

Sanchez Elementary School Site Summary

Address	73 San Marcos Street Austin, TX 78702
Number of Permanent Campus Facilities	1
Original Year of Construction	1976
Total Campus Building Area (combined)	77,905 SF



Introduction

The Sanchez Elementary School campus is located at 73 San Marcos Street in Austin, Texas. Sanchez Elementary School was established in 1953, and consists of a single main building (BLDG-127A). This permanent campus building includes administration offices, classrooms, cafeteria, and gym.

Meeting Log		Revision Log		
Date	Meeting	Revision	Date	Summary of Content
8/1/16	Interview	00	9/15/16	Draft Issue
8/3/16	Assessment	01	11/16/16	Added comments from PM Randall Sakai as indicated on email dated 10/28/16.
9/27/16	Cluster Meeting			

Main School Building – BLDG-127A

Building Purpose	Administration, Classrooms, Cafeteria, & Gymnasium
Building Area	77,904 SF
Inspection Date	August 3, 2016
Inspection Conditions	90°F - Sunny
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	The exterior walls are primarily brick. An band of cement plaster is installed at the top of the walls. Cement plaster soffits are installed at entries and exits. Painted metal louvers are installed in the brick portion of the walls. Tile accent panels are installed on the west wall adjacent to the main entry. Two pre-fabricated aluminum roof ladders are installed on walls above the lower roof level. The walls, soffits, louvers, and ladders all appeared to be in good condition.	Good
	Exterior Windows	The exterior windows are aluminum, single-glazed units. Many of the units have a single-hung operable middle section with fixed, opaque panel lights above and below the operable sections. The windows appeared to be in average condition, but some required repairs and the staff reported units leaking. Some instances were observed where the perimeter sealant was aged and cracked. Several glass lights were broken. The glass putty glazing was failing on some of the sashes. Some of the opaque panel lights were peeling and require paint.	Average
	Exterior Doors	Typical doors are painted hollow metal doors installed in painted hollow metal frames. Two painted steel, overhead, coiling doors are installed at the kitchen receiving dock and at the adjacent walk-in cooler. Some doors required weather stripping. The paint finish	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>on doors and frames appeared to be old but little or no peeling was observed. The finish of one service door, however, appeared to be ruined. The receiving dock overhead door frame was severely rusted. The staff reported several doors as being rusted and a security threat. The cooler installation door was in average condition. Both coiling doors were operable.</p>	
Roofing		<p>The roof consists of four different roof systems. There is a single ply system of about 5,600 square feet on the north portion of the building. This roof drains to edge gutters and downspouts. There is a built-up system of about 19,250 square feet covering the east wing. This roof drains through a low parapet through scuppers to leader boxes and downspouts. The largest area is a modified bitumen system of approximately 42,250 square feet. An upper area over the gymnasium and cafeteria drains to gutters which discharges through downspouts to the lower area. A small portion of the lower roof area of this system is internally drained north and east of the gym, but the majority of it drains to gutters located at the perimeter of the building which has downspouts that discharge at grade. The fourth system appears to be a built-up system that was applied over a modified bitumen system and is approximately 10,800 square feet in size. An approximate four foot wide strip of modified bitumen is installed along the perimeter of this surface. It too drains to gutters and downspouts.</p> <p>The single ply system appeared to be a new application and was in good condition. The built-up system appeared to be in average condition with a little less than half of the life remaining. Tree debris was collected near the scuppers. The modified bitumen system appeared to be in good condition with over half the life remaining. The age and condition of the patched system was difficult to ascertain. The campus staff indicated that during rainstorms, a leak exists below this area in restroom-110RR. Sheet metal flashings, coping caps, drip edges, scuppers, gutters, leader boxes, and downspouts all appeared to be in good condition. The boots at the base of downspouts appeared to require paint.</p>	Average
