

St. Elmo Elementary School Site Summary

Address	600 West St. Elmo Road Austin, TX 78745
Number of Permanent Campus Facilities	1
Original Year of Construction	1960
Total Campus Building Area (combined)	48,922 SF



Introduction

The St. Elmo Elementary School campus is located at 600 West St. Elmo Road in Austin, Texas. St. Elmo Elementary School was built in 1960. It consists of the Main School Building (BLDG-136A) with administrative offices, classrooms, cafeteria, library, and gymnasium. Currently, the cafeteria and the 300-wing are under construction. The cafeteria and main lobby are receiving new vinyl tile. The 300-wing has received new roof top air conditioning units, replacing the old individual single classroom units. The flooring is being replaced in that area.

Main School Building, BLDG-136A

Building Purpose	Administrative Offices, Classrooms, Cafeteria and Gymnasium
Building Area	48,922 SF
Inspection Date	July 21, 2016
Inspection Conditions	99°F - Hot and 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	<p>The exterior of the building consists of a 100% brick façade. The building is one story, built in 1960. There is a basement that houses mechanical rooms and a few offices.</p> <p>The exterior of the building was observed to be in good condition. There were holes in the soffit around the entire building where there were once downspouts. The metal fascia was peeling along the library window wall.</p>	Good
	Exterior Windows	<p>The windows are aluminum framed inset into the brick façade. They appear to be single paned.</p> <p>The exterior windows along the library corridor were scratched and faded.</p> <p>Overall, the windows appeared to be in good condition.</p>	Good
	Exterior Doors	<p>There are many double exterior metal doors throughout the building.</p> <p>The exterior doors were observed to be in good condition.</p>	Good
Roofing		<p>The main building has a single-ply roof and has been recovered in recent years.</p> <p>The area A-05 near the east end was showing some wear and flaking due to the adjacent trees. Staff reported that downspouts on the east side of the building were not working properly, and that the downspout at room 202 was damaged and leaked into the building.</p> <p>The roofing appeared to be in average condition.</p>	Average
Interior	Interior Walls	<p>The interior walls are made up of the following materials: brick in the corridors and some classrooms;</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Construction		<p>painted gypsum board in offices and classrooms; wood paneled with louvers at the top and bottom at the classroom/corridor connections; CMU (concrete masonry units) in the gymnasium and restrooms; and ceramic tile in the restrooms and kitchen areas.</p> <p>All interior walls were observed to be in good condition.</p> <p>There was a large hole in the mechanical room over the new junction box that was just installed for the new AC (air conditioning) system in the 300-wing.</p>	
	Interior Doors	<p>The interior doors are wood with a lite in metal frames, and some are solid wood doors with side lites. Interior doors were observed to be non-scratched and hardware in good working order.</p> <p>The doors were observed to be in good condition.</p>	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	<p>There are two exit staircases on the east end of the building, exiting to ground level which is lower than the building level.</p> <p>The stairs were observed to be in good condition, but there was a horizontal support beam that was rusted.</p>	Good
	Interior Stairs	<p>There is a small concrete staircase leading into the gymnasium area with five steps. The steps have a metal non-skid edge on the tread. There is no deterioration of concrete on these steps.</p> <p>The stairs appeared to be in good condition.</p>	Good
Interior Finishes	Interior Wall Finishes	<p>The interior walls are brick in the corridors and some classrooms. The walls are painted gypsum board in offices and classrooms. Corridor walls are wood paneled with louvers at the top and bottom at the classroom/corridor connections; The walls are CMU in the gymnasium and restrooms; and ceramic tile in the restrooms and kitchen areas.</p> <p>No water damage to wall finishes was observed. All interior wall finishes were observed to be in good condition.</p>	Good
	Interior Floor Finishes	<p>The interior floor finishes are VCT (vinyl composition tile) in the administrative offices and classrooms. The floors are ceramic tile in the restrooms and kitchen; The floor is under construction and is exposed concrete in the lobby and cafeteria waiting for new vinyl tile to be installed this month; there is carpet in the library and administrative offices; and there is rubber sport court in the gymnasium. There is suspected asbestos tile in the</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>300-wing corridor; and wood flooring on the stage. The kitchen ceramic tile flooring is in good condition and there was no indication that it should be replaced. The vinyl tile in the remainder of the building was also viewed to be in good condition.</p> <p>All floor finishes were observed to be in good condition.</p>	
	Interior Ceiling Finishes	<p>The interior ceilings are Tectum brand acoustical panels in the majority of the school. There are acoustical ceiling tiles in metal grid in the administrative areas. There are 12"x12" perforated glue on tiles over the stage area and cafeteria north section.</p> <p>The perforated tiles were worn, yellowed, and outdated. The ceiling finishes appeared to be in good condition.</p>	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	<p>The facility contains multiple plumbing applications that service the first floor level, consisting of: student restrooms, staff restrooms, janitorial closets with service sinks, and one commercial kitchen.</p> <p>The facility restrooms generally have wall-mounted vitreous china hand sinks with manual faucets or metering faucets, along with vitreous china, floor-mount/wall toilets with manual flushing valves, and vitreous china, wall-hung urinals in the male restrooms with manual flushing valves. There are also wall-mounted service sinks in the janitorial closets.</p> <p>The plumbing fixtures observed in the 200-wing and administration area at the time of assessment were in good condition. The 100-wing restroom plumbing fixtures were being renovated at the time of the assessment and were not observed. The building also includes a commercial kitchen with multiple plumbing fixtures that were observed to be in good condition, with the exception of the aged fixtures in the kitchen staff's restroom.</p> <p>The staff reported that the restroom in the commercial kitchen near the end of it's typical service life.</p> <p>Between the new fixtures being installed in the 100-wing and the existing fixtures observed throughout the facility, this system appeared to be in good condition.</p>	Good
