPC. Suggest modernizing the existing shower rooms.

J1: Overall Category [1]

- The new gym building has updated plumbing fixtures, no modernization required. It should be noted that the flush valves were Zurn. Suggest standardizing plumbing fixtures throughout the campus reducing the number of manufacturers for identical systems from building to building.

#### **4.7-4 Electrical, Low Voltage, + Fire Alarm**

##### **Electrical Distribution Equipment:**

Category [3]

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be



to replace old equipment with newer equipment from similar manufacturer, for better maintenance and ease of finding replacement parts.

#### **Lighting and Lighting Control System:**

##### **Category [5]**

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

#### **Fire Alarm System:**

##### **Category [3]**

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires all new building or even remodeled buildings equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### **4.7-5 Technology**

#### **J**

#### **IDF Room:**

##### **Category [2]**

Observation: No visible fire stop protection, environmental climate control not present, conduits over 40% ratio industry standard cable fill requirements.

Recommendation: Install air conditioning wall unit to achieve ambient room temperature between 64-81 degrees at all times. Install Districts standard Category 6 cable for IP-base network devices and Category 6A for wireless devices.

#### **Intercom/ Clock/ Speaker/ Bell:**

##### **Category [5]**

Manufacturer: Simplex Integrated Communications System

Observation: Existing paging is operable. PAS system is out of date (installed 10+ years), out of warranty. Exterior/interior speakers throughout

the campus does not provide adequate coverage as per M & O. Clock/speaker combo: is an Analog system. Reported by M & O; inadequate coverage, inconsistent function throughout the campus.

Recommendation: Complete replacement with district standards. LPA suggestion: Bogen Nyquist 7000 and/or Valcom IP6000 IP-base system. Install and update with UPS backup, bonded, and protected in a locked room, climate-controlled environment. Additional speaker locations will be provided as need to accommodate the changes in Public address requirements and need.

#### **Phone System: Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

#### **Classroom Technology: Category [1]**

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

#### **Security Intrusion: Category [2]**

Manufacturer: Bay Alarms/Altronix Control Panel (10+ years old)

Observation: Motions detectors present and visible. M & O shared inconsistencies with the detection system and that it is not an IP base system.

Recommendation: Intrusion system upgrade with the next modernization. It is recommended to upgrade the Security Intrusion system in its entirety (Campus-Wide) to a District Standard of one manufacture such as Bosch and or DMP as a reference. All Security Intrusion devices and associated wiring in existing building can remain, with the installation of new expansion panels in each existing buildings, rewiring, and retesting will be required.

#### **Security Surveillance: Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with the next modernization.

**Data Networks:****Category [1] - WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

**Infrastructure Low Voltage Cabling****Category [5]**

Observation: Cabling not industry standards. Existing Category 5e cable present. Manufacture warranty is dated and possible void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Replacement of network cabling to devices that have Category 5e. Replace one-for-one and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.

**J1****IDF Room:****Category [2]**

Observation: No visible fire stop protection, environmental climate control not present, conduits over 40% ratio industry standard cable fill requirements. Updated fiber and copper present.

Recommendation: Install air conditioning wall unit to achieve ambient room temperature between 64-81 degrees at all times. Install Districts standard Category 6 cable for IP-base network devices and Category 6A for wireless devices.

**Intercom/ Clock/ Speaker/ Bell:****Category [5]**

Manufacturer: Simplex Integrated Communications System.

Observation: Existing paging is operable. PAS system is out of date (installed 10+ years), out of warranty. Exterior/interior speakers throughout Malibu campus does not provide adequate coverage per M & O. Clock/speaker combo is an Analog system. Inadequate coverage reported by M & O, inconsistent throughout the campus.

Recommendation: Complete replacement with district standards. LPA suggestion: Bogen Nyquist 7000 and/or Valcom IP6000 IP-base system. Install and update with UPS backup, bonded, and protected in a locked room, climate-controlled environment. Additional speaker locations will be provided as need to accommodate the changes in Public address requirements and need.

**Phone System:****Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

**Classroom Technology:****Category [1]**

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

**Security Intrusion: Category [2]**

Manufacturer: Bay Alarms/Altronix Control Panel (10+ years old).

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Upgrade the Security Intrusion system in its entirety (Campus-Wide) to a District Standard of one manufacturer (i.e. Bosch and/or DMP as a reference) with the next modernization. All Security Intrusion devices and associated wiring in existing building can remain, with the installation of new expansion panels in each existing buildings, rewiring, and retesting will be required.

**Security Surveillance: Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced, upgrade with the next modernization.

**Data Networks:****Category [1] - WAP**

Manufacturer: - CISCO Wireless System (less than





## 4.7 Malibu Middle & High School | Buildings J & J1

5 years old).

Observation: Newly installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

### **Infrastructure Low Voltage Cabling**

#### **Category [5]**

Observation: Cabling not industry standards. Existing Category 5e cable present. Manufacture warranty is dated and possible void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Replacement of network cabling to devices that have Category 5e. Replace one-for-one and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.



4.7-6 Photos



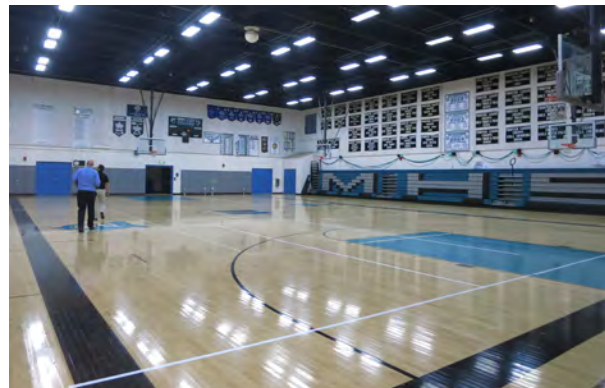
Exterior elevation of Bldg. J towards hardcourts.



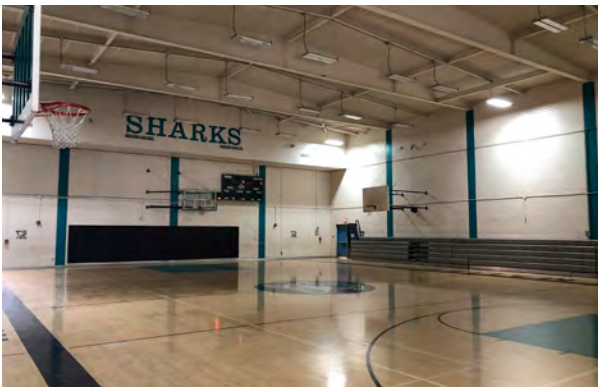
Exterior elevation of Bldg. J1.



Entry to locker rooms in Bldg. J.



Gymnasium in Bldg. J1.



Gymnasium in Bldg. J.



Concessions and circulation in Bldg. J1.



Typical Locker Room in Bldg. J.



Typical Team Room in Bldg. J1.



## 4.8 Malibu Middle & High School | Building K

### 4.8 Malibu Middle HS - Building K



#### Building K: Classroom Building

condition.

##### General Information:

Year Built: 2002  
Story: 2  
Square Footage: 12,698  
Use: Classrooms and Science Labs

Fire Sprinklers: No  
Occupancy: E-1  
Type II-F.R.

#### 4.8-1 Architectural

- Overall Category Rating by M&O: [3]

##### Exterior

- The exterior finish is plaster and in fair condition. Overall, the exterior walls appear to be in fair condition. M&O noted that there have been leaks reported through the plaster walls.

##### Paint

- Paint at exterior plaster walls is in good to fair condition; some areas could be repainted - red staining at lighter color areas.
- Paint at doors and frames are in good condition.
- Exterior metal pan stairs and metal guardrails are chipped and faded; need to be re-painted. Metal coping also needs to be refinished and repainted.

##### Doors & Frames

- Hollow metal doors and frames should be refinished and repainted. Exposed exterior doors and frames showing some corrosion and faded paint.

##### Windows

- Windows are aluminum system with fixed and operable, with dual-pane glazing; in fair

##### Roof

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with white capsheet installed in 2004. The roof needs minor repairs.

##### ADA Compliance

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- ADA compliant restrooms.
- Signage appears to be compliant.
- A more detailed assessment and survey will need to be performed as projects come online.