Interior Construction	Interior Walls	<p>CMU (concrete masonry unit) walls are installed in stairways, gymnasium, cafeteria, kitchen, utility rooms, music room, and in some restrooms. A modular framing system is installed in the north wing classrooms. This system consists of a mix of partial height and to-ceiling vinyl-clad panels with anodized aluminum top caps. Elsewhere gypsum wallboard is installed on conventional stud framing. Much of the concrete structure is exposed in the library. A vinyl-faced, tracked, moveable partition system is installed between the gymnasium and cafeteria. Accordion acoustic curtains are installed in storage 214 and room 123. Single-hung aluminum windows are set in painted hollow metal frames between the kitchen and cafeteria. There are two full-height painted hollow metal window</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>units dividing the main entrance corridor area from the public administration area.</p> <p>The interior walls appeared to be in good condition. The campus staff requested the partial height partitions in the north classroom wing to be full height in order to eliminate the noisy environment. The staff also requested more wall closure in classroom 208 and 218 in order to create more useable spaces. The moveable partition system between the gymnasium and cafeteria was reported to be used by the staff. It proved to be difficult to operate and the bottom seal was broken. The campus staff requested that this system be replaced. The accordion curtain in room 214 appeared to be functional and in good condition. The curtain in room 123, however, was worn and difficult to operate. The campus staff requested that it be replaced. The interior windows are in good condition but the hollow metal frames require paint. The windows appeared to be in good condition at the administration suite.</p>	
	Interior Doors	<p>Most interior doors are stained solid-core wood set in painted hollow metal frames. Some of these frames have sidelights. The door frame at the kitchen storage room includes a wide transom with woven wire mesh infill panels. Service doors are painted, while hollow metal doors are set in painted hollow core frames.</p> <p>Door and hardware assemblies appeared to be in good condition throughout, except for some marring and scratches.</p>	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	<p>A single, cast-in-place stair services the kitchen loading dock.</p> <p>These stairs have been damaged by years of abuse. The galvanized pipe handrails are bent from being backed into by service vehicles. The stairs consist of unequal length treads which have been broken by the same vehicle abuse.</p>	Poor
	Interior Stairs	<p>There are three primary sets of exit stairs that serve the building and are located in enclosed stair wells. These stairs are formed by cast-in-place concrete with embedded traction nosings. Guardrails are painted steel with woven wire mesh infill panels. Wall-mounted hand rails are stained wood. Another open stair of similar construction is installed at the library. It differs in that wood handrails cap the steel guardrails and carpet is</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>installed for the walking surface. Two additional short run, wood stairs flank the rear sides of the cafeteria stage. Carpeted steps form the front edge of the stage in the cafeteria.</p> <p>All stairs appeared to be in good condition. The two stairs flanking the stage, however did not have handrails. These two stairs were well finished, but were scarred.</p>	
<p>Interior Finishes</p>	<p>Interior Wall Finishes</p>	<p>Paint on either CMU, gypsum wallboard, or concrete structure is the most prevalent finish. A painted mural occupies the upper areas of three library walls. Vinyl-clad panels on a partial height partition system are installed in the north classroom wing areas at both the first and second levels. FRP (fiber reinforced plastic) panel wainscots on painted gypsum board walls are installed in the library, in corridors of the same north classroom wing area, and in corridor 4. Ceramic tile is installed in restrooms as wainscots and full-height in the kitchen. Acoustic panels are installed on the upper wall areas in the gymnasium and music 100.</p> <p>The campus staff reported that paint peels on the walls in the cafeteria, gymnasium, restroom WFRR100, classroom 7 and at the open space at classrooms 5 and 8 even though there were no moisture problems and paint failed soon after application. Paint was also observed peeling from the CMU walls in the stair wells. The north wing corridor corners were chipped and marred, mostly at the exposed concrete column corners. The vinyl-clad wall system appeared to be in good condition as were the FRP panels. The older ceramic wall tile installations appeared to be in good condition but the campus staff requested the tile be replaced in the student restrooms.</p>	<p>Average</p>
	<p>Interior Floor Finishes</p>	<p>Resilient tile floor is installed throughout the building. Broadloom carpet is installed in the center areas of the north classrooms, the library suite, music 100, room 7, and on the steps along the front edge of the cafeteria stage. Porcelain tile is installed in the toilet rooms, and athletic tile is installed in the gym. Stained, strip wood flooring is installed on the cafeteria stage, and 6"x6" porcelain tile with a traction finish is installed in the kitchen. One horizontal course of this tile is installed along the bottom of the walls to form the base. Stained wood base is installed below all corridor and library (FRP) wainscot, in the corridor under the level two</p>	<p>Good</p>

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>guardrail (above the library), and at the cafeteria stage; elsewhere vinyl base is installed.</p> <p>All floor finishes appeared to be in good condition. The campus staff requested that carpet in the library, classrooms, stage stair, and elevator be replaced; but these did not appear to be in poor condition. Though the gymnasium floor is in good condition, it requires cleaning. The wood stage floor is in good condition but the wood surface is rough and should be well sanded before the next finish. The campus staff reported that the kitchen tile around a floor drain was sinking. This condition was not observed but could have been hidden by equipment and not available for visible assessment. All vinyl wall base appeared to be in good condition except in the cafeteria where it was in poor condition and partially missing. Most all of the wood base is scratched and dented.</p>	
	Interior Ceiling Finishes	<p>A 2'x4' acoustic tile in a suspended grid system is installed throughout most of the building. A 2'x4' vinyl-clad tile and suspended grid system is installed in the kitchen. The bottom side of the roof deck forms the ceiling above the gymnasium and cafeteria stage. There are 6"x6" acoustic tiles adhered to the restroom ceilings. Painted gypsum board ceilings are installed in the newer east classroom wing.</p> <p>Ceilings appeared to be in good condition even though the cafeteria acoustic tile installation was beginning to show age. The adhered tile in the restrooms was damaged or missing.</p>	Good
Conveying		<p>The building is equipped with a two-stop, 2,000-pound elevator for second floor accessibility. The elevator's certificate of compliance is current.</p> <p>The conveying system was found to be in good condition. The elevator hydraulic equipment data plate was original to the building's construction, but all components appear to be in good working order. Campus faculty reported that the elevator gets stuck occasionally, leaving occupants trapped inside. Campus staff also requested a wheelchair lift for stage accessibility.</p>	Good
Plumbing	Plumbing Fixtures	<p>The building contains predominantly single-use restrooms throughout the facility, with multi-use restrooms found outside of the kitchen, gymnasium, and library. Typical restrooms have floor-mounted vitreous china water closets with manual flush valves. Additionally wall-hung vitreous china urinals with manual flush valves are located in the dedicated multi-use male restrooms. Multi-use restrooms contain wall-</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>mounted vitreous china or stainless steel handwashing sinks. Typical classrooms contain a single basin stainless steel sink with a drinking fountain attached. Stainless steel and vitreous china drinking fountains are found in the corridors of the building. Various additional vitreous china and stainless steel sinks can be found throughout the building in areas such as the kiln room, lounge, and library. Additionally, a single-use shower stall is located in the restroom off of the gymnasium office.</p> <p>There is a stainless steel handwashing basin sink outside of the cafeteria. The kitchen contains stainless steel kitchen equipment, including one triple basin and one double basin prep sink. It also has various wall-mounted vitreous china sinks for personal use. Service sinks are also located in various janitorial closets.</p> <p>The majority of plumbing fixtures were in average working condition, but were aged and show minor signs of deterioration. The drinking fountain in the cafeteria was observed to have no flow. The drinking fountain outside of the 100-wing multi-use restroom was observed to have a split flow from the nozzle. The drinking fountain in classroom 102 was observed to have low flow. The sink and drinking fountain combination in classroom 111 was observed to have low flow coming from both fixtures. The sink in the male restroom (BRR101) sticks in the "ON" position. The sink in room 122COPY was observed to have no flow. The sink in classroom 101 was observed to be missing a faucet plug. The male faculty restroom (MFRR100) was observed to have low flow to the sink. The sink in classroom 210 was observed to be emitting an odor when turned on. The double basin prep sink in the kitchen was observed to have a leaky handle. The sinks in the janitorial closets were in average condition showing signs of deterioration and rust associated with age.</p> <p>The water closets in classrooms 2 and 103 were observed to leak when flushed. The water closets off of both classrooms 3 and 4 were observed to have pests in them, with classroom 4 having indications of buildup. The shower in the nurse's restroom had items stored in it and could not be assessed for operation; visual assessment did not yield any deficiencies.</p>	

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Domestic Water Distribution	<p>Domestic hot water to the kitchen is provided by a 70-gallon water heater stored in the main mechanical room (MAINMECH). A smaller point of use water heater is in STO1. The floor plan noted a water heater would feed the shower in the gymnasium office, but no water heater was detected. Domestic hot water is not supplied to the classroom plumbing fixtures.</p> <p>The water heater feeding the kitchen was aged and was reaching its end of typical design service life. The unit was observed to have signs of corrosion and rust. The point of use unit in STO1 was newer and in good condition. Corrosion and rust observed on distribution piping throughout the building. The plumbing distribution to equipment was observed to be in average condition with typical wear and tear associated with the system's age and general daily use.</p>	Average
	Other Plumbing	<p>There are roof, storm, and floor drains present in the facility.</p> <p>Rooftop drains were observed to be rusted. There was an exterior water spigot that was observed to be dripping. The storm drain found in the courtyard was heavily rusted. Gas lines in the kitchen were observed to be rusted. One of the floor drains in the kitchen was observed to be broken and rusted. Floor drains in the MAINMECH and AHU rooms were observed to be rusted and corroded. The male faculty restroom was observed to be emitting an odor. The restroom off of classroom 217 was observed to be emitting an odor.</p>	Average
Mechanical/ HVAC		<p>The building's HVAC (heating, ventilating, and air conditioning) system is composed of WSHPs (water source heat pump units), a boiler, two chillers, AHUs (air handling units), and roof top condenser air conditioner units. A separate WSHP unit was designated for classrooms 1-12. Pumps for these units were not accessible, but assumed to be stored within the unit and working properly. Multiple roof top EFs (exhaust fans), ranging in size, serve the building.</p> <p>The HVAC system was in average condition; however, some pieces of equipment were past their expected design life and show signs of degradation and minimal signs of rust and corrosion. There was aged ductwork observed in the GYMSTO.</p> <p>The boiler was aged and had signs of corrosion. It was in average condition but was observed to have a drain pipe that had been disconnected. The chillers and associated pumps were observed to have leakage around the equipment. Chillers were newer but had signs of corrosion and rust on the connections. CH-2R was observed to be missing insulation from the connections. Roof top cooling unit CU-5R was observed to have condensate drip off the back of the unit. The condenser air conditioner unit in the courtyard was observed to have vegetation overgrown</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>on the unit. AHUs were observed to be aged and original to the building but in average condition. Some units were noted to have signs of corrosion and were making a loud vibration noise.</p> <p>WSHPs were aged and reaching their end of typical design service life. Nameplate information was not visible for the WSHP units, but similar units have been observed to use R-22 refrigerant. Additional HVAC units were also observed to be using R-22 refrigerant, which is outdated and is being phased out of use. The EFs in classrooms 104 and 105 were observed to be making a loud humming noise. The EF in the restroom off classroom 110 was observed to be coming unattached from the ceiling. Multiple roof top EFs and vents were observed to be rusted.</p>	
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. Enclosed classrooms have detectors installed, but the open configuration classrooms only have indication and annunciation devices preset.</p> <p>The fire alarm system was observed to be in good condition. Many of the interior end devices appeared dated and approaching the end of service life expectancy. The building has several dated end devices that appear to be a light or strobe end device. It could not be determined if these end devices are still in operation.</p>	Good
	Fire Protection/ Suppression	<p>A fire suppression system is present in the range hood in the kitchen, with a tank mounted to the wall overhead. Janitorial closets were observed to have a single sprinkler head mounted on the ceiling. Fire extinguishers are located throughout the building. Visual assessment showed these are in average condition. Majority of the extinguishers were observed to be up to date with their annual inspections, but multiple fire extinguishers throughout the facility were observed to be last inspected in August of 2015, making them due for annual inspections before the end of August 2016. The fire extinguisher off of the gymnasium had no inspection tag attached to it.</p>	Average
Electrical	Electrical Distribution	<p>The electrical service enters the building at the 277/480-volt, 1,200-amp panelboard located in room MAINMECH on the south end of the building. The service feeds transformers and high-voltage panel boards, which are located in various electrical rooms throughout the building. The building does not have a</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>lightning protection system.</p> <p>The electrical distribution equipment was observed to be in average condition. The majority of the panelboards and transformers throughout the building are original to the building construction and nearing their service life expectancy. There were several life safety issues observed. The main, high-voltage 1,200-amp panelboard was found with the front cover removed, allowing access to the wiring and possible live electrical components. A large Square D QMB Saflex model distribution panelboard was found with several missing screws from the access panel. Panel LE is located in room CAFESTO and observed to be missing breaker slot covers. One transformer located in the MAINMECH room was found with items stored on the top of the enclosure.</p> <p>AISD (Austin Independent School District) Service Center staff have expressed concern over the age of the original panelboards and requested replacements.</p>	
	Lighting	<p>The building's exterior lighting primarily consists of wall-mounted high pressure sodium/metal-halide, LED (light-emitting diode), and fluorescent luminaires. Wall-mounted screw-in fixtures and recessed downlight luminaires were also present on the exterior. Exterior lighting is located around the building's exterior walls and building egresses. The interior lighting consists of primarily recessed troffer and surface-mounted fluorescent luminaires although some storage/janitorial rooms have various downlight luminaires present.</p> <p>The lighting for the building was observed to be in average condition. Many exterior luminaires are discolored, aged past their design life, or damaged. Observed interior lighting deficiencies include non-functional luminaires, unsecured luminaires, and damaged/missing lens covers. The kitchen strip lights were observed with missing lens covers. Several exit sign luminaires were dim, and roof top conduit was found exposed on one piece of HVAC equipment. Several exterior electrical receptacle were observed to be worn or with broken covers.</p> <p>AISD Service Center and campus staff requested that all exterior lights be replaced with LED luminaires. Campus faculty requested additional lighting for the west parking lot and the south side portion of facility. Campus faculty reported the north parking lot lighting</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>requires frequent lamp replacement and there may be an issue with the electrical feed. Campus faculty requested the lighting be replaced in the cafeteria, kitchen, and gymnasium. It was noted that the exposed kitchen lamps pose a safety concern due to their age and ease of lamps being broken. AISD Service Center staff requested that the stairwell lighting be replaced and relocated due to difficulties with changing the lamps. Campus staff also requested the lighting and sound systems for the stage be replaced.</p>	
	<p>Communications & Security</p>	<p>The building is equipped with telecommunications/cabling systems, with the main backbone equipment located in rooms MDF (main distribution frame) (inaccessible), IDF (intermediate distribution frame)-B, AHU2, and AHU4. Networking Wi-Fi access points are installed throughout the building. The building utilizes VOIP (Voice Over Internet Protocol) for telecommunications. The building also has abandoned Token Ring receptacles present in some rooms.</p> <p>The building security consists of surveillance cameras, motion detectors, and a proximity card access system. Exterior surveillance cameras overlook the main entrance, playground, and kitchen unloading areas. Interior surveillance cameras are located throughout the building overlooking building egresses. Motion detectors are installed throughout the building.</p> <p>The communications and security system was found to be in good condition. A telecommunications distribution panel and a receptacle were found damaged and improperly mounted, although it appears this system may no longer be in use.</p> <p>Faculty reported that the Wi-Fi loses signal in various locations throughout the building, especially in 123OFC and 123CLSRM. Additional surveillance cameras were requested for the north corners of the 100- and 200-wing classrooms.</p>	<p>Good</p>

Exterior System Deficiency Examples

Exterior Windows



Exterior Doors



Roofing Deficiency Examples



Interior Construction Deficiency Examples

Interior Walls





Stairs Deficiency Examples

Exterior Stairs



Interior Stairs



Interior Finishes Deficiency Examples

Interior Wall Finishes



Interior Floor Finishes



Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures





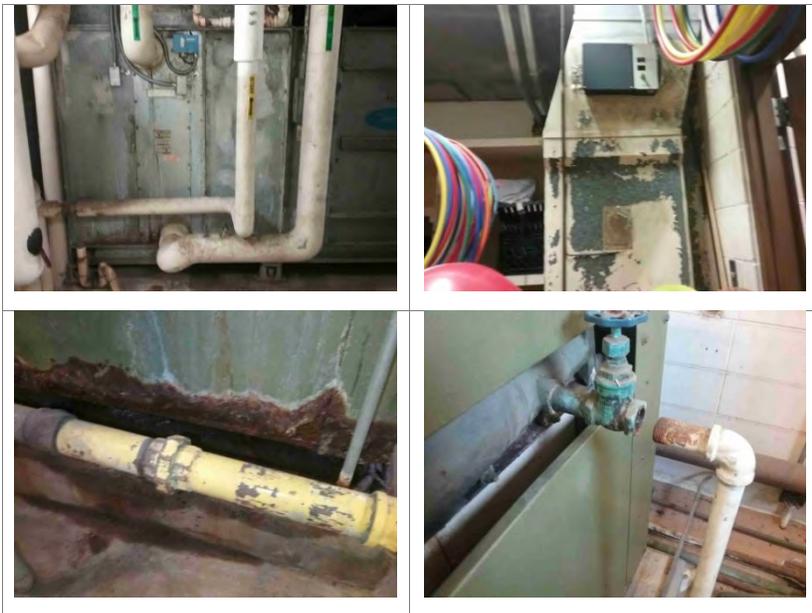
Domestic Water Distribution

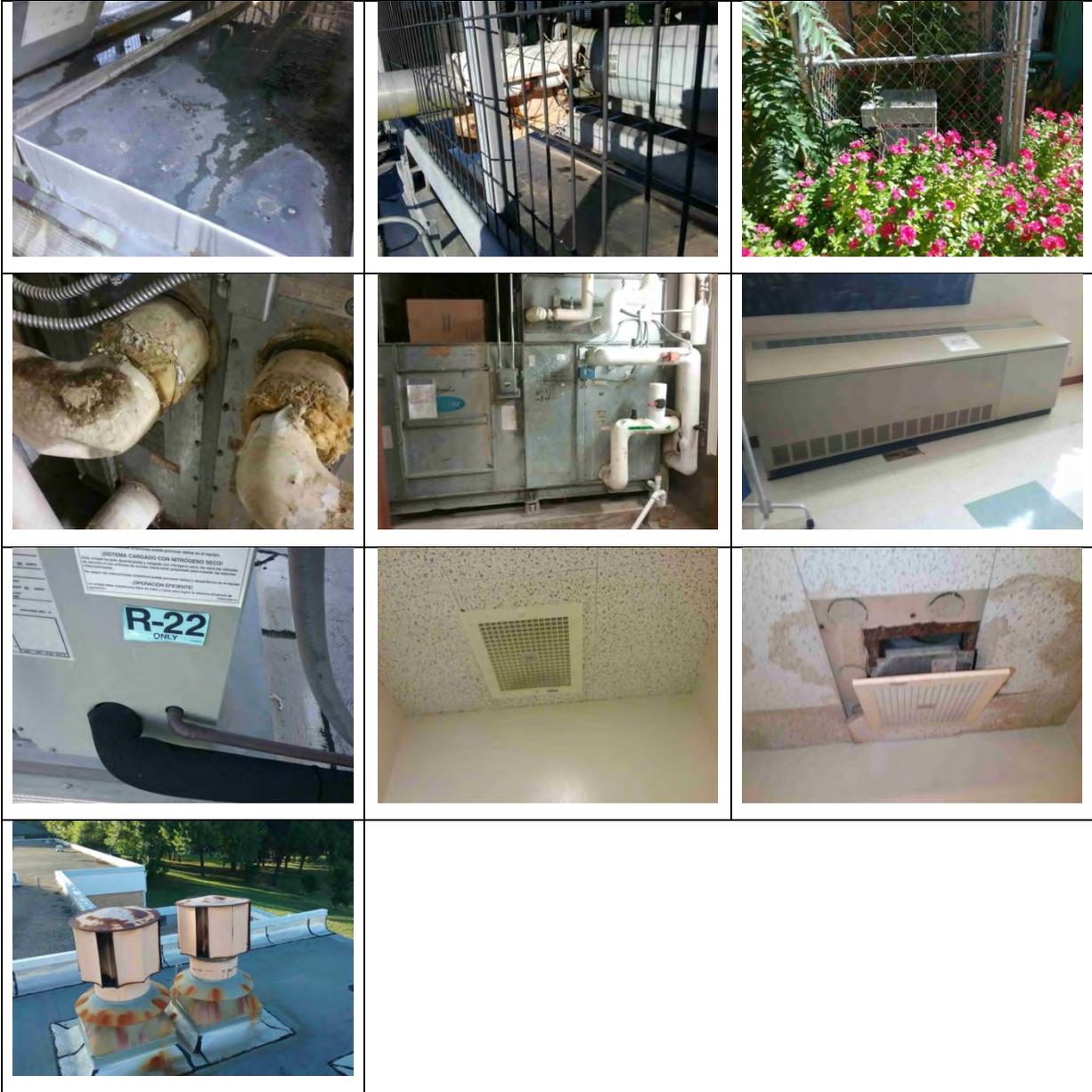


Other Plumbing



Mechanical/HVAC System Deficiency Examples





Fire Protection System Deficiency Examples

Fire Alarm

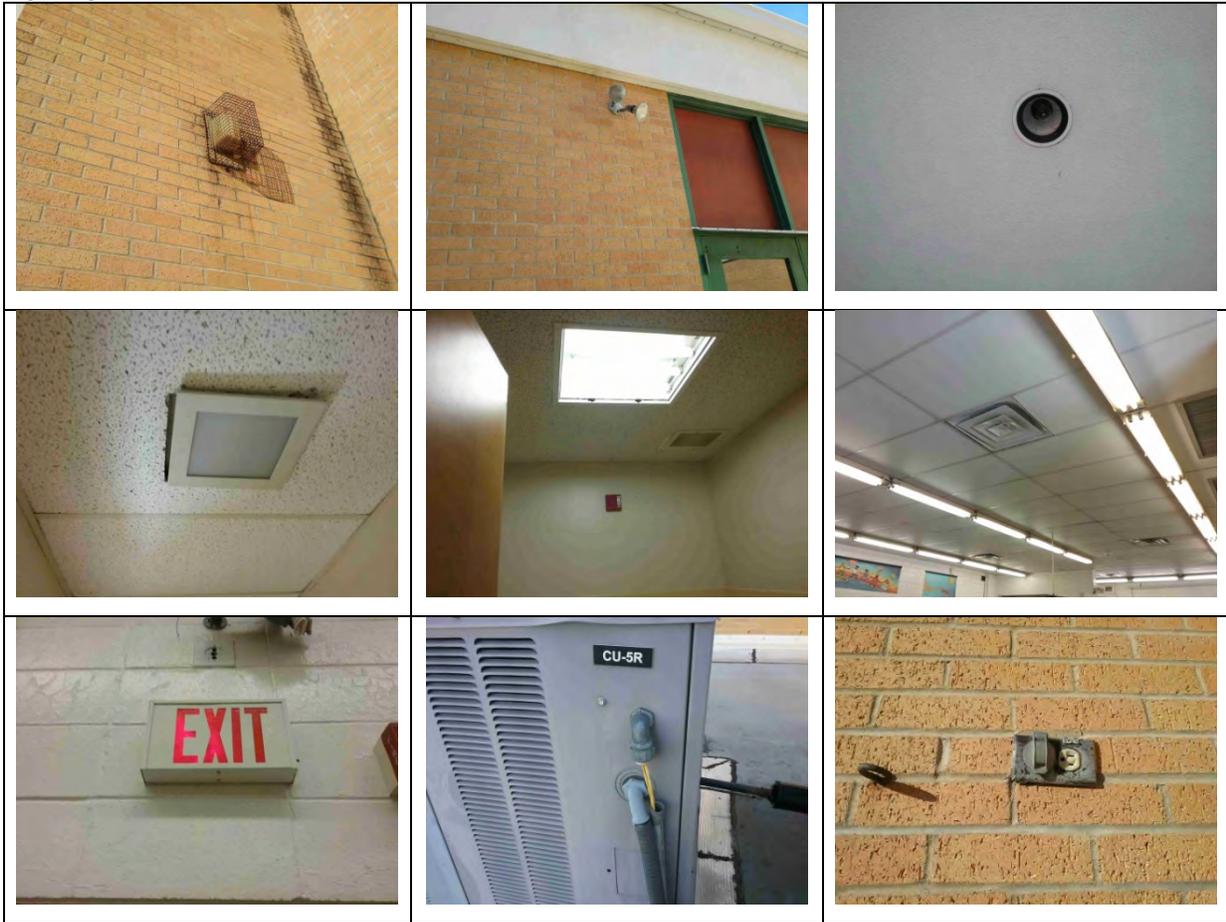


Electrical System Deficiency Examples

Electrical Distribution



Lighting



Communications & Security



Sanchez 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.

Main School Building Recommendations

Exterior

1. Inspect the sealant at the perimeter of window unit installations for failure. Install new sealant where required.
2. Replace damaged glass lites.
3. Inspect window sashes for damaged, missing, or misapplied putty/seals at perimeter glass lites. Install new putty/seals where required.
4. Inspect window units for paint failure on opaque panels. Repaint as required.
5. Inspect entry/exit doors for missing or damaged weather stripping. Install new weather stripping as required including at center astragal of double doors.
6. Repaint the pair of service doors on the east side of the building.
7. Replace the overhead coiling door unit located at the kitchen loading dock.

Roofing

1. Remove tree debris from the built-up roof surface.
2. Evaluate the condition/age of the patched roof above the east second level classrooms and library. Monitor the performance of this roof area during rain events.
3. Repaint downspout boots.

Interior Construction

1. Evaluate with staff the possibility of enclosing classroom walls.
2. Replace or otherwise renew the moveable partition unit installed between the gymnasium and cafeteria.
3. Replace the accordion acoustic curtain in room 123.
4. Re-paint the steel hollow metal portion of the aluminum window units installed between the kitchen and the cafeteria.

Stairs

1. Remove and install a new exterior loading dock stair. Consider the possibility of redesigning a wider dock in order to protect the stair from vehicular damage.
2. Consider adding handrails to the pair of interior stairs flanking the cafeteria stage.
3. Fully sand the stair surfaces next time the stairs are scheduled for a new finish.

Interior Finishes

1. Investigate the possible reason for paint failure on CMU walls as the staff reported that some of these finishes failed soon after application.
2. Paint damaged wall corners in the classroom and corridor areas. Consider the installation of corner guards.
3. Consider future scheduling refinishing the gymnasium floor. Note: The adjacent cafeteria floor was being refinished at the time of the assessment, so this operation may already be scheduled.
4. Consider sanding the wood stage floor before the next time it is to be refinished.
5. Replace some or all of the vinyl wall base in the cafeteria.
6. Replace all of the 6"x6" adhered acoustic ceiling tile currently installed in the restrooms.

Conveying

1. Investigate and repair the issues causing the elevator to become stuck, as requested by faculty.
2. Investigate the feasibility of installing a wheelchair lift for stage accessibility, as requested by faculty.

Plumbing

1. Repair sinks that are not functioning properly.
2. Replace aged plumbing fixtures order to maintain a functioning system.
3. Repair water closets observed to have evidence of leaks.
4. Repair drinking fountains that were observed to be not functioning properly.
5. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset by cleaning, repainting, and/or repairing by any other means to prevent further deterioration.
6. Replace water heaters that are beyond their expected design life before failure occurs.
7. Inspect, clean and repair plumbing and plumbing fixtures in multiple bathrooms that are emitting an unpleasant odor.
8. Clean and flush out all floor drains to ensure adequate drainage.
9. Verify functionality of the shower in the nurses' office, repair if necessary.
10. Repair or replace exterior spigot observed to be leaking.

Mechanical/HVAC

1. Replace HVAC units that use R-22 refrigerant; an outdated refrigerant being phased out of use. These systems may need to be replaced before they meet their design life due to refrigeration restrictions.
2. Replace HVAC equipment that is beyond its expected design life before failure occurs.
3. Repair any equipment that was noted with excessive noise/vibration.
4. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset by cleaning, repainting, and/or repairing by any other means to prevent further deterioration.
5. Repair drain pipe observed to be disconnected on the boiler.
6. Repair any equipment observed to have leakage or excessive condensation.
7. Repair or replace any insulation that is damaged or missing.
8. Remove overgrown vegetation around the condenser unit in the courtyard.
9. Replace EFs reported to be damaged or not functioning properly.

Fire Protection

1. Inspect extinguishers that are past due on their annual inspections, or missing their inspection tag and replace if necessary.
2. Replace fire alarm end devices that have exceeded their typical design service life.

Electrical

1. Develop a plan to replace all original panelboards and transformers in the next five to ten years.
2. Replace the front cover on the high-voltage, 1,200-amp panelboard located in MAINMECH, as this is a life safety issue.
3. Install fasteners in the Square D QMB Saflex distribution panelboard to properly secure access covers.
4. Install breaker slot covers in Panel LE located in CAFESTO, as this is a life safety issue.
5. Relocate items that are being stored on transformers throughout the campus, as this is a fire safety issue.
6. Replace exterior luminaires that are damaged or exceeded their service life expectancy with LED luminaires.
7. Replace lamps in interior and exit sign luminaires that have burned out.
8. Repair interior luminaires that are loose or missing lens covers.
9. Repair conduit for roof top HVAC equipment that is open.
10. Replace exterior electrical receptacles and receptacle covers for those that are damaged or worn.

11. Install additional lighting for the areas outlined by campus faculty in the Condition and Deficiency Overview section of this report.
12. Investigate the north parking lot lighting to determine the cause of frequent lamp replacement and repair as necessary.
13. Replace cafeteria, kitchen, and gymnasium lighting, as requested by campus faculty.
14. Replace and relocate stairwell luminaires to allow lamp replacement, as requested by AISD Service Center staff.
15. Replace stage lighting and sound system, as requested by campus staff.
16. Repair telecommunications receptacles and distribution boards unless the system has been abandoned.
17. Consider removing Token Ring receptacles throughout the building.
18. Investigate the loss of Wi-Fi signal throughout the building, especially in rooms 123OFC and 123CLSRM.
19. Install additional surveillance cameras on the north corners of the 100 and 200-wings, as requested by faculty staff.

Sanchez Elementary School Planned Future Improvements

The following are any known planned and funded improvements scheduled to take place at this campus in the future. Their scope and schedule are subject to change.

2017 Bond Planned Improvements from PM Randall Sakai on 10/28/16.

- June 2017.
 - Replace AHUs for 2 story structure.
 - Replace AHUs for administration and kitchen.
 - Replace HVAC equipment for single story structure for classrooms 1-12.
 - Replace exterior lighting at entrances.
 - Replace boiler by this contract or separate contract.
 - Assess ductwork for replacement.

CRAWL SPACE – Sanchez ES – Main School Building (BLDG-127A)

Building Purpose	Admin, Classrooms
Inspection Date	August 11, 2016
Inspection Conditions	80° and Sunny (Afternoon)

Crawl Space System Deficiency Overview

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

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: The classroom addition on the east side of the school is slab-on-grade construction and does not have a crawl space. The areaway grates observed were typically bolted down and did not function as access points to the crawl space. Crawl space on the north side of the original building was inaccessible; access hatch was not found in plans nor did school staff know of a hatch location. All observations below apply to the south side of the original school building.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Soil, Drainage, Ventilation & Access	Soil Below Building, Site Drainage in Crawl Space	Soil in crawl space was generally flat and dry. Some areas directly below pipes were damp due to condensation dripping down from pipes. The middle of the crawl space contained a drainage inlet that had been surrounded with sand bags and was not operable; as a result, runoff in the crawl space has caused soil to erode around the inlet. Drain was blocked by sand bags intentionally placed at the perimeter of the drain. Soil/Drainage deficiencies: <ul style="list-style-type: none"> Blocked drainage inlet Eroded soil leading to & around drainage inlet 	Poor
	Soil Retainers & Carton Forms	N/A – No soil retainers or carton forms in building	N/A
	Areaways/Ventilation	Ventilation is provided through areaways spaced regularly around the building perimeter. Airflow through areaways was largely blocked by grass clippings, leaves, and twigs caught in wire mesh attached to metal grate. Areaway grates were corroded and were bolted in place so could not be used to access the crawl space. Areaway/ventilation deficiencies: <ul style="list-style-type: none"> Condensation due to inadequate ventilation Ventilation limited due to blocked areaways Rusted areaway grates 	Average

	Access Hatches	<p>The wall hatch was located in a custodian closet beside the stage. This access hatch serviced the south side of the school. Access down into crawl space required climbing down large, questionably-anchored pipes then jumping down onto a chair.</p> <p>Access hatch deficiencies:</p> <ul style="list-style-type: none"> • Wall hatch frame rusted • Access to crawl space not safe 	Average
Exposed Structure	Columns & Exposed Tops of Foundations (Piers or Footings)	<p>Concrete columns were observed in the building interior and around the exterior. Tops of pier foundations, however, were below ground and could not be observed.</p> <p>Column/Foundation deficiencies:</p> <ul style="list-style-type: none"> • Minor column spalling/honeycombing in limited locations 	Good
	Inside Faces of Perimeter Walls / Grade Beams	<p>Perimeter of crawl space is enclosed with grade beams.</p> <p>Beam deficiencies:</p> <ul style="list-style-type: none"> • Minor spalling 	Good
	Exposed Faces of Interior Floor Beams Above	<p>Suspended concrete beams span between columns. Observed beams were all in good condition. Beams have minimal spalls in isolated locations.</p> <p>Beam deficiencies:</p> <ul style="list-style-type: none"> • Minor spalling 	Good
	Underside of Suspended Floor Slabs Above	<p>Precast pan joists spanned between beams and formed the floor system. A few places were observed with spalls or honeycombing and exposed/rusted reinforcement.</p> <p>Floor Slab deficiencies:</p> <ul style="list-style-type: none"> • Minor spalling/honeycombing • Exposed/rusted reinforcement 	Good
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes	<p>PVC and galvanized pipes were observed. Some pipes were covered with insulation.</p> <p>Pipe deficiencies:</p> <ul style="list-style-type: none"> • Light rusting at hangers • Degraded and torn pipe insulation 	Good
	Exposed Ductwork	N/A – No MEP ductwork was present in the crawl space areas observed.	N/A
	MEP Equipment	N/A – No MEP equipment was present in the crawl space areas observed.	N/A

	Spray Fireproofing/ Insulation	N/A – No fireproofing or insulation was present in the crawl space areas observed.	N/A
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Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

 <p>Damp Soil</p>	 <p>Drain inlet blocked with sand bags</p>	 <p>Significant erosion around blocked inlet</p>
 <p>Condensation & damp soil due to poor ventilation</p>	 <p>Blocked areaways limit ventilation in crawl space</p>	 <p>Areaway grate is rusted</p>
 <p>Dangerous descent from wall hatch down to crawl space</p>		

Exposed Structure

 <p>Column Minor spalling</p>	 <p>Grade Beam spalling</p>	 <p>Spalling/Honeycombing on precast pan joists and suspended beam, exposed/corroded reinforcement</p>
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Pipes, Ducts, Equipment & Fireproofing

 <p>Rusted hanger/rod</p>	 <p>Degraded pipe insulation</p>	 <p>Torn pipe insulation</p>
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LBJ HS – Campus Summary of Crawl Space 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.

Main School Building Recommendations

Soil, Drainage, Ventilation & Access

1. Re-grade as need to repair eroded areas and provide positive drainage into drainage inlet
2. Remove sand bags from around inlet & verify drain is functioning - repair inlet and/or drainage pipe as needed
3. Remove debris blocking areaway grates
4. Investigate need to improve ventilation

Exposed Structure

1. Clean exposed reinforcement and paint with a rust-inhibiting primer to prevent further corrosion

Pipes, Ducts, Equipment & Fireproofing

1. Replace degraded/torn pipe insulation