	Domestic Water Distribution	<p>The majority of the plumbing fixtures are not serviced by any domestic water distribution equipment, except the plumbing fixtures in the commercial kitchen.</p> <p>The two vertical gas water heaters observed near the</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>kitchen (99-gallon capacity) had no reported deficiencies at this time; however, they were observed to have a manufacturing and installation date of 2006 and have both reached the end of their projected service life.</p> <p>The staff reported that the domestic water distribution piping had a number of deficiencies. The shut-off procedure for the plumbing distribution piping was outdated and should be updated to provide a more efficient way to isolate specific parts of the facility when repairs are required. The staff reported that the janitorial closet by the gymnasium had a damaged sink drain that needs to be rerouted. The mechanical room that houses Boiler 1 had piping that is reported to leak, although no leaks were observed at the time of assessment. The sewer lines were reported to continually backing up and were not functioning properly. At the time of assessment, a sewage back-up was not observed. It was reported that the plumbing for the gymnasium shower needs to be replaced. Plumbing for the shower fixture was not accessible at time of assessment.</p> <p>The domestic water distribution system for this facility was rated to be in average condition at the time of assessment.</p>	
	Other Plumbing	<p>The roof drains on this facility are predominantly designed with an exterior type drainage system that drains to daylight.</p> <p>The drains observed at the time of assessment were in good condition.</p>	Good
Mechanical/ HVAC		<p>This building has multiple HVAC (heating, ventilating, and air conditioning) applications that service the single-story building. The major mechanical equipment consists of RTUs (roof top units), split system heat pump/air conditioning units, indoor AHUs (air handling units), and floor-mounted horizontal packaged unit ventilator systems. The HVAC system also includes one large roof-mounted rotary air-cooled chiller that has a refrigeration cooling capacity of 90-TON and two horizontal gas-fired boilers with rated output capacities of 1,260 MBH and 990 MBH.</p> <p>Thirty-one HVAC systems were assessed throughout the building. The estimated capacities of the roof-mounted exhaust fans ranged from 150 to 2000 CFM (cubic feet per minute). The refrigeration capacities of the HVAC units ranged from 2.5- to 20-TON.</p> <p>Many of the deficiencies observed were typical aging of equipment, e.g., compressor fin damage due to vandalism/weather, and enclosure and insulation</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>damage due to excessive exposure to the elements. The use of the outdated R22 refrigerant in some of the existing HVAC systems was another observed deficiency.</p> <p>The roof-mounted chiller that was installed in 2001 and was charged with R-22 refrigerant and is nearing the end of its projected service life. The Horizontal floor units in the 200- and 100-wings were replaced in 2006; however, when installed, they were potentially charged with an outdated refrigerant type R-22. The kitchen HVAC RTUs have met their projected service life and have been reported to no longer run efficiently.</p>	
Fire Protection	Fire Alarm	<p>The building contains a fire alarm system by Silent Knight consisting of detectors, pull stations, and horn/strobe combination units.</p> <p>The equipment appeared to be in good condition. The main panel was not located but assumed to be in the MDF (main distribution frame) room, which was not accessible.</p>	Good
	Fire Protection/Suppression	<p>The building is not equipped with a fire sprinkler/suppression system; however, it is protected by portable fire extinguishers stationed throughout the building.</p> <p>All portable fire extinguishers observed were inspected within the last year.</p>	N/A
Electrical	Electrical Distribution	<p>The electrical service transformer is located on the south side of the building between the parking lot and the sidewalk. There is another switchboard located in the courtyard east of the library. It appears that the switchboard feeds main electrical distribution panels in a main mechanical room located in the basement area below room 105.</p> <p>TP1A in the main mechanical room had breakers and breaker void covers missing. These need to be installed. There were extension cords constructed out of single-conductor cable in the "home-made" fashion that travelled into a crawlspace to feed power to an unknown user. If this user is of a temporary nature, a correctly sized extension cord should be implemented.</p> <p>Numerous junction and pull boxes in the electrical room west of classroom 202 did not have enclosure covers or plates installed. Some of the cables were verified energized. The facility needs to install the enclosure plates.</p>	Average
	Lighting	<p>There are numerous types and styles of lighting on the exterior of the building. Lighting around the front entrance appears to be exterior LED (light-emitting</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>diode) fixtures. HID (high-intensity discharge) style fixtures are mounted at the roof line surrounding the building with the occasional screw-in flood-style fixtures installed at various locations.</p> <p>The interior lighting is mainly fluorescent surface-mount or troffer fixtures with the occasional incandescent fixture in closets. The gymnasium is equipped with hanging fluorescent fixtures.</p> <p>The majority of the exterior and interior lighting appeared to be in good condition. There are exit signs at every exit; however, various signs were not illuminated. Facility should verify operation. There were a small number of fixtures that appeared to be near the end of their life expectancy. The facility reported that lighting north of the gymnasium and in the parking lot should be added.</p>	
	<p>Communications & Security</p>	<p>There is a Gemini security system currently installed with keypads at various entrances. Motion detectors are installed in interior areas and wall-mount and column-mount security cameras are installed throughout the interior of the building and strategically on exterior corners. There were no damaged security panels or cameras observed.</p> <p>There are door frame-mount proximity readers for access into certain entrances and a call box to reach administration at the front entrance.</p> <p>The MDF room was not accessible, therefore, the main communications rack and any additional electrical equipment were not observed.</p> <p>The facility staff reported that the telecommunications systems were not functioning properly, but that the public address system was functioning.</p> <p>The equipment was observed in good condition.</p>	<p>Good</p>

