Metz Elementary School Site Summary

Address	84 Robert Martinez Jr. Austin, TX 78702
Number of Permanent Campus Facilities	1
Original Year of Construction	1993
Total Campus Building Area (combined)	61,905 SF

Introduction

The Metz Elementary School campus is located at 84 Robert Martinez Jr. in Austin, Texas. Metz Elementary School was established in 1993, and consists of the Main School Building (BLDG-124A). The building is shaped like a horse shoe and has one continuous interior corridor with an exterior covered concrete sidewalk connecting two wings.

Main School Building – BLDG-124A

Building Purpose	Administrative, Classrooms, Cafeteria and Gymnasium
Building Area	61,905 SF
Inspection Date	June 28-29, 2016
Inspection Conditions	June 28 - 80° sunny and hot June 29 - 80° sunny and hot
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 of the building consists of a brick and tile façade over a steel structure. The wall between the cafeteria and gymnasium is EIFS (Exterior Insulating Finishing System) construction over the same structure. The exterior walls were observed to be in good condition, with isolated areas in need of cleaning due to organic growth. A foundation crack was observed near the corner of the Main Building near the kitchen. It was reported that this area also has a cracked interior kitchen wall in the same location. Expansion joint sealant was deteriorated or missing in places but was in average condition. Masonry spalling was observed at a structural beam near the kitchen loading dock roof. Also, the crawlspace access grate may allow rodents to enter between the grate in the concrete and the expanded metal on the wall opening.	Good
	Exterior Windows	The exterior windows consist of single-pane glazing units with bronze aluminum window frames. All windows appear to be original to building and in good condition with no reported issues.	Good
	Exterior Doors	There is one main public entryway located at the east side of the building. All exterior doors are hollow metal with original hollow metal frames. The exterior doors were observed to be in good condition with minor paint issues, primarily on those facing the sun. The kitchen door and doorframe showed signs of rust and deterioration.	Good
Roofing	The roof material covering the majority of the building appears to be PVC/TPO (polyvinyl chloride/thermoplastic membrane). There is a connecting covered walkway with a metal sloped roof between the Main Building's B-wing and C-wing.		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		There is also a sloped metal roof along the north and east facades. There is a sloped metal roof at the bus canopy along the east side of the parking lot connecting to the building canopy. The majority of roof surfaces appear to be in average condition with the exception of isolated areas where ponding and blistering were observed on the A- and B-wings (roofs A30, A31, A01) and C-wing (roof A107). The west side of the building (B-wing) was in poor condition. Leaks were reported in B122, C100 and COR5, and ceiling damage was visible in these areas. Building staff indicated that leaks had occurred mainly in the north and west of the building. Many areas of blistering, ponding, debris and staining were observed in these areas. The membrane flashings around the metal hip roofing elements showed signs of blistering and darkening as well. The areas above the cafeteria and gymnasium were at two different heights from the rest of the roofs, but in average condition. Little staining was noted in these areas. The base flashing sealant along these higher walls was deteriorating. Water damage was reported near this area. The metal sloped canopy roof over the walkway appeared to be in good condition, although the front canopy had dark staining and debris buildup. Many of the sealants used on the metal copings were deteriorated and pulling away from the membrane flashings throughout the roofing system.	
Interior Construction	Interior Walls	The administrative offices, classrooms and library have painted gypsum board construction. The gymnasium, kitchen and cafeteria are constructed of a combination of gypsum and CMU (concrete masonry unit) systems. There are hollow metal framed interior windows located throughout the building. Most of the classroom partitions have had small spots of the gypsum board paper layer torn away. This damage was typically around tack boards, doors and windows. The administrative offices, Nurse's office, stage and library were in good condition.	Good
	Interior Doors	The building contains solid core wood doors, hardware, and hollow metal doorframes. The interior doors and frames were observed to be in good condition. There were scratches and finish damage observed on the wood doors. A few doors had severe gouges. The hardware throughout was showing signs of wear, but appeared to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	Concrete stairs with steel nosings were only noted at the loading dock and were observed to be in average condition. The stair railing observed was unpainted steel and in poor condition showing signs of rust and corrosion.	Average
	Interior Stairs	The ramp and stairs at the back of the stage are concrete with steel railings. The stage steps are wood and were observed to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Finishes	Interior Wall Finishes	The building has undergone renovations since its original construction in 1993. The library, administration and Nurse's office spaces were recently updated and appear to be in good condition. The corridor walls are plastic laminate wainscot with gypsum construction above and appeared to be in good condition. The walls in most classrooms have areas of missing gypsum paper and paint. This occurs around tack/chalkboards, doors, windows and above millwork in approximately 90% of classrooms. Painted gypsum walls inside the stage and cafeteria are also in good condition. A few staff restrooms were observed. These were finished with 4"x4" wainscot ceramic tile with painted gypsum construction above. The public restrooms are full height ceramic tile. Both were observed to be in average condition. The gymnasium is painted acoustical block construction and in good condition. The cafeteria and kitchen are painted concrete block and in good condition, except for an area reported to have a leak above the sink.	Good
	Interior Floor Finishes	Resilient 12"x12" floor tile is found throughout the building and is original construction. Original ceramic tile floor is present in the restrooms. The administrative offices and library are finished with carpet and in good condition. In room 122, vinyl tile has been patched.. Carpet in the music room had a pull in the pile material. In one staff restroom, the grout was discolored around the toilet. In the cafeteria, some tiles appeared to be darkened below the hand sink. The transition strips between quarry tile and vinyl tile were deteriorated in the serving line. It was observed in the kitchen that there are several areas with water marks in the grout.	Good
	Interior Ceiling Finishes	Acoustical 2x4 lay-in tile was predominantly used throughout the building. Reports of leaks in B-wing and C-wing was confirmed by water-damaged tiles observed in these areas. The ceiling in the gymnasium consisted of exposed joists and decking that was observed to be in good condition. No damaged ceiling tiles were observed in COR5, though this area has been reported to have roof leaks. All other areas with reported leaks have water-damaged ceiling tiles. A few damaged ceiling tiles with holes and miscellaneous scratches appeared in about 20% of the classrooms.	Good
Conveying	System not present.		N/A

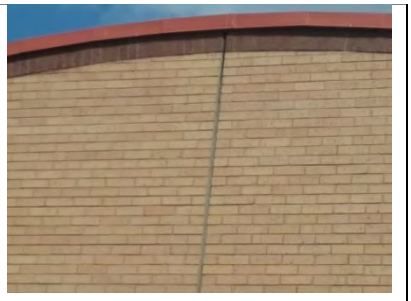
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Plumbing	Plumbing Fixtures	The building has shared male and female restrooms for students between classrooms, and separate staff restrooms located throughout the facility. The restrooms have vitreous china hand sinks in counters with manual faucets, along with vitreous china toilets with manual flushing mechanisms. There are service sinks found in the janitorial closets and water fountains located throughout the facility, typically near the public restrooms. The restroom plumbing fixtures are in average condition as the fixtures are typically aged but still operational with noticeable wear due to their age. The kitchen includes additional plumbing fixtures such as stainless steel wash sinks. These plumbing fixtures were observed to be in average condition.	Average
	Domestic Water Distribution	The sinks located throughout the facility, with the exception of the kitchen, are not equipped with hot water. The sinks located in the kitchen are serviced with hot water from a gas water heater (GWH-1) that is located in the kitchen mechanical room. The water heater was observed to be in poor condition and appears to be at the end of its useful life. An additional water heater is present in the room and appeared to be abandoned. An abandoned recirculation pump was also observed in the mechanical room. The plumbing distribution equipment was observed to be in poor condition based upon the deficiencies of the water heater mentioned above and the age of the system.	Poor
	Other Plumbing	The roof drainage system consists of gutters that drain water off the roof as well as roof drains located within the roof perimeter. The interior floor drains were observed to be aged and in average condition.	Average
Mechanical/ HVAC	The major mechanical equipment consists of package RTUs on the roof and floor-mounted units within the classrooms and corridors that appeared to be ground source heat pumps to provide cooling in the building. Additional ducted ground source heat pumps are located within the interior spaces in the facility, presumably to provide cooling to the corridors and select interior portions of the building. These serve the HVAC (heating, ventilating, and air conditioning) system along with roof-mounted and plenum-mounted exhaust fans. Eight rooftop units (RTU)s, ranging in capacity from an estimated 10 to 25 tons, are located on the roof. There are floor-mounted units that appeared to be ground source heat pumps located in the classrooms and select other areas, including the corridors. Approximately six additional ground source heat pumps are located within mechanical closets and were observed to be past their service life. The RTUs and ground-mounted units within the facility appear to be aged and need replacement. Split system AHUs (air handling units) were observed to serve the		Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		MDF (main distribution frame) room as well as the administration area. The split system units serving the administration area were observed to be in good condition. The split system serving the MDF room was inaccessible at the time of assessment. Corrosion was observed on several pieces of equipment and piping. The condensate lines associated with the RTUs appeared to be aged and damaged in some areas. The condensate drain piping insulation was observed to be deteriorated or missing in areas. Corrosion was beginning to form on the gas piping associated with the RTUs. Supplemental mechanical equipment for the HVAC system also includes roof-mounted and plenum-mounted exhaust fans. The roof-mounted and wall-mounted exhaust fans appeared to be outdated and need replacement. The plenum-mounted exhaust fans appear to serve bathroom exhaust. The rooftop exhaust fans located on the kitchen roof are much larger and appear to serve the dishwasher, kitchen exhaust hood and general kitchen exhaust. The makeup air unit appears to be in good condition. The HVAC system was observed to be in poor condition due primarily to its age.	
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/ annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was observed to be in good condition.	Good
	Fire Protection/ Suppression	The cafeteria storage room as well as the janitorial closet located adjacent to corridor 6 were observed to be equipped with fire sprinklers. The classrooms and corridors were not equipped with fire sprinklers. Fire extinguishers were located throughout the building and the inspection tags were observed to be up to date.	Average
Electrical	Electrical Distribution	The electrical service enters the building at the 277/480-volt 1200-amp main switchboard along with an Eaton Power Factor Correction board located in the main electrical room near the west side of the kitchen. The main switchgear showed signs of corrosion, as this room is also used to store wet mops and buckets. The service feeds transformers and high-voltage panelboards that are located in various electrical rooms throughout the building. There are eight distribution transformers rated at 480-volt primary that step-down to 120/208-volt secondary, which feeds power to 120/208-volt panelboards. The electrical distribution equipment was observed to be in good condition. It was observed that several of the interior electrical rooms were also used as storage spaces which is typically not permitted by the building code. In the administration mechanical closet, there are several conduits with exposed wire and wire nuts along	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		with a disconnect that is not secured to the wall. The building does not have a lightning protection system.	
	Lighting	The building's exterior lighting consists of HID (high-intensity discharge) and high-pressure sodium wall packs with two pole-mounted light poles in front of the school and one in the rear parking lot. Facilities reported that due to the inadequate lighting in the parking lots, vandalism has been frequently occurring. Facilities reported that there was inadequate lighting in the center court and basketball court area and it was outdated. The interior lighting primarily consists of T8 fluorescent luminaires and compact fluorescent down lighting at the intersecting wings. The lighting for the building was observed to be in good condition, but the gymnasium lighting was identified as being difficult to find replacement bulbs for, and the restroom lighting was dim. There are exit signs present in the building that appear to be in good condition.	Good
	Communications & Security	There is a Gemini security system including surveillance cameras covering the interior and exterior of the building. Facilities reported that the exterior cameras are not fully functional, there are blind spots throughout the corridors, and the quality of video in the kitchen area is poor. There is a public address system in the building, and it was observed to be in good condition. The building is equipped with tele/data systems, but the main backbone equipment is located in an inaccessible room.	Average

Exterior System Deficiency Examples

Exterior Walls

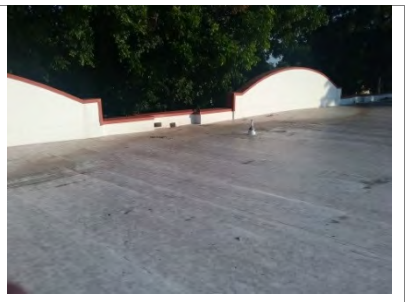



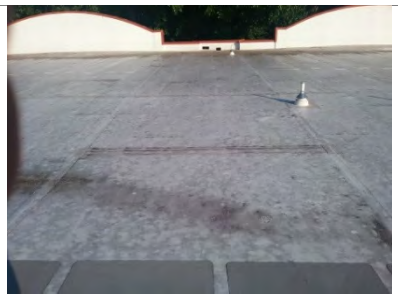