##### Interiors

- Interior Carpet floor finish is in showing areas that are worn.
- Interior gypsum board painted walls are in good condition. Areas of tackable wall surface are peeling and showing punctures from previous mounted items.
- Rubber wall base is in good condition.
- Acoustical ceiling system is in good condition for the most part with normal wear.

#### 4.8-2 Structural Overview

##### General:

Two story steel framed modular classroom building.

##### Gravity Load Resisting System:

The existing roof framing consists of 23/32 inch plywood roof sheathing spanning to metal Z-girt roof joists at 4 feet on center which span to 10 gauge metal tapered C-channel beams which span to steel tube posts at the corners of the pre-fabricated modules. The existing floor framing





consists of light-weight concrete fill over 1-1/2" composite "B" deck which spans to metal Z-girt floor joists at 4 feet on center which span to steel wide flange floor beams which span to steel tube posts at the corners of the pre-fabricated modules.

#### **Lateral Load Resisting System:**

The existing lateral force resisting systems consists of steel moment resisting frames in both the longitudinal and transverse directions.

#### **Foundation System:**

The existing foundation system consists of continuous reinforced concrete footings around the perimeter of each interconnecting classroom module. Isolated spread footings are provided in the middle of the classroom modules at the seams where the individual prefabricated modules are interconnected to create a single classroom module.

### **4.8-3 Mechanical + Plumbing**

#### **Mechanical:**

##### **Overall Category [4]**

Modular classroom building with gas furnaces. No cooling or economizer function is present. Ventilation appears to be limited. No energy management system is in place. Existing furnaces appear to be nearing the end of their useful life.

#### **Plumbing:**

##### **Overall Category [1]**

There were no plumbing fixtures observed at time of site investigation. It should be noted that this building's storm drain was observed spilling to grade and going underground. For future modernization storm drain treatment will be required.

### **4.8-4 Electrical, Low Voltage, + Fire Alarm**

#### **Electrical Distribution Equipment:**

##### **Category [3]**

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be to replace old equipment and to go with similar manufacturer as the newer equipment, for better maintenance and ease of finding replacement parts.

#### **Lighting and Lighting Control System:**

##### **Category [5]**

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

#### **Fire Alarm System:**

##### **Category [3]**

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### **4.8-5 Technology**

#### **IDF Room:**

Observation: Not installed per:

- ANSI/TIA 568-C.1 2012 Telecommunications cabling for customer premise
- ANSI/TIA 568-C.2 2010 Balanced twisted-pair telecommunications cabling and components.
- ANSI/TIA 569-C 2012 Telecommunications pathway and spaces.
- ANSI/TIA 607-B 2013 Building grounding (earthing) and bonding
- ASTM E119, UL 263, NFPA 251 Fire Stopping barrier standards

##### **Category [4]**

Observation: No entrance protection panels present for all underground termination. No growth and/or expansion available in wall mount rack, inadequate labeling, no visible fire stop protection, environmental climate control not present, inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling, conduits over 40% ratio industry standard cable fill requirements. PVC cable being used, using household power strips, no TGB bus, inadequate bonding to telecommunications hardware, Category 5e patch panels and cable present,



## 4.8 Malibu Middle & High School | Building K

multimode 62.5 OM1 fiber cable.

Recommendation: Install air conditioning wall unit to achieve ambient room temperature between 64-81 degrees at all times. Remove existing wall mount cabinet and replace with larger wall mount to add expansion and growth to your fiber/copper network. Install new fiber with multimode OM3 & singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards. Replace Category 5e patch panels with Districts industry standard Category 6 cable for IP-base network devices and Category 6A for wireless devices. Install earth grounding TGB and bond hardware and equipment. Existing Blonder Tongue equipment abandoned not in use - remove.

### Intercom/ Clock/ Speaker/ Bell:

#### Category [5]

Manufacturer: Simplex Integrated Communications System.

Observation: Existing paging is operable. PAS system is out of date (installed 10+ years), out of warranty. Exterior/interior speakers throughout Malibu campus does not provide adequate coverage as per M & O. Clock/speaker combo: is an Analog system. Reported by M & O; inadequate coverage, inconsistent function throughout the campus.

Recommendation: Complete replacement with district standards. LPA suggestion: Bogen Nyquist 7000 and/or Valcom IP6000 IP-base system. Install and update with UPS backup, bonded, and protected in a locked room, climate-controlled environment. Additional speaker locations will be provided as need to accommodate the changes in Public address requirements and need.

### Phone System:

#### Category [2]

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

### Classroom Technology:

#### Category [1]

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old).

Recommendation: Equipment is adequate for

today's technology. Add 1-1 combo charging stations in each classroom.

### Security Intrusion:

#### Category [2]

Manufacturer: Bay Alarms/Altronix Control Panel (10+ years old).

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with the next modernization. It is recommended to upgrade the Security Intrusion system in its entirety (Campus-Wide) to a District Standard of one manufacture such as Bosch and or DMP as a reference. All Security Intrusion devices and associated wiring in existing building can remain, with the installation of new expansion panels in each existing buildings, rewiring, and retesting will be required.

### Security Surveillance:

#### Category [5]

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with the next modernization.

### Data Networks:

#### Category [1] - WAP

Manufacturer: - CISCO Wireless System (less than 5 years old).

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

### Infrastructure Low Voltage Cabling

#### Category [5]

Observation: Cabling not industry standards. Existing Category 5e cable present. Manufacture warranty is dated and possible void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building

modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Replacement of network cabling to devices that have Category 5e. Replace one-for-one and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.







## 4.8 Malibu Middle & High School | Building K

### 4.8-6 Photos



Exterior elevation towards drop-off.



Exterior elevation and drop-off.



Elevator and machine room.



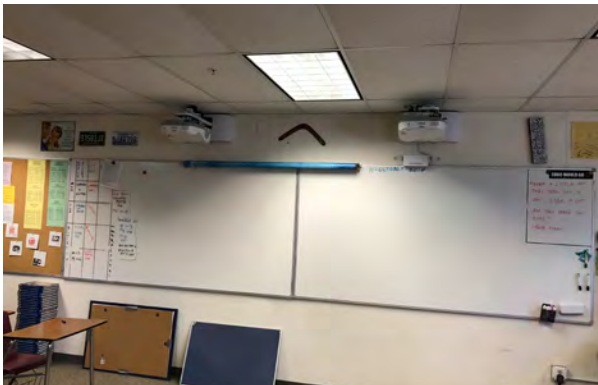
Exterior elevation towards Quad.



Exterior stair access.



Typical classroom.



Typical teaching wall.



Typical signage.



## 4.9 Malibu Middle HS - Other Buildings



### Pool

Year Built: 1963; Deck replaced in 1994  
Pool: 25M x 30M (60' x 75')  
Pool Equipment Building: 900sf

### Field House

Year Built: 2002  
Story: 1  
Square Footage: 930

### Portables (Interim Classrooms and Administration)

Year Installed: 2017 Classrooms; 1999 Admin.  
Story: 1  
Square Footage: 10,080 (1 @1,920sf, 8 @960sf, 1 @480sf) + 2,880 (3 @960sf)  
Use: Interim Classrooms and Administration

### Boys and Girls Club

Year Built: 1999 (approx.)  
Portable Buildings: 3,920sf\* (3@24x40, 1@12x40)  
\*approximate  
Use: Classrooms and Administration for before and after school care.

### Equestrian Center

Year Built: 1986 (approx.)  
Restroom Building: 120sf (approx.)



### 4.2-1 Architectural

- Pool Overall Category Rating by M&O: [5]

#### Field House Overall Category [1]

- Administration Portables Overall Category Rating by M&O: [4]
- The Interim Housing Classroom Portables, Boys and Girls Club, and Equestrian Center were not evaluated since these programs will be removed/ relocated in the future.

#### Exterior

##### Pool Equipment Building:

- The exterior finish is CMU and appears to be in good condition; some staining from graffiti removed.

##### Field House:

- The exterior finish is plaster in good condition.
- It was observed there were many birds nest underneath the eave that should be removed.

#### Paint

##### Pool Equipment Building:

- Paint at metal coping is in acceptable condition; could be repainted.
- Paint at doors and frames are faded; doors should be repainted.

##### Field House:

- Paint at exterior plaster is in good condition.
- Paint at doors and frames are in good condition.

#### Doors & Frames

##### Pool Equipment Building:

- Doors are hollow metal frame and panel; door louvers show signs of corrosion and should be replaced/ refinished and repainted.

##### Field House:

- Doors are hollow metal frame and panel and in





## 4.9 Malibu Middle & High School | Other Buildings

good condition.

### Windows

Not applicable.

### Roof

Pool Equipment Building:

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with aggregate surfacing installed in 1996. The roof needs to be replaced immediately.

### Field House:

- Roof is standing seam metal roof and is original to the building. It was not included in the District roofing report.

### ADA Compliance

#### Pool Equipment Building:

- Not applicable.
- Restroom Portable: Lacks ADA access.

#### Field House:

- ADA compliant door hardware.
- ADA compliant restrooms.
- Most areas are missing signage and ADA required braille

### Interiors

- Interior finish conditions reflect the overall category rating as listed above.

## 4.9-2 Structural Overview

### Pool Building

General: Single story wood and masonry pool mechanical building.

### Gravity Load Resisting System:

The existing roof framing consists of plywood roof sheathing which spans to 2x solid sawn roof joists which span to masonry load bearing walls.

### Lateral Load Resisting System:

The existing lateral force resisting systems consists of load bearing masonry shear walls.

### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing masonry walls. The existing interior slab is a reinforced concrete slab on grade.

### Bus Depot & M&O

General: Single story steel framed pre-fabricated metal building.

### Gravity Load Resisting System:

The existing roof framing consists of metal roof deck which spans to light-gauge metal Z-girts which span to steel wide flange shaped roof beams which span to steel wide flange shaped columns.

### Lateral Load Resisting System:

The existing lateral force resisting systems consists of custom shaped steel wide flange moment frames in the transverse direction and steel braced frames in the longitudinal direction.

### Foundation System:

The existing foundation system consists of reinforced concrete footings below the steel moment frame columns. The existing interior slab consists of a concrete slab on grade.

## 4.9-3 Mechanical + Plumbing

### Mechanical:

Typical bard units for portables. Units are near end of their life cycle.

### Plumbing:

No Assessment.

## 4.9-4 Electrical, Low Voltage, + Fire Alarm

### Electrical Distribution Equipment:

Category [3]

System consists of old and new panels, from different manufacturers. Some were installed inside electrical rooms, while others were installed outside on exterior walls of buildings they serve. Overall, current electrical distribution system is expandable and does have capacity to add loads within existing panels. Recommendation would be to replace old equipment and to go with similar manufacturer as the newer equipment, for better maintenance and ease of finding replacement parts.

### Track and Field House:

Category: N/A

Utility transformer and electrical distribution equipment were mainly installed outside behind the field house. However, equipment condition could not be verified at the time of the site visit due to locked gated fence which we didn't have the key for. From thirty feet observation behind the fence, it seems that most equipment are in good condition, but maybe the switch gear enclosure needed some rust repair and repainting.



**Lighting and Lighting Control System:****Category [5]**

All existing light fixtures seem to be a mix of LED and fluorescent type. EXERGY Lighting control system was installed in multiple buildings along with time clocks. Lighting control system does not seem coherent, expandable, and may not be in compliance with T-24. Complete system replacement is recommended.

**Fire Alarm System:****Category [3]**

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside 2nd floor electrical room at building "K". This panel communicate with all power supplies and initialing devices throughout the campus. There is a fire alarm panel model # 4003EC, which is an amplifier panel for voice/evacuation system, is installed in the new gym building "J.1" and connected with the main fire alarm panel. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.



## 4.9 Malibu Middle &amp; High School | Other Buildings

## 4.9-6 Photos



Portables - interim housing.



Restroom Building at Equestrian Center.



Restroom portable/ Pool Equipment Building.



Pool.



## 4.10 Cabrillo ES - Building A

**Building A: Administration Building****General Information:**

Year Built: 1958  
 Modernized: 1992 (Doors and Windows); 2016 (Restrooms, various ADA upgrades, Finishes)  
 Story: 1  
 Square Footage: 2,280  
 Use: Main Administration offices.

Fire Sprinklers: No  
 Occupancy: B  
 Type V-N

**4.10-1 Architectural**

- Overall Category Rating by M&O: [3]

**Exterior**

- The exterior finish is plaster and in good condition. Overall, the exterior walls appear to be in good condition.

**Paint**

- Paint at exterior plaster walls is in good.
- Paint at doors and frames are in good condition.
- Paint at exterior fascia, coping, canopy, metal columns and downspouts is in good condition.

**Doors & Frames**

- Hollow metal doors and frames are in good condition. Doors were replaced in the last modernization.

**Windows**

- Windows are aluminum system with fixed and operable, with single-pane glazing; in fair condition. These appear to be residential grade windows.

**Roof**

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with white capsheet installed in 1992. The roof needs minor repairs.

**ADA Compliance**

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- ADA compliant restrooms.
- Signage appears to be compliant.
- A more detailed assessment and survey will need to be performed as projects come online.

**Interiors**

- Interior resilient floor finish is in good condition.
- Interior gypsum board painted walls are in good condition.
- Rubber wall base is in good condition.
- Gluedown ceiling tiles appear original and are in are poor condition with mismatched tiles, staining and chipping. Gypsum board ceilings are in good condition.
- Casework appears to be the original wood cabinets with new plastic laminate countertop and door panels. These are in fair condition.

**4.10-2 Structural Overview****General:**

Single story wood framed administration building.

**Gravity Load Resisting System:**

The existing roof framing consists of ½ inch thick plywood sheathing which spans to 2x solid sawn roof joists which span to wood framed load bearing walls at each end.

**Lateral Load Resisting System:**

The existing lateral force resisting systems consists





## 4.10 Cabrillo Elementary | Building A

of plywood sheathed wood shear walls in both the longitudinal and transverse directions.

### **Foundation System:**

The existing foundation system consists of continuous reinforced concrete footings below the load bearing wood walls. The existing concrete slab on grade is a 4 inch thick slab on grade reinforced with welded wire mesh.

### **4.10-3 Mechanical + Plumbing**

#### **Mechanical:**

Overall Category [3]

Base mechanical system is heater closets with furnaces inside. Ventilation appears to be from operable windows. No economized function is present. No energy management system is installed.

#### **Plumbing:**

Overall Category [3]

Observation:

- Water Closets: The existing water closets appear to have been modernized to low flow type but are tank type and not commercial grade.
- Lavatories: The existing lavatories looked to be modernized and are in good shape.
- Hand Sinks: The existing hand sinks were found to be old and not in compliance with Cal Green Code.

### **4.10-4 Electrical, Low Voltage, + Fire Alarm**

#### **Electrical Distribution Equipment:**

Category [5]

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### **Lighting and Lighting Control System:**

Category [5]

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system replacement is recommended.

#### **Fire Alarm System:**

Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### **4.10-5 Technology**

#### **General:**

Category [2]

Observation: Hard cap ceiling environment: No access panels present. Inadequate access (hard cap ceiling) to rooms and walls for new installation of systems and cabling.

Recommendation: Alternative to a full modernization, install exterior wire mold for new cabling and system. Esthetics can be an issue but adds (VE) value engineering to save costs.

#### **MDF Room:**

Category [5]

Observation: Not installed per:

- ANSI/TIA 568-C.1 2012 Telecommunications cabling for customer premise
- ANSI/TIA 568-C.2 2010 Balanced twisted-pair telecommunications cabling and components.
- ANSI/TIA 569-C 2012 Telecommunications pathway and spaces.
- ANSI/TIA 607-B 2013 Building grounding (earthing) and bonding
- ASTM E119, UL 263, NFPA 251 Fire Stopping barrier standards

No growth and/or expansion available, sharing room with electrical not meeting proper clearance requirements of (1m) 4.3' from all electrical units/panels, inadequate rack space, improper terminations, visible tie wraps (Velcro only), inadequate labeling, no visible fire stop protection, environmental climate control between 67 to 81 degrees not present (using a household fan), using household power strips, armored fiber not properly grounded, wall mount enclosed rack not properly installed. Inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Multimode 62.5 OM1 fiber present. Cabling in conduits going to campus IDF's not OSP.

Recommendation: Relocate and rebuild new MDF



room in a controlled environment. Protect in place and re-use Access Provider demarcation and extend to new MDF room. Install new fiber with multimode OM3 & single mode OS2 fiber to each IDF on campus. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards. Install an Air Conditioning wall unit to achieve ambient room temperature between 67-81 degrees.

#### **Intercom/ Clock/ Speaker/ Bell:**

##### **Category [5]**

Manufacturer: Simplex Integrated Communications System.

Observation: Existing paging is inoperable. Located in Administration office, the PAS system is out of date (installed 15+ years), unmanageable, and out of warranty. Finding qualified technicians for service is not available and purchasing OEM parts are obsolete. Exterior/interior speakers throughout Cabrillo campus does not provide adequate coverage. Clock/speaker combo: Analog system. Reported by M & O; inadequate coverage, inconsistent function throughout the campus.

Recommendation: Complete replacement with integrable IP systems Bogen Nyquist 7000 and/or Valcom IP6000 IP-base system. UPS backup, bonded, and protected in a locked room, climate-controlled environment. Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of systems and cabling (refer to Data Networks). Additional speaker locations will be provided as need to accommodate the changes in Public address requirements and need.

#### **Phone System:**

##### **Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints regarding the system has been reported to the survey team.

Recommendation: Minor cabling required with other building modernization.

#### **Classroom Technology:**

##### **Category [4]**

Manufacturer: N/A

Observation: No audio-visual devices and/or system located in admin building.

Recommendation: Installation of new reader boards, and TV display monitors with associated

wiring and systems. Update the Admin building with AV technology.

#### **Security Intrusion:**

##### **Category [3]**

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization.

#### **Security Surveillance:**

##### **Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization.

#### **Data Networks:**

##### **Category [1] - WAP**

Manufacturer: Category 1 - CISCO Wireless Access Point System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

#### **Infrastructure Low Voltage Cabling**

##### **Category [5]**

Observation: Cabling not industry standards. Existing Category 5/ 5e cable present. Inconsistent network cabling added over the years by multiple manufactures. Manufacture warranty is void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Complete replacement of network cabling and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.



## 4.10 Cabrillo Elementary | Building A

## 4.10-6 Photos



Main point of entry to Administration.



Typical glazing.



Hallway through Administration and reception.



Staff Workroom.



Staff Restroom.



Staff Lounge.



Typical refurbished casework.



Typical gluedown ceiling tile.





## 4.11 Cabrillo ES - Building B

**Building B: Kindergarten Classroom Building (CR1 - 5)****General Information:**

Year Built: 1955  
 Modernized: 1992 (Doors and Windows); 2016 (Restrooms, various ADA upgrades, Finishes)  
 Story: 1  
 Square Footage: 5,941  
 Use: Kindergarten Classrooms

Fire Sprinklers: No  
 Occupancy: E  
 Type V-N

**4.11-1 Architectural**

- Overall Category Rating by M&O: [3]

**Exterior**

- The exterior finish is plaster and in good condition. Overall, the exterior walls appear to be in good condition.

**Paint**

- Paint at exterior plaster walls is in good.
- Paint at doors and frames are in good condition.
- Paint at exterior fascia and coping are in good condition.
- Canopy, metal columns and downspouts is in good condition.

**Doors & Frames**

- Hollow metal doors and frames are in good condition. Doors were replaced in the last modernization.

**Windows**

- Windows are aluminum system with fixed and operable portions, with single-pane glazing; in good condition. M&O noted these were

replaced in the 1990's modernization. However, the wood sills at several areas are chipped/eroded.

**Roof**

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with aggregate surfacing installed in 1992. The roof needs minor repairs.

**ADA Compliance**

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- ADA compliant restrooms.
- Signage appears to be compliant.
- A more detailed assessment and survey will need to be performed as projects come online.

**Interiors**

- Interior carpet and resilient floor finishes are in good condition.
- Interior gypsum board painted walls are in good condition. Areas of gluedown acoustical tile are uneven, but appear to have been painted in the last modernization.
- Rubber wall base is in good condition.
- Acoustical ceiling system is in good condition.
- Casework is a mix. The sink and base cabinet are new plastic laminate type. The rest are refinished and painted original wood casework with new stainless steel countertops. It is in good to fair condition.
- Ceramic tile at restrooms appear to be in good condition.

**4.11-2 Structural Overview****General:**

Single story steel framed classroom building.



## 4.11 Cabrillo Elementary | Building B

### Gravity Load Resisting System:

The existing roof framing consists of 1-1/2"x18 gauge bare metal roof deck which spans to steel wide flange beams which span to 4" diameter standard weight pipe columns.

### Lateral Load Resisting System:

The existing lateral force resisting system consists of fixed-base 4 inch diameter standard weight steel pipe cantilevered columns.

### Foundation System:

The existing foundation system consists of round shaped spread footings below each steel pipe column with vertical dowels extending out of the spread footing into a cylindrical shaped concrete column, which is cast around the base of the steel pipe columns. Along the perimeter of the building a continuous reinforced concrete stem wall interconnects the cylindrical concrete footing piers. At the interior slab on grade, 3/8 inch diameter steel rods are oriented in a diagonal pattern creating a basket weave type layout of reinforcement over the entire footprint of the building slab. The 3/8 inch diameter steel rods wrap around and are welded to each of the steel pipe columns. The interior slab is a 4 inch thick concrete slab on grade.

### 4.11-3 Mechanical + Plumbing

#### Mechanical:

Overall Category [3]

Base mechanical system is heater closets with furnaces inside. Ventilation appears to be from operable windows. No economized function is present. No energy management system is installed.

#### Plumbing:

Overall Category [3]

The existing restroom fixtures were found to be old, not in compliance with Cal Green Code and in need of modernization.

- Water Closets: The existing water closets do not comply with Cal Green.
- Urinals: The existing urinals are water-less and do comply with Cal Green, no need for modernization.
- Lavatories: The existing lavatories appear to be new and in good shape although the faucets are not metering type and do not comply with Cal Green.
- Classroom Sinks: The existing classroom and work room sinks appeared to be old and not in compliance with Cal Green.

### 4.11-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

Category [5]

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### Lighting and Lighting Control System:

Category [5]

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.11-5 Technology

#### General:

Category [2]

Observation: Hard cap ceiling environment: No access panels present. Inadequate access (hard cap ceiling) to rooms and walls for new installation of systems and cabling.

Recommendation: Alternative to a full modernization, install exterior wire mold for new cabling and system. Esthetics can be an issue but adds (VE) value engineering to save costs.

#### IDF Room:

Category [2]

Observation: No growth and/or expansion available in wall mount rack, inadequate labeling, no visible



fire stop protection, environmental climate control not present, wall mount enclosed rack not properly installed. Inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling.

Recommendation: Air conditioning wall unit to achieve ambient room temperature between 67-81 degrees at all times. Remove existing wall mount cabinet and replace with larger wall mount to add expansion and growth to your fiber/copper network. Install new fiber with multimode OM3 & singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards.

#### **Intercom/ Clock/ Speaker/ Bell:**

##### **Category [5]**

Manufacturer: Simplex Integrated Communications System:

Observation: Existing paging is inoperable. (refer to Building A)

Recommendation: Complete replacement and new cabling (refer to Building A)

#### **Phone System:**

##### **Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

#### **Classroom Technology:**

##### **Category [1]**

Manufacturer: Epson projection/ Brightlink Interactive Displays

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

#### **Security Intrusion:**

##### **Category [3]**

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and

functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization.

#### **Security Surveillance:**

##### **Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization.

#### **Data Networks:**

##### **Category [1] - WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

#### **Infrastructure Low Voltage Cabling**

##### **Category [5]**

Observation: Cabling not industry standards. Existing Category 5/ 5e cable present. Inconsistent network cabling added over the years by multiple manufactures. Manufacture warranty is void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Complete replacement of network cabling and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.





## 4.11-6 Photos



Exterior elevation of Bldg. J towards hardcourts.



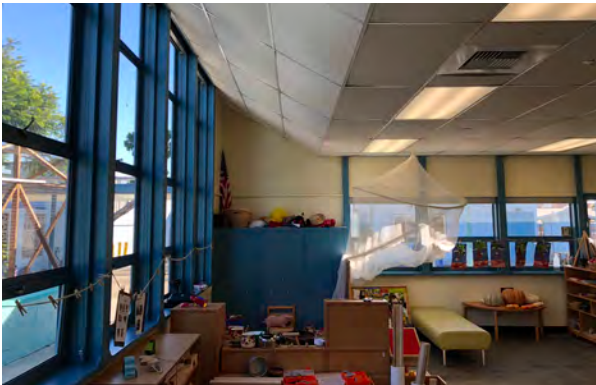
Exterior elevation of Bldg. J1.



Typical Kindergarten Classroom.



Typical Kindergarten Classroom.



Typical Kinder Classroom at window wall.



Typical Kindergarten Classroom.



Typical student restrooms.



Typical Kindergarten restroom.



## 4.12 Cabrillo ES - Building C



### Building C: Classroom Building (CR8 – 11)

#### General Information:

Year Built: 1957  
 Modernized: 1992 (Doors and Windows); 2016 (Restrooms, various ADA upgrades, Finishes)  
 Story: 1  
 Square Footage: 4,554  
 Use: Classrooms

Fire Sprinklers: No  
 Occupancy: E  
 Type V-N

#### 4.12-1 Architectural

- Overall Category Rating by M&O: [3]

#### Exterior

- The exterior finish is plaster and in good condition. Overall, the exterior walls appear to be in good condition.

#### Paint

- Paint at exterior plaster walls is in good.
- Paint at doors and frames are in good condition.
- Paint at exterior fascia and coping are in good condition.
- Canopy, metal columns and downspouts is in good condition.

#### Doors & Frames

- Hollow metal doors and frames are in good condition. Doors were replaced in the last modernization.

#### Windows

- Windows are aluminum system with fixed and operable portions, with single-pane glazing;

in good condition. M&O noted these were replaced in the 1990's modernization. However, the wood sills at several areas are chipped/eroded.

#### Roof

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with white capsheet installed in 1992. 50% of the roof (South side) needs to be replaced. 50% of the roof (North side) needs minor repairs.

#### ADA Compliance

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- ADA compliant restrooms.
- Signage appears to be compliant.
- A more detailed assessment and survey will need to be performed as projects come online.

#### Interiors

- Interior resilient floor finishes are in good condition.
- Interior gypsum board painted walls are in good condition. Areas of gluedown acoustical tile are uneven, but appear to have been painted in the last modernization.
- Rubber wall base is in good condition.
- Acoustical ceiling system is in good condition.
- Casework is a mix. The sink and base cabinet are new plastic laminate type. The rest are refinished and painted original wood casework with new stainless steel countertops. It is in good to fair condition.
- Ceramic tile at restrooms appear to be in good condition.





## 4.12 Cabrillo Elementary | Building C

### 4.12-2 Structural Overview

#### General:

Single story wood framed classroom building.

#### Gravity Load Resisting System:

The existing roof framing consists of 1x6 diagonal board sheathing which spans to 2x solid sawn roof joists which span to wood framed load bearing walls at each end.

#### Lateral Load Resisting System:

The existing lateral force resisting systems consists of plywood sheathed wood shear walls in both the longitudinal and transverse directions.

#### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing wood walls. The existing concrete slab on grade is a 5 inch thick slab on grade reinforced with welded wire mesh.

### 4.12-3 Mechanical + Plumbing

#### Mechanical:

Overall Category [3]

Base mechanical system is heater closets with furnaces inside. Ventilation appears to be from operable windows. No economized function is present. No energy management system is installed.

#### Plumbing:

Overall Category [3]

- Water Closets: The existing water closets appeared to be old and do not comply with Cal Green.
- Lavatories: The existing lavatories appear to be new and in good shape although the faucets are not metering type and do not comply with Cal Green.
- Classroom Sinks: The existing classroom room sinks appeared to be old and not in compliance with Cal Green.

### 4.12-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

Category [5]

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can

not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### Lighting and Lighting Control System:

Category [5]

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.12-5 Technology

#### General:

Category [2]

Observation: Hard cap ceiling environment: No access panels present. Inadequate access (hard cap ceiling) to rooms and walls for new installation of systems and cabling.

Recommendation: Alternative to a full modernization, install exterior wire mold for new cabling and system. Esthetics can be an issue but adds (VE) value engineering to save costs.

#### IDF Room:

Category [2]

Observation: No growth and/or expansion available in wall mount rack, inadequate labeling, no visible fire stop protection, environmental climate control not present, wall mount enclosed rack not properly installed. Inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling.

Recommendation: Air conditioning wall unit to achieve ambient room temperature between 67-81 degrees at all times. Remove existing wall mount cabinet and replace with larger wall mount to add expansion and growth to your fiber/copper network. Install new fiber with multimode OM3





& singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards.

#### **Intercom/ Clock/ Speaker/ Bell:**

##### **Category [5]**

Manufacturer: Simplex Integrated Communications System:

Observation: Existing paging is inoperable. (refer to Building A)

Recommendation: Complete replacement and new cabling (refer to Building A)

#### **Phone System:**

##### **Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

#### **Classroom Technology:**

##### **Category [1]**

Manufacturer: Epson projection/ Brightlink Interactive Displays

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

#### **Security Intrusion:**

##### **Category [3]**

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization.

#### **Security Surveillance:**

##### **Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization

#### **Data Networks:**

##### **Category [1]- WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

#### **Infrastructure Low Voltage Cabling**

##### **Category [5]**

Observation: Cabling not industry standards. Existing Category 5/ 5e cable present. Inconsistent network cabling added over the years by multiple manufactures. Manufacture warranty is void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Complete replacement of network cabling and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.



4.12-6 Photos



Exterior elevation along covered walkway.



End of building elevation; entry to restrooms.



Typical storefront and operable glazing.



Typical classroom.



Typical casework in classroom.



Typical classroom.



Typical Restroom - girls.



Typical Restroom - girls.



## 4.13 Cabrillo ES - Building D

**Building D: Classroom Building (CR12 - 15)****General Information:**

Year Built: 1958  
 Modernized: 1992 (Doors and Windows); 2016 (Restrooms, various ADA upgrades, Finishes)  
 Story: 1  
 Square Footage: 4,535  
 Use: Classrooms (Art and Music)

Fire Sprinklers: No  
 Occupancy: E  
 Type V-N

**4.13-1 Architectural**

- Overall Category Rating by M&O: [3]

**Exterior**

- The exterior finish is plaster and in good condition. Overall, the exterior walls appear to be in good condition.

**Paint**

- Paint at exterior plaster walls is in good.
- Paint at doors and frames are in good condition.
- Paint at exterior fascia and coping are in good condition.
- Canopy, metal columns and downspouts is in good condition.

**Doors & Frames**

- Hollow metal doors and frames are in good condition. Doors were replaced in the last modernization.

**Windows**

- Windows are aluminum system with fixed and operable portions, with single-pane glazing; in good condition. M&O noted these were replaced in the 1990's modernization.

**Roof**

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with white capsheet installed in 1992. The roof is in fair condition but is recommended to be restored in 3 to 5 years.

**ADA Compliance**

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- ADA compliant restrooms.
- Signage appears to be compliant.
- A more detailed assessment and survey will need to be performed as projects come online.

**Interiors**

- Interior resilient floor finishes are in good condition.
- Interior gypsum board painted walls are in good condition. Areas of gluedown acoustical tile are uneven, but appear to have been painted in the last modernization.
- Rubber wall base is in good condition.
- Acoustical ceiling system is in good condition.
- Casework is a mix. The sink and base cabinet are new plastic laminate type. The rest are refinished and painted original wood casework with new stainless steel countertops. It is in good to fair condition.
- Ceramic tile at restrooms appear to be in good condition.





## 4.13 Cabrillo Elementary | Building D

### 4.13-2 Structural Overview

#### General:

Single story wood framed classroom building.

#### Gravity Load Resisting System:

The existing roof framing consists of ½ inch thick plywood sheathing which spans to 2x solid sawn roof joists which span to wood framed load bearing walls at each end.

#### Lateral Load Resisting System:

The existing lateral force resisting systems consists of plywood sheathed wood shear walls in both the longitudinal and transverse directions.

#### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing wood walls. The existing concrete slab on grade is a 4 inch thick slab on grade reinforced with welded wire mesh.

### 4.13-3 Mechanical + Plumbing

#### Mechanical:

##### Overall Category [3]

Base mechanical system is heater closets with furnaces inside. Ventilation appears to be from operable windows. No economized function is present. No energy management system is installed.

#### Plumbing:

##### Overall Category [3]

- Classroom Sinks: The existing classroom room sinks appeared to be old and not in compliance with Cal Green.

### 4.13-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

##### Category [5]

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### Lighting and Lighting Control System:

##### Category [5]

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

##### Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.13-5 Technology

#### General:

##### Category [2]

Observation: Hard cap ceiling environment: No access panels present. Inadequate access (hard cap ceiling) to rooms and walls for new installation of systems and cabling.

Recommendation: Alternative to a full modernization, install exterior wire mold for new cabling and system. Esthetics can be an issue but adds (VE) value engineering to save costs.

#### IDF Room:

##### Category [2]

Observation: No growth and/or expansion available in wall mount rack, inadequate labeling, no visible fire stop protection, environmental climate control not present, wall mount enclosed rack not properly installed. Inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling.

Recommendation: Air conditioning wall unit to achieve ambient room temperature between 67-81 degrees at all times. Remove existing wall mount cabinet and replace with larger wall mount to add expansion and growth to your fiber/copper network. Install new fiber with multimode OM3 & singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards.

**Intercom/ Clock/ Speaker/ Bell:****Category [5]**

Manufacturer: Simplex Integrated Communications System:

Observation: Existing paging is inoperable. (refer to Building A)

Recommendation: Complete replacement and new cabling (refer to Building A)

**Phone System:****Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

**Classroom Technology:****Category [1]**

Manufacturer: Epson projection/ Brightlink Interactive Displays

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

**Security Intrusion:****Category [3]**

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization.

**Security Surveillance:****Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization..

**Data Networks:****Category [1] - WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newly installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

**Infrastructure Low Voltage Cabling****Category [5]**

Observation: Cabling not industry standards. Existing Category 5/ 5e cable present. Inconsistent network cabling added over the years by multiple manufactures. Manufacture warranty is void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Complete replacement of network cabling and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.



## 4.13-6 Photos



North elevation at restrooms.



North elevation with typical window system.



Typical classroom.



Typical casework in classroom.



Science classroom.



Science classroom.



Casework in science classroom.



Science classroom.





## 4.14 Cabrillo ES - Building E

**Building E: Library****General Information:**

Year Built: 1965  
 Modernized: 1992 (Doors and Windows); 2016 (Restrooms, various ADA upgrades, Finishes)  
 Story: 1  
 Square Footage: 2,694  
 Use: Library

Fire Sprinklers: No  
 Occupancy: B  
 Type V-N

**4.14-1 Architectural**

- Overall Category Rating by M&O: [2]

**Exterior**

- The exterior finish is plaster and in good condition. Overall, the exterior walls appear to be in good condition.

**Paint**

- Paint at exterior plaster walls is in good.
- Paint at doors and frames are in good condition.
- Paint at exterior fascia and coping are in good condition.
- Canopy, metal columns and downspouts is in good condition.

**Doors & Frames**

- Hollow metal doors and frames are in good condition. Doors were replaced in the last modernization.

**Windows**

- Windows are aluminum system with fixed and operable portions, with single-pane glazing;

in good condition. M&O noted these were replaced in the 1990's modernization.

**Roof**

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with white capsheet installed in 1992. The roof is in fair condition and repairs may be required in 1 to 3 years.

**ADA Compliance**

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- Signage appears to be compliant.
- A more detailed assessment and survey will need to be performed as projects come online.

**Interiors**

- Interior carpet (in Library) resilient floor (in Workrooms) finishes are in good condition.
- Interior gypsum board painted walls and gluedown acoustical tiles are in good condition.
- Rubber wall base is in good condition.
- Ceiling panels are in good condition.
- Casework is a mix. The sink and base cabinet are new plastic laminate type. The rest are refinished and painted original wood casework with plastic laminate countertops. It is in fair condition.

**4.14-2 Structural Overview****General:**

Single story wood and steel framed library building.

**Gravity Load Resisting System:**

The existing roof framing consists of long span "Inland Type" 18 gauge metal deck which spans to load bearing wood walls and steel wide flange



## 4.14 Cabrillo Elementary | Building E

beams which span to 6x6 wood posts or steel pipe columns.

### **Lateral Load Resisting System:**

The existing lateral force resisting systems consists of plywood sheathed wood shear walls in both the longitudinal and transverse directions.

### **Foundation System:**

The existing foundation system consists of continuous reinforced concrete footings below the load bearing wood walls. The existing concrete slab on grade is a 4 inch thick slab on grade reinforced with #3 rebar at 18 inches on center each way at center of slab.

### **4.14-3 Mechanical + Plumbing**

#### **Mechanical:**

**Overall Category [3]**

Base mechanical system is heater closets with furnaces inside. Ventilation appears to be from operable windows. No economized function is present. No energy management system is installed.

#### **Plumbing:**

**Overall Category [2]**

Observation: There were no plumbing fixtures to report on in this building.

### **4.14-4 Electrical, Low Voltage, + Fire Alarm**

#### **Electrical Distribution Equipment:**

**Category [5]**

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### **Lighting and Lighting Control System:**

**Overall Category [5]**

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system replacement is recommended.

### **Fire Alarm System:**

**Category [3]**

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### **4.14-5 Technology**

General:

**Category [1]**

Observation: Hard cap ceiling environment: 2 access panels present. With crawl space.

Recommendation: Install exterior wire mold for new cabling and system.

#### **IDF Room:**

**Category [2]**

Observation: No growth and/or expansion available in wall mount rack, inadequate labeling, no visible fire stop protection, environmental climate control not present, wall mount enclosed rack not properly installed.

Recommendation: Air conditioning wall unit to achieve ambient room temperature between 67-81 degrees at all times. Remove existing wall mount cabinet and replace with larger wall mount to add expansion and growth to your fiber/copper network. Install new fiber with multimode OM3 & singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards.

#### **Intercom/ Clock/ Speaker/ Bell:**

**Category [5]**

Manufacturer: Simplex Integrated Communications System:

Observation: Existing paging is inoperable. (refer to Building A)

Recommendation: Complete replacement and new cabling (refer to Building A)

**Phone System:****Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

**Classroom Technology:****Category [1]**

Manufacturer: Epson projection/ Brightlink Interactive Displays

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

**Security Intrusion:****Category [3]**

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization.

**Security Surveillance:****Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization.

**Data Networks:****Category [1] - WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next

modernization

**Infrastructure Low Voltage Cabling****Category [5]**

Observation: Cabling not industry standards. Existing Category 5/ 5e cable present. Inconsistent network cabling added over the years by multiple manufactures. Manufacture warranty is void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Complete replacement of network cabling and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.





## 4.14 Cabrillo Elementary | Building E

## 4.14-6 Photos



Typical glazing.



Typical doors.



Library.



Library ceiling.



Library.



Workroom and office.



Media storage.



Casework in workroom.



## 4.15 Cabrillo ES - Building F

**Building F: Classroom Building (CR16 - 23)****General Information:**

Year Built: 1961/ 1965  
 Modernized: 1992 (Doors and Windows); 2016 (Restrooms, various ADA upgrades, Finishes)  
 Story: 1  
 Square Footage: 7,952  
 Use: Classrooms

Fire Sprinklers: No  
 Occupancy: E  
 Type V-N

**4.15-1 Architectural**

- Overall Category Rating by M&O: [3]

**Exterior**

- The exterior finish is plaster and in good condition. Overall, the exterior walls appear to be in good condition.

**Paint**

- Paint at exterior plaster walls is in good.
- Paint at doors and frames are in good condition.
- Metal coping and downspouts are showing signs of corrosion. They need to be refinished.

**Doors & Frames**

- Hollow metal doors and frames are in good condition. Doors were replaced in the last modernization.

**Windows**

- Windows are aluminum system with fixed and operable portions, with single-pane glazing; in good condition. M&O noted these were replaced in the 1990's modernization.

**Roof**

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with white capsheet installed in 1992. The roof needs to be restored in 1 to 3 years to prevent replacement.

**ADA Compliance**

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- Signage appears to be compliant; but many are worn.
- A more detailed assessment and survey will need to be performed as projects come online.

**Interiors**

- Interior resilient floor finishes are in good condition.
- Interior gypsum board painted walls are in good condition.
- Rubber wall base is in good condition.
- Ceiling panels are in fair to good condition; they were painted in the last modernization.
- All Casework is plastic laminate type with plastic laminate countertops, and appears to be in good condition.

**4.15-2 Structural Overview****General:**

Single story wood and steel framed classroom building.

**Gravity Load Resisting System:**

The existing roof framing consists of long span "Inland Type" 18 gauge metal deck which spans to load bearing wood walls and steel wide flange beams which span to 6x6 wood posts or steel pipe columns.





## 4.15 Cabrillo Elementary | Building F

### Lateral Load Resisting System:

The existing lateral force resisting systems consists of plywood sheathed wood shear walls in both the longitudinal and transverse directions.

### Foundation System:

The existing foundation system consists of continuous reinforced concrete footings below the load bearing wood walls. The existing concrete slab on grade is a 4 inch thick slab on grade reinforced with #3 rebar at 18 inches on center each way at center of slab.

### 4.15-3 Mechanical + Plumbing

#### Mechanical:

Overall Category [3]

Base mechanical system is heater closets with furnaces inside. Ventilation appears to be from operable windows. No economized function is present. No energy management system is installed.

#### Plumbing:

Overall Category [2]

Classroom Sinks: The existing classroom room sinks appeared to be in good shape, but the faucets were not in compliance with Cal Green.

### 4.15-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

Category [5]

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### Lighting and Lighting Control System:

Category [5]

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.15-5 Technology

#### General:

Category [2]

Observation: Hard cap ceiling environment: No access panels present. Inadequate access (hard cap ceiling) to rooms and walls for new installation of systems and cabling.

Recommendation: Alternative to a full modernization, install exterior wire mold for new cabling and system. Esthetics can be an issue but adds (VE) value engineering to save costs.

#### IDF Room:

Category [2]

Observation: No growth and/or expansion available in wall mount rack, inadequate labeling, no visible fire stop protection, environmental climate control not present, wall mount enclosed rack not properly installed. Inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling.

Recommendation: Air conditioning wall unit to achieve ambient room temperature between 67-81 degrees at all times. Remove existing wall mount cabinet and replace with larger wall mount to add expansion and growth to your fiber/copper network. Install new fiber with multimode OM3 & singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards.

#### Intercom/ Clock/ Speaker/ Bell:

Category [5]

Manufacturer: Simplex Integrated Communications System:

Observation: Existing paging is inoperable. (refer to Building A)

Recommendation: Complete replacement and new cabling (refer to Building A)



**Phone System:****Category [2]**

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Recommendation: Minor cabling required with other building modernization.

**Classroom Technology:****Category [1]**

Manufacturer: Epson projection/ Brightlink Interactive Displays

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

**Security Intrusion:****Category [3]**

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization.

**Security Surveillance:****Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization.

**Data Networks:****Category Rating [1] - WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

**Infrastructure Low Voltage Cabling****Category [5]**

Observation: Cabling not industry standards. Existing Category 5/ 5e cable present. Inconsistent network cabling added over the years by multiple manufactures. Manufacture warranty is void. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Will require building modernization due to inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling. Complete replacement of network cabling and standardize to Category 6 for network cabling (all devices) and upgrade to Category 6A for wireless access points only.



## 4.15-6 Photos



East exterior elevation.



North exterior elevation.



Typical storefront window system.



Typical door.



Typical classroom.



Typical classroom.



Science classroom.



Typical casework in classrooms.



## 4.16 Cabrillo ES - Building G



### Building G: Multipurpose Room Building

#### General Information:

Year Built: 1995  
Modernized: 2016  
Story: 1  
Square Footage: 4,758  
Use: Multipurpose Room and Food Service

Fire Sprinklers: No  
Occupancy: A  
Type V-N

#### 4.16-1 Architectural

- Overall Category Rating by M&O: [2]

#### Exterior

- The exterior finish is plaster and in good condition. Overall, the exterior walls appear to be in good condition.

#### Paint

- Paint at exterior plaster walls is in good.
- Paint at doors and frames are in good condition.
- Paint at exterior fascia and coping are in good condition.
- Canopy, metal columns and downspouts is in good condition.

#### Doors & Frames

- Exterior is typically aluminum storefront system for doors and windows. These are in good condition.
- Interior wood doors and hollow metal frames are in good condition.

#### Windows

- Windows are aluminum system with fixed and

operable portions, with single-pane glazing; in good condition. Some areas should be resealed in routine maintenance.

#### Roof

- Per District roofing report by Tremco, the roof is an asphalt built up roofing with white capsheet. The roof needs minor repairs.

#### ADA Compliance

- ADA compliant door hardware.
- Door thresholds appear to be compliant.
- Signage appears to be compliant; but many are worn.
- There is an ADA lift to the stage.
- A more detailed assessment and survey will need to be performed as projects come online.

#### Interiors

- Interior resilient floor finish (in MPR, Stage and Kitchen) is in general in good condition. Rubber at stage steps is uplifting.
- Interior gypsum board painted walls are in acceptable condition.
- Rubber wall base is in good condition.
- Acoustical ceiling system is in fair condition with areas that appear to be sagging.
- Casework is original wood type, and appears to be in fair condition. Lunch table and benches fold into wall pockets.

### 4.16-2 Structural Overview

#### General:

Single story wood and steel framed classroom building.

There was lack of structural information for this building to make further assessment.





## 4.16 Cabrillo Elementary | Building G

### 4.16-3 Mechanical + Plumbing

#### Mechanical:

##### Overall Category [3]

Base mechanical system is heater closets with furnaces inside. Ventilation appears to be from operable windows. No economized function is present. No energy management system is installed.

#### Plumbing:

##### Overall Category [3]

Observation: The existing plumbing fixtures were found to be outdated and not in compliance with the California Green Building Code (Cal Green) and in some cases not in compliance with the current California Plumbing Code (CPC).

- The existing kitchen fixtures appeared to be old and not in compliance with Cal Green.

### 4.16-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

##### Category [5]

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### Lighting and Lighting Control System:

##### Category [5]

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system replacement is recommended.

#### Fire Alarm System:

##### Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations

fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.16-5 Technology

#### General:

##### Category [1]

Observation: Hard cap ceiling environment: 2 access panels present. Inadequate access (hard cap ceiling) to rooms and walls for new installation of systems and cabling. Possible crawl space available.

Recommendation: None

#### IDF Room:

##### Category [2]

Observation: No growth and/or expansion available in wall mount rack, inadequate labeling, no visible fire stop protection, environmental climate control not present, wall mount enclosed rack not properly installed. Inadequate access (hard cap ceiling) to rooms and walls for new installation of cabling.

Recommendation: Air conditioning wall unit to achieve ambient room temperature between 67-81 degrees at all times. Remove existing wall mount cabinet and replace with larger wall mount to add expansion and growth to your fiber/copper network. Install new fiber with multimode OM3 & singlemode OS2 fiber from MDF. Remove all 62.5 OM1 Multimode fiber from premise. Install OSP (outside plant) copper/fiber as per industry standards.

#### Intercom/ Clock/ Speaker/ Bell:

##### Category [5]

Manufacturer: Simplex Integrated Communications System:

Observation: Existing paging is inoperable. (refer to Building A)

Recommendation: Complete replacement and new cabling (refer to Building A)

#### Phone System:

##### Category [2]

Manufacturer: Cisco VoIP

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully

functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.



Recommendation: Minor cabling required with other building modernization.

#### **Classroom Technology:**

##### **Category [1]**

Manufacturer: Epson ceiling mount projection (8+ years old), Sennheiser Microphone system (less than 5 years old), Midas speaker channel (less than 5 years old), Atlona HDMI switcher (less than 5 years old), Wall mount AV speakers (less than 5 years old)

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: AV equipment is adequate for today's technology and updated. Include a portable Assistive Listening System (ALS) to meet 4% total occupancy.

#### **Security Intrusion:**

##### **Category [3]**

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization.

#### **Security Surveillance:**

##### **Category [5]**

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization.

#### **Data Networks:**

##### **Category [1] - WAP**

Manufacturer: - CISCO Wireless System (less than 5 years old)

Observation: Newly installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

#### **Infrastructure Low Voltage Cabling**

##### **Category [1]**

Observation: T-grid ceiling application. Existing Category 6 cable present.

Recommendation: None



## 4.16-6 Photos



Entry into MPR.



Typical door and storefront system.



Outdoor eating/ lunch area.



Drinking fountain.



Multipurpose Room and stage.



Multipurpose room.



ADA lift at stage.



Food service/ kitchen.





## 4.17 Cabrillo ES - Portables

**Portables****Portables P1 thru P5****General Information:**

Year Installed: 2017

Story: 1

Square Footage: 5,280 (5 @960sf, 1 @480sf)

Use: Classrooms and Restroom

- Paint at doors and frames are in good condition.
- Exterior metal fascia and downspouts need to be re-painted.

**Doors & Frames**

- P1 thru P5 are new and in good condition.
- In general, all hollow metal doors and frames are in good condition.

**Windows**

- P1 thru P5 are new and in good condition.
- In general, windows are aluminum system with fixed and operable, with single-pane glazing; in fair condition.

**Boys & Girls Club****General Information:**

Year Installed: 1992

Story: 1

Square Footage: 1,920 (2 @960sf)

Use: Boys &amp; Girls Club \*Program will be relocated

**Roof**

- P1 thru P5 are not listed in the District roofing report by Tremco. Installed in 2017, we assume the roof is in good condition.
- Boys & Girls Club - Per District roofing report by Tremco, the roof is standing seam metal roofing installed in 1988. The roof needs to be replaced eventually.
- H & I - Per District roofing report by Tremco, the roof is standing seam metal roofing installed in 1999. The roof needs to be replaced immediately.

**Building H & I****General Information:**

Year Built: 1992

Square Footage: 1,920 (2 @960sf)

Use: Special Ed classrooms \*Will be removed in 2019

**ADA Compliance**

- P1 thru P5 and Restroom are new and should meet ADA requirements.
- Boys & Girls Club and H&I wood access ramps are in poor condition. These need to be further evaluated for compliance with new codes.
- ADA compliant restrooms.
- Signage appears to be compliant.
- A more detailed assessment and survey will need to be performed as projects come online.

**4.17-1 Architectural**

- P1 thru P5 Overall Category Rating by M&O: [1]
- Boys & Girls Club Overall Category Rating: N/A
- H & I Overall Category Rating by M&O: [5+]

**Exterior**

- P1 thru P5 are new and in good condition.
- The exterior finish is wood siding and in good condition. Overall, the exterior walls appear to be in good condition.

**Paint**

- P1 thru P5 are new and in good condition.
- In general paint at exterior walls, doors and frames are in good condition.

**Interiors**

P1 thru P5



## 4.17 Cabrillo Elementary | Portables

- New and in good condition.

### H&I:

- M&O reported that the floors are uneven. Resilient floor finish is in good condition.
- Casework is mismatched and does not appear to meet ADA requirements.
- Acoustical ceiling system and panels are in poor condition with areas of warping and staining.

### Boys & Girls Club

- The interiors was not evaluated because there was no access to the space.

### 4.17-2 Structural Overview

#### General:

Typical portable on grade with wood foundations.

### 4.17-3 Mechanical + Plumbing

#### Mechanical:

Typical bard units on portables. Newer portables are in good condition. Units on older portables are at the end of their life cycle.

#### Plumbing:

#### Overall Category [3]

- Classroom Sinks: The existing classroom room sinks appeared to be in good shape, but the faucets were not in compliance with Cal Green.

### 4.17-4 Electrical, Low Voltage, + Fire Alarm

#### Electrical Distribution Equipment:

#### Category [5]

Most distribution panels are installed outside on the exterior wall of the building they are serving. In general. Panels seem to be old and most of them are maxed out on capacity. Current electrical distribution system is not expandable and can not even satisfy additional new loads such as HVAC system. Complete system replacement is recommended.

#### Lighting and Lighting Control System:

#### Category [5]

All existing light fixtures seem to be fluorescent type. Lighting control system conduits are surface mounted, and controllers seem to be serving only the room they are installed in. Lighting control system does not seem networkable and may not be in compliance with T-24. Complete system

replacement is recommended.

#### Fire Alarm System:

#### Category [3]

Simplex is the district standard for Fire alarm system. Simplex main fire alarm panel model # 4100ES, which is a horn/strobe system, is installed inside electrical room at building "A". This panel communicate with all power supplies and initialing devices throughout the campus. DSA now requires that all new building or even remodeled buildings to be equipped with voice evacuation fire alarm system. It is highly recommended that entire fire alarm system gets upgraded to voice evacuations fire alarm system, by adding amplifiers and replace horns with speakers for the entire system.

### 4.17-5 Technology

#### General:

#### Category [5]

Observation: Removal of building is suggested

Recommendation: none

#### IDF Room (bldg. I):

#### Category [2]

Observation: One 12U wall mount rack located above cabinet in bldg. 3U space expansion available in wall mount rack, wall mount enclosed rack not properly installed. Has newly installed OM3 fiber backbone to LIU. No ground and bonding to rack is present.

Recommendation: Label the fiber. Provide earth ground and bond rack.

#### Intercom/ Clock/ Speaker/ Bell:

#### Category [5]

Manufacturer: Simplex Integrated Communications





System:

5 years old)

Observation: Existing paging is inoperable. (refer to Building A)

Observation: Newley installed wireless access points (WAP) CISCO system. Some WAP not installed in protective housing. WAP cabling installed exterior on walls and using wire mold due to none ceiling access.

Recommendation: Complete replacement and new cabling (refer to Building A)

Recommendation: Equipment is adequate for today's technology. New cabling with the next modernization.

### **Phone System:**

Category [1]

Manufacturer: Cisco VoIP

### **Infrastructure Low Voltage Cabling**

Category [1]

Observation: The phone system has been recently replaced by a CISCO VoIP system. The system is fully functional and tested and inspected yearly. No complaints been reported to the survey team regarding the system.

Observation: T-grid ceiling application. Existing Category 6 cable present. Installation of Low Voltage Category cabling installed outside of walls using staples, wire mold and exposed conduit.

Recommendation: Minor cabling required with other building modernization.

Recommendation: None

### **Classroom Technology:**

Category [1]

Manufacturer: Epson projection/ Brightlink Interactive Displays

Observation: Audio-visual device(s) and system(s) are newly installed (less than 5 years old)

Recommendation: Equipment is adequate for today's technology. Add 1-1 combo charging stations in each classroom.

### **Security Intrusion:**

Category [3]

Manufacturer: Bay Alarms/Ademco Control (15+ years old)

Observation: Motions detectors present and visible in rooms. M & O shared the detection system and functionality has inconsistencies and is not IP base system.

Recommendation: Intrusion system upgrade with integrable IP capabilities next modernization

### **Security Surveillance:**

Category [5]

Manufacturer: N/A

Observation: CCTV security cameras none existent.

Recommendation: CCTV camera system should be replaced and upgraded with integrable IP capabilities next modernization.

### **Data Networks:**

Category [1] - WAP

Manufacturer: - CISCO Wireless System (less than





## 4.18 Cabrillo Elementary | Support Spaces

### 4.18 Support Spaces - Bus Depot & M&O



#### Bus Depot

##### General Information:

Year Built: 1963

Story: 1

Square Footage:

#### M&O

##### General Information:

Year Built: 1963

Story: 1

Square Footage: 930

#### 4.18-1 Architectural

- Overall Category Rating by M&O: [4]

##### Exterior

- The exterior finish is corrugated metal and in poor condition. Overall the exterior metal finishes are in poor condition with many areas showing corrosion.

##### Paint

- Not applicable.

##### Doors & Frames

- Corrugated metal garage doors appear to be in working condition.

##### Windows

- Windows are old steel frame with single pane. Windows and screens are corroded. Glazing is worn.

##### Roof

- These roofs are not listed in the District roofing report by Tremco. From visual observation, they are corrugated metal roofing and in fair condition.

##### ADA Compliance

- Restroom is not accessible.

##### Interiors

- Interior finishes are worn and showing their age.

#### 4.18-2 Structural Overview

##### General:

Single story steel framed pre-fabricated metal building.

##### Gravity Load Resisting System:

The existing roof framing consists of metal roof deck which spans to light-gauge metal Z-girts which span to steel wide flange shaped roof beams which span to steel wide flange shaped columns.

##### Lateral Load Resisting System:

The existing lateral force resisting systems consists of custom shaped steel wide flange moment frames in the transverse direction and steel braced frames in the longitudinal direction.

##### Foundation System:

The existing foundation system consists of reinforced concrete footings below the steel moment frame columns. The existing interior slab consists of a concrete slab on grade.



4.18-6 Photos



Bus depot.



M&O Storage.



Bus depot.



Transportation/ M&O staff lounge.