Exterior System Deficiency Examples

Exterior Walls



Exterior Windows



Roofing Deficiency Examples



Stairs Deficiency Examples

Exterior Stairs



Interior Finishes Deficiency Examples

Interior Ceiling Finishes



Domestic Water Distribution Deficiency Examples



Mechanical/HVAC System Deficiency Examples



Electrical System Deficiency Examples

Electrical Distribution



Lighting



St. Elmo 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. Repair holes in the soffit left by former downspouts.
2. Repair the horizontal support beam that is supporting the exterior stair cases on the east end of the building.
3. Touch up the paint on the east end of the library fascia where paint is peeling.
4. Replace or reglaze windows in the corridor across from the library.

Roofing

1. Keep trees trimmed back so they are not touching the roof. Repair roofing wear due to tree.
2. Investigate downspouts reported to not function and repair

Interior Construction

1. Repair the hole in the ceiling mechanical room.

Interior Finishes

1. Replace stained, yellowed perforated ceiling tile in the cafeteria as needed.

Plumbing

1. Continue preventive maintenance on aged plumbing fixtures and plan for replacement of the fixtures in the future as they continue to age, specifically, the kitchen staff bathroom.

Domestic Water Distribution

1. Plan for future replacement of commercial kitchen hot water heaters based on recommended service life.
2. Planning to update shut-off procedures for plumbing distribution piping.
3. Investigate the sink in the janitorial closet near the gymnasium and repair drain line as needed.
4. Investigate piping in mechanical room that housing Boiler 1 and repair as needed.
5. Investigate the sewer lines reported to continually back up and not function properly and repair as needed.
6. Plan to replace the plumbing for the gymnasium shower.

Mechanical/HVAC

1. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
2. Plan for and track equipment that uses R-22 refrigerant. The refrigerant is being phased out of manufacturing and construction use in the near future, and will make all equipment that utilizes R-22 refrigerant obsolete.
3. Continue conducting preventive maintenance checks and services for HVAC systems.
4. Plan to replace or repair aged HVAC equipment, including the following specific equipment: Kitchen RTU-01, Kitchen SF-1 and Rotary Chiller CH-2

Electrical

1. Consider adding lighting north of the gymnasium and in the parking lot.
2. Assess the telecom system and determine if an upgrade is necessary.
3. Assess exterior lighting to verify operation.

4. Verify all Exit signs are operational.
5. Install breaker covers in panels that have uninstalled breakers.
6. Install plates on junction boxes and pull boxes that do not have them.
7. Implement extension cords rated for proper size where temporary power is required.

DRAFT