

Walnut Creek Elementary School Site Summary

Address	401 West Braker Lane Austin, TX
Number of Permanent Campus Facilities	2
Original Year of Construction	1961, 1999
Total Campus Building Area (combined)	79,223 SF



Introduction

The Walnut Creek Elementary School campus is located at 401 West Braker Lane in Austin, Texas. Walnut Creek Elementary School was established in 1961, and consists of two permanent campus buildings. The Main School Building (BLDG-141A) includes administration offices, classrooms, gymnasium and cafeteria. The other permanent campus building is the Stand-Alone Building (BLDG-141B), which is an attached classroom addition constructed in 1999.

Meeting Log		Revision Log		
Date	Meeting	Revision	Date	Summary of Content
8/4/16	Interview	00	9/16/16	Draft Issue
8/11/16	Assessment	01	12/5/16	Added comments from PM Robert Ross and CM Randall Sakai as indicated on email dated 10/28/16. See page 8.
10/18/16	Cluster Meeting (Attended)			

Main School Building – BLDG-141A

Building Purpose	Administration, Classrooms, Gymnasium and Cafeteria
Building Area	44,924 SF
Inspection Date	August 11, 2016
Inspection Conditions	102°F - Partly cloudy
Facility Condition Index	



System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	<p>The exterior walls are brick façade on CMU (concrete masonry unit). There is painted steel structure framing window openings, as a majority are full height window systems. There are painted structural steel roof beams that support the overhangs and a painted roof panel soffit. The main entrance has painted columns and beams supporting a metal roof structure.</p> <p>The exterior brick was in good condition. The steel structure at windows and overhangs had peeling paint throughout the perimeter. There was a conduit penetration in classroom 202 that was open to the exterior with no insulation.</p>	Good
	Exterior Windows	<p>The exterior windows are single pane aluminum framed windows. The windows on the front of the 100-wing were replaced in 2015 during repairs after a fire. The windows in the cafeteria have been replaced with double pane glazing presumably also in 2015. The new windows are double pane. The remaining windows appear to be original. These older windows are a full height window system with opaque metal panels approximately three feet off the floor and above seven feet with painted structural members for support.</p> <p>The original windows were in poor condition with failing seals, cracked window panes, and dented opaque panels. The windows in the art room were stuck open and a majority of these original windows were</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		inoperable. A number of windows in the library wing were blocked off with black paper, studs, and insulation visible from the exterior due to renovations in 2015. The windows system in corridor C4 had a tinted reflective film on the glass that was damaged in various spots.	
	Exterior Doors	<p>The exterior doors are painted metal in painted hollow metal frames with clear vision panels on the top and bottom portion of the doors.</p> <p>The exterior doors were in average condition. The paint was peeling and facility staff reported they are at the end of their typical design service life.</p>	Average
Roofing	<p>The roof has a modified bitumen roof covering with painted metal gutters and downspouts. The roof covering over the cafeteria, A-02, appears to have been replaced during the renovation in 2015. There are eight 4'x4' fiberglass skylights on the gymnasium roof. The front entrance has a pre-finished standing seam roof canopy.</p> <p>The roof covering was in average condition with several areas that were in poor condition. There were numerous repairs previously to area A-10 with significant bubbling and cracking. The cafeteria (A-02) had evidence of roof leaks on the interior ceiling finish but not specifically visible on the roof. Facility staff reported roof leaks on the east end of area A-13 as well. The skylights over the gymnasium were in average condition. There were two skylights that had visible cracks that appeared to have been repaired previously.</p>		Average
Interior Construction	Interior Walls	<p>The majority of the interior walls are CMU with gypsum board on studs as infill. The corridor walls are framed with wood panels and louvered glass transom windows. The 200-wing has had the louvered windows replaced with solid glass.</p> <p>The interior walls are in average condition due to age, yet no visible cracking or movement issues were present.</p>	Average
	Interior Doors	<p>The interior doors are wood veneer with painted hollow metal frames. The interior doors in the 100-wing and administration area have clear glass vision panels and were replaced during the renovation in 2015. The doors in the 200- and 600-wings do not have vision panels.</p> <p>The interior doors were in average condition. Excluding the renovated areas, the door frames had peeling paint and the wood veneer doors had scratches and showed signs of wear. The kitchen doors showed more wear at the floor likely due to frequent cleaning.</p>	Average
	Interior Specialties	System not present.	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Stairs	Exterior Stairs	There are concrete exterior stairs at the loading dock to the kitchen. The concrete stairs were in average condition due to age. The painted metal handrail was bent but still secure.	Average
	Interior Stairs	There are interior stairs at the side of the stage with wood flooring and carpeted steps at the rear. The stairs were in average condition due to age and normal wear and tear.	Average
Interior Finishes	Interior Wall Finishes	The interior wall finishes consist of paint and tack boards in the classrooms. The classrooms also have structural glazed wall tiles around the restrooms and between classrooms. The corridor walls have wood paneling, chalkboard finish, paint, and tack board on the framed walls. The interior wall finishes appeared to be in good condition with normal wear but well maintained. There was a small area of damage in the cafeteria wood paneling possibly due to a roof leak.	Good
	Interior Floor Finishes	The interior floor finishes include vinyl composition tile throughout the classrooms and corridors. The 100-wing and administration areas were remodeled in 2015 with new floor finishes. The remaining areas have older vinyl composition tile, which is well maintained. There is carpet in the conference room and administration offices, and the restrooms have ceramic tile floors. The interior floor finishes were in average condition due to age and wear in the majority of the school. The male restroom BRRGYM was discolored and worn. The restroom appeared to be in the process of being renovated as the toilet partitions were partially removed.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	<p>The interior ceiling finish includes acoustic ceiling tile in the administration area with vinyl ceiling tile in the restrooms. The majority of classrooms and corridors have Tectum ceiling panels above the painted steel structure. The panels are smooth and painted in the corridors, 200-wing, 600-wings, and gymnasium. The panels in the 100-wing are textured.</p> <p>The ceiling finishes were in average condition due to age. There was a damaged ceiling panel around the EF (exhaust fan) in the IDF B room in the conference room. The ceiling finish was peeling in the cafeteria and the vents was discolored in the kitchen. There were several visible holes in the gymnasium.</p>	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	<p>The building predominantly contains single-use restrooms throughout the facility for each classroom. Additionally multi-use restrooms for the gymnasium and cafeteria areas with single use faculty restrooms in the cafeteria, administration, and nurse areas. Typical restrooms have floor-mounted vitreous china water closets with manual flush valves. Vitreous china urinals with manual flush valves are located in the dedicated male restrooms. Restrooms that were not located inside classrooms had wall-mounted vitreous china sinks for handwashing. Personal use stainless steel sinks with a drinking fountain attached are located in each classroom. Stainless steel and vitreous china drinking fountains can be found in the corridors of the building.</p> <p>A commercial kitchen is located in the school's cafeteria. The kitchen contains stainless steel kitchen equipment, including one triple basin prep sink and one double basin prep sink. It also has various wall-mounted sinks for personal use. The art room contains two stainless steel basin sinks, and a single deep basin stainless steel rinse sink. The building also has service sinks located in various janitorial closets. Various other rooms such as the library and lounge have basin sinks for personal use.</p> <p>Majority of plumbing fixtures were in average working condition, but were aged and were original to the building and showed signs of deterioration. The drinking fountain in the corridor of the 100-wing was observed as non-functioning. The drinking fountain in room 600 was observed to have low flow. A drinking fountain outside</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		of the gymnasium was observed to have a bag placed over top and was presumed non-functional. One of the water closets in the female restroom outside the gymnasium was observed to leak when flushed. Corrosion and rust was observed on some of connections to the fixtures. The janitorial mop sinks were in average condition, some showing minor signs of deterioration with age.	
	Domestic Water Distribution	<p>Domestic hot water to the kitchen is provided by a 99-gallon, 0.199 MBH gas water heater stored in the kitchen mechanical room (KITMECH). Various smaller electric water heaters are located throughout the building in order to provide heated domestic water to specific locations in the school (i.e. nurse and gymnasium janitorial closet). Domestic hot water is not supplied to the classroom plumbing fixtures.</p> <p>The gas water heater feeding the cafeteria was in average condition and was observed to have rust on the connections. Additionally, it was missing the cover from the control box on the front of the unit and wires were protruding. Majority of the smaller units installed for hot water use to a specific location were in average condition showing signs of deterioration due to age. There is a point of use water heater in the restroom in the kitchen that was observed to be newer and in good condition. There is a water heater in the lounge on the floorplan, however, it was not observed during the assessment but was assumed to be under the enclosed sink.</p> <p>The plumbing distribution equipment was observed to be in average condition with minor signs of corrosion observed on piping throughout the building. The sinks in classroom 601 and the nurse's office had evidence of leaks underneath them. Some roof top plumbing was observed to be missing insulation.</p>	Average
	Other Plumbing	<p>Other plumbing consists of floor drains and roof drains. Associated other plumbing was observed to be in average condition. The male restroom outside the cafeteria emitted a foul odor potentially coming from the drain. One of the roof drains was observed to be missing its grate and had debris covering the opening. The grate over the floor drain in the female restroom outside the gymnasium was observed to be damaged. It was reported that this drain has been filled with cement.</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		There was standing water observed on the floor of the kitchen indicating a possible plumbing issue but no leaks were observed during assessment. No source of the water was determined, but reported as a known issue during the facility interview. One floor drain had a grate that was not properly secured and had slight build-up in the drain. A floor drain in the kitchen was missing a grate.	
Mechanical/ HVAC	<p>The building's HVAC system is primarily composed of heat pumps, RTUs (roof top units), rooftop AHUs (air handling units), vertical unit ventilators, and air conditioner condenser units. Various sized exhaust fans feed the building.</p> <p>Majority of the RTUs were observed to be brand new and in excellent condition. There were several older RTUs that were observed to be aged and have corrosion and rust. RTU-3A and RTU-6 were observed to have a condensation drip off the back of the units. Additionally majority of the vertical unit ventilators were also brand new and in excellent condition. Heat pumps found in the library and administration areas were aged and out of date. Cooling units in rooms 100 and 101 were newer and reported to be replaced in 2014 after the 100-wing had a fire causing damage to the previously existing units. Roof top AHUs were newer and in good condition. Majority of the condenser air conditioner units were brand new and in excellent condition. CU-1 outside room 205 was observed to be older and using R-22 refrigerant.</p> <p>The HVAC system was in average condition with wear associated with the age of the associated units. Exhaust fan EF-5B was observed to be making a loud vibration noise. Roof top exhaust fans were in average condition with some units observed to be making a loud whirring noise. Exhaust fans were aged and were approaching the end of their typical design service life. There were various pieces of HVAC equipment that were no longer functional and were abandoned in place. Multiple HVAC units were observed to be using R-22 refrigerant, which is an outdated refrigerant that is being phased out of use.</p>		Average
Fire Protection	Fire Alarm	<p>The building has a fire alarm system that consists of alarm and signaling devices such as strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm system is controlled by a Silent Knight control panel. The 200-wing classrooms did not appear to have detection or annunciation present, but were present within the corridor. The fire alarm was under construction during the assessment and many end devices were removed or loose to allow for new cabling to be installed.</p> <p>The fire alarm system was observed to be in good condition.</p>	Good
	Fire Protection/ Suppression	The fire suppression system is present for a range hood in the kitchen with a tank mounted to the wall at the	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>ceiling. Additionally, a fire suppression sprinkler system is found in the kitchen. Fire extinguishers are located throughout the building.</p> <p>The over range and sprinkler fire suppression systems appeared to be in good condition, but were not tested for functionality. Visual assessment showed the fire extinguishers were in average condition. Majority of the extinguishers were observed to be up to date with their inspections. The fire extinguishers in 200 and CAFEECC were observed to be out of date on their annual inspections.</p>	
Electrical	Electrical Distribution	<p>The electrical service enters the building at the 277/480-volt, 2,500-amp switchboard located at the northwest exterior corner of the building. The service feeds transformers and 277/480-volt panelboards, which are located in various electrical rooms throughout the building. The building does not have a lightning protection system.</p> <p>The electrical distribution equipment was observed to be in average condition. The building had several panelboards that had exceeded their typical design service life and should be considered obsolete. Those obsolete were manufactured by Wilson Electric, Federal Pacific, and ITE. Obsolete panelboards were found in rooms STO200, GYMSTO, ADMIN, CAFEELEC, CAFESTO, and KITCHEN. ADM3STO was found with several items blocking the access to a panelboard and should be considered a life safety hazard. The building had a roof-mounted transformer that was observed to have severe corrosion due to weather exposure. The building also had a number of safety switches and motor control panels that appeared to have exceeded their typical design service life.</p> <p>Faculty expressed concern over the outdated panelboards and safety switches that were at the end of their typical design service life and requested replacements.</p> <p><i>It was reported by AISD construction management staff that electrical disconnects were replaced on the exterior wall of the kitchen during the summer of 2016.</i></p>	Average
	Lighting	<p>The building has a wide variety of exterior lighting luminaires that are wall- or canopy-mounted on the building exterior walls and most egresses. Exterior wall lighting is predominately limited to the front of the</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>building and within the courtyard area. Exterior luminaires include high pressure sodium/metal halide, fluorescent, LED, and screw-in incandescent flood lamps. The interior lighting consists of primarily recessed troffer and surface-mounted fluorescent luminaires although some storage/janitorial rooms have various downlight luminaires present. The 100-wing has suspended LED fixtures that were added in the past year.</p> <p>The lighting for the building was observed to be in average condition. Many exterior luminaires were discolored or aged past their typical design service life. Observed interior lighting deficiencies were limited to burned-out lamps. A large portion of the roof top had been replaced from the recent HVAC renovations, but the existing roof top conduit was damaged in several areas. Much of the existing HVAC equipment was observed with open conduit. Roof top conduit was found damaged in several areas. One section of conduit was loose on the roof with wiring exposed, possibly from the ongoing construction project. The kitchen area roof top had a section of conduit with a disconnected union, exposing severely twisted cabling. The twisted cabling within this section of conduit was observed with exposed copper wiring. The open conduit area could lead to water infiltration into end devices and panelboards.</p> <p>Faculty requested additional luminaires to improve parking lot lighting.</p>	
	Communications & Security	<p>The building is equipped with telecommunication/data systems, with the main backbone equipment located in IDF-B. Networking WIFI access points are installed throughout the building. The building utilizes VOIP (Voice Over Internet Protocol) for telecommunications, although some aged telephone receivers are present in classrooms.</p> <p>The building security consists of surveillance cameras, motion detectors, and a proximity card access system. Exterior surveillance cameras overlook the main entrance, the cafeteria egress, and the north-side parking lot. Interior surveillance cameras are within the cafeteria, gymnasium, and within corridor overlooking egress areas. Motion detectors are installed throughout the building.</p> <p>The communications and security system was found to</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>be in good condition. One junction box was observed without a cover plate and appeared to have networking cabling present.</p> <p>Faculty reported that the Wi-Fi signal is poor within the administration office area. Faculty reported that the security alarm system did not function properly and could be activated while windows were open. Faculty also reported that the interior surveillance cameras were poor quality and requested higher resolution replacements. Faculty also requested a secured access to the west-side of the building.</p>	

Exterior System Deficiency Examples

Exterior Walls



Exterior Windows



Exterior Doors

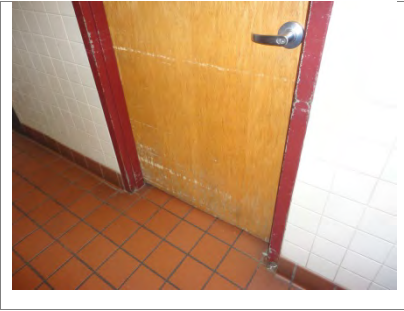


Roofing Deficiency Examples



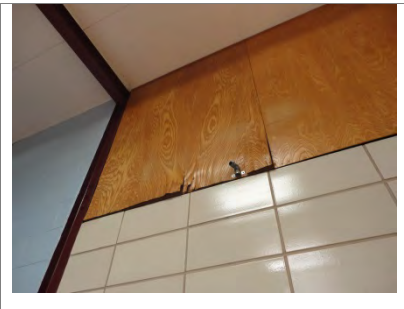
Interior Construction Deficiency Examples

Interior Doors



Interior Finishes Deficiency Examples

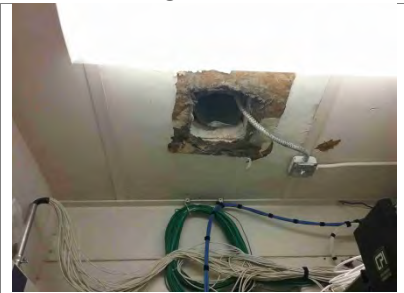
Interior Wall Finishes



Interior Floor Finishes



Interior Ceiling Finishes





Plumbing System Deficiency Examples

Plumbing Fixtures

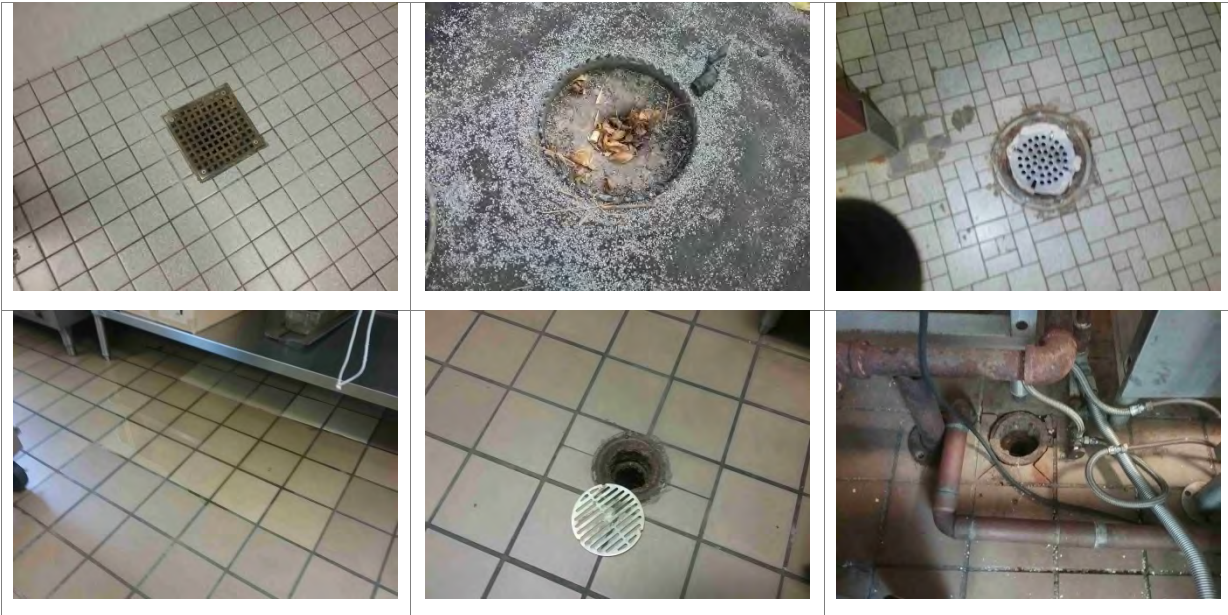


Domestic Water Distribution





Other Plumbing



Mechanical/HVAC System Deficiency Examples





Fire Protection System Deficiency Examples

Fire Protection/Suppression



Electrical System Deficiency Examples

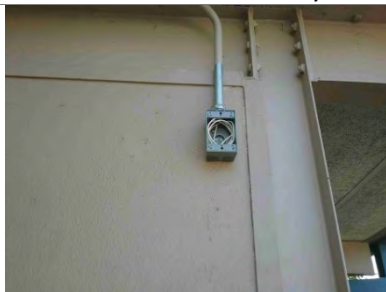
Electrical Distribution



Lighting



Communications & Security



Stand-Alone Building – BLDG-141B

Building Purpose	Classrooms
Building Area	34,499 SF
Inspection Date	August 11, 2016
Inspection Conditions	102°F - Partly Cloudy
Facility Condition Index	



System Deficiency Overview

The following table provides a summary of the conditions and deficiencies found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are brick façade on metal stud framed walls. The exterior walls were in good condition.	Good
	Exterior Windows	The exterior windows are single pane aluminum framed windows. The exterior windows were in good condition.	Good
	Exterior Doors	The exterior doors are painted metal with clear vision glass panels on the upper and lower portion of the windows. The exterior doors were in average condition. The paint was peeling on the exterior door from the 400- and 500-wing.	Average
Roofing	The roof covering is modified bitumen with pre-finished gutters and downspouts. The roof covering was in average condition. There was an area of ponding water on the southeast side of the 400-wing due to a condensate drain leaking on the roof and insufficient slope to drain. There were several other areas where ponding water has occurred in the past along the roof edges.		Average
Interior Construction	Interior Walls	The interior walls are gypsum board on metal studs. The interior walls were in good condition with no visible structural issues.	Good
	Interior Doors	The interior doors are wood veneer with painted hollow metal frames and clear vision panels. There are painted metal fire doors with hold-open devices between the classroom wings and connection corridor. The interior doors were in good condition.	Good

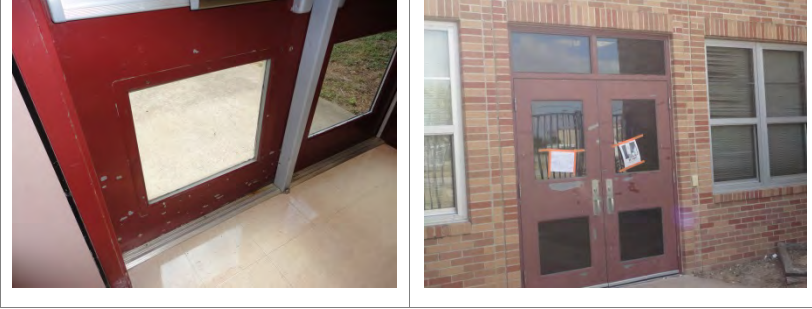
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finishes include paint in the classrooms with ceramic tile up to six feet in the restrooms. The corridors have plastic laminate panels up to eight feet and painted gypsum board above. The interior wall finishes were in good condition.	Good
	Interior Floor Finishes	The interior floor finish is vinyl composition tile throughout the corridors and classrooms. The classroom restrooms have ceramic tile flooring. The interior floor finishes were in good condition.	Good
	Interior Ceiling Finishes	The interior ceiling finish is an acoustic ceiling tile and grid system in the classrooms and corridors. The restrooms have vinyl ceiling tile and grid. The interior ceiling finishes were in good condition with several discolored ceiling tiles in classroom 404 storage room, possibly due to a roof leak.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	Building BLDG-141B contains single use restrooms in each classroom and faculty restrooms in corridor 8. The restrooms contain floor-mounted vitreous china water closets with manual flush valves. Stainless steel drinking fountains were observed in corridor. Each classroom had a combination stainless steel sink and drinking fountain. A janitorial service sink was located in CC500. Majority of plumbing fixtures are in average working condition. The sink in the male faculty restroom MFRR400 was observed to have low flow. The fixtures in the female faculty restroom WFRR400 were observed to have the water shut off due to ongoing construction. The drinking fountain in classroom 503 was observed to have no flow. The water closet in classroom 503 was observed to not flush. The water closets in room 302 and MFRR400 were observed to be continuously flushing. The water closet off of room 303 was observed to have a cracked fixture. The water closet in room 401 was observed to be clogged.	Average
	Domestic Water Distribution	A small 10-gallon EWH is in CC500. Distribution plumbing feeds the various fixtures in the building. The water heater was aged, original to the building, and found to be in average condition. Distribution plumbing	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		was observed to be in average condition with minor signs of deterioration associated with age. Some of the roof top distribution plumbing was observed to be missing its insulation.	
	Other Plumbing	There were roof drains that had lines coming from the exterior walls of the building. Some of these lines were observed to be cut and have signs of corrosion and rust.	Average
Mechanical/ HVAC	<p>The HVAC system is composed of water source heat pumps, roof top makeup air units, and RTUs. During the assessment a new RTU was in the process of being installed to feed the MDF room. Water source heat pump units are in the corridor and in each classroom. Various exhaust fans feed the building.</p> <p>Make-up air units and water source heat pump units were original to the building and showed signs of age. Make-up air units had signs of corrosion and rust on the exterior. MUC-1B was had wires protruding out of the top of the grate. Multiple heat pump units were observed to be making a buzzing sound during operation or a churning noise at shutdown. The heat pump unit in classroom 507 (AC-A1) was observed to not be functioning properly; when the on/off switch was toggled, the unit did not respond. The heat pump unit in room 400 (AC-2A) was observed to have evidence of leakage on the ground.</p> <p>The new unit for the MDF was not fully installed and functional yet but assumed to be in excellent condition when complete. Additionally, the unit's corresponding ductwork was observed to be partially installed and hanging hanging down from the ceiling. Two of the RTUs were original to the building and two were installed in 2005. Multiple RTUs had a condensate leak dripping from the back of the unit and had signs of rust on the outside of the units. Multiple HVAC units for the building were using R-22 refrigerant, which is an outdated refrigerant that is being phased out of use.</p>		Average
Fire Protection	Fire Alarm	<p>The building has a fire alarm system that consists of alarm and signaling devices such as strobes, horn/strobe combinations, pull stations, and detectors.</p> <p>The fire alarm system was observed to be in good condition.</p>	Good
	Fire Protection/ Suppression	<p>No fire suppression system was present in the building.</p> <p>Fire extinguishers were present in the building and were observed to be up to date on their annual inspections.</p>	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Electrical	Electrical Distribution	<p>The electrical feed for the building is located at the 277/480-volt, 800-amp panelboard located in room ELEC400. The service feeds transformers and 277/480-volt panelboards, which are located within ELEC400 and within corridor COR9.</p> <p>The electrical distribution equipment was observed to be in good condition. Panel RC located in COR9 was found with open breaker slots, which should be considered a life safety hazard.</p>	Good
	Lighting	<p>The building's exterior lighting primarily consists of wall-mounted high pressure sodium/metal-halide luminaires located on exterior walls and near egresses. The interior lighting consists of primarily recessed troffer and surface-mounted fluorescent luminaires.</p> <p>The lighting for the building was observed to be in good condition. One exterior luminaire was found with a cracked lens cover. Roof top conduit was found damaged in several areas with cabling exposed. This could lead to water infiltration into electrical equipment.</p> <p>Faculty requested additional luminaires to improve parking lot lighting.</p>	Good
	Communications & Security	<p>The building is equipped with telecommunication/data systems with the main equipment located in room MDF. Networking WIFI access points are installed throughout the building. The building utilizes VOIP for telecommunications.</p> <p>The building security consists of surveillance cameras, motion detectors, and a proximity card access system. Exterior surveillance cameras overlook the east parking lot, playground, playscape, and portable building areas. Interior surveillance cameras are located throughout the corridors overlooking the building egresses. Motion detectors are installed throughout the building.</p> <p>The communications and security system was found to be in good condition. One roof top conduit junction that appeared to have networking cabling installed was found with a missing cover, which could lead to water infiltration. Faculty reported that the interior cameras are poor quality and requested higher resolution replacements.</p>	Good

Exterior System Deficiency Examples

Exterior Doors



Roofing Deficiency Examples



Interior Finish Deficiency Examples

Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures





Domestic Water Distribution



Other Plumbing



Mechanical/HVAC System Deficiency Examples





Electrical System Deficiency Examples

Electrical Distribution



Lighting



Communications & Security



Walnut Creek Elementary School Campus Summary of Recommendations

This document is based on current conditions observed during fieldwork and provides recommendations for corrective actions by each discipline. The following recommendations provide a summary of the findings.

Campus Recommendations

Exterior

1. Provide pest control for the entire campus.

Plumbing

1. Repair or replace drinking fountains that were observed to be not functioning properly.
2. Repair or replace water closets that were broken or not functioning properly.
3. Repair or replace sinks and connected distribution plumbing that was observed to be leaking or not functioning properly.
4. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
5. Replace water heaters that are showing signs of deterioration and beyond their typical design service life before failure occurs.
6. Repair or replace any damaged or missing piping insulation as needed.

Mechanical/HVAC

1. Replace HVAC units that use R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. These systems may need to be replaced before meeting their typical design service life due to refrigeration restrictions.
2. Repair any equipment that was noted with excessive noise/vibration.
3. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
4. Replace HVAC equipment that is beyond their expected design life before failure occurs
5. Repair HVAC equipment noted to have evidence of condensation drips or leaks.
6. Replace any HVAC equipment that has passed or is reaching its typical design service life before failure occurs.

Electrical

1. Repair or replace damaged roof top conduit and cabling for roof-mounted HVAC equipment
2. Install covers for conduit junction boxes that house networking cabling.
3. Install additional exterior luminaires for parking lots, as requested by faculty.
4. Investigate and repair security alarm system, as reported by faculty.
5. Investigate and replace interior surveillance cameras that have poor resolution, as requested by faculty.

Main School Building Recommendations

Exterior

1. Repaint exposed steel framing.
2. Insulate conduit penetration to exterior in classroom 202.
3. Replace exterior full height window systems.
4. Repaint exterior doors.

Roofing

1. Patch roof covering over cafeteria (A-02).
2. Replace roof covering in area A-10.
3. Replace two 4'x4' skylights.

Interior Finishes

1. Replace wood paneling in cafeteria.
2. Replace ceiling tile in the IDF B room.
3. Patch ceiling finish in cafeteria.
4. Replace mechanical vents in kitchen.
5. Patch gymnasium ceiling finish.
6. Repaint interior door frames excluding 100-wing doors.
7. Refinish interior doors excluding the 100-wing doors.

Plumbing

1. Inspect, clean, and repair plumbing in multiple restrooms that are emitting an unpleasant odor.
2. Clean and flush all plumbing fixtures to remove and prevent odors.
3. Replace plumbing fixtures that are beyond their typical design service life before failure occurs.
4. Repair or replace drain grates that are missing, damaged, or not secured properly.

Mechanical/HVAC

1. Remove any HVAC equipment and associated connections that are no longer functional and abandoned in place.

Fire Protection

1. Inspect fire extinguishers that are out of date on their annual inspection, replace if necessary.

Electrical

1. Replace all original or outdated panelboards, safety switches, and motor control panels for the building.
2. Repair or replace roof top transformer with severe corrosion.
3. Relocate storage items within ADM3STO to allow access to the panelboard, as this should be considered a life safety hazard.
4. Replace worn or outdated exterior lighting with more efficient LED luminaires.
5. Replace burned out lamps in interior luminaires.
6. Investigate and repair poor Wi-Fi signal within the administration offices.
7. Investigate the addition of a secured access to the west-side of the building, as requested faculty.

Stand-Alone Classroom Recommendations

Exterior

1. Repaint exterior doors.

Roofing

1. Repair condensate drain leak.
2. Monitor roof drainage at perimeter.

Interior Construction

1. Replace ceiling tile in storage room of classroom 404 and investigate possibility of a roof leak.

Plumbing

1. Repair drains on the exterior of the building that were observed to be cut and not allowing proper drainage.

Mechanical/HVAC

1. Remove any HVAC equipment and associated connections that are no longer functional and abandoned in place.
2. Repair or replace water source heat pump unit (AC-A1) in room 507 that was observed to be not functioning properly.
3. Repair or replace water source heat pump unit (AC-2A) in room 400 that was observed to have evidence of leakage in front of the unit.
4. Verify functionality of new RTU for the MDF room once installation is complete.
5. Repair MUC-1B that was observed to have wires coming out over the top of the grate.

Electrical

1. Immediately provide missing breaker cover plates for Panel RC located in COR9, as this should be considered a life safety hazard.
2. Replace lens cover on damaged exterior wall-mounted luminaire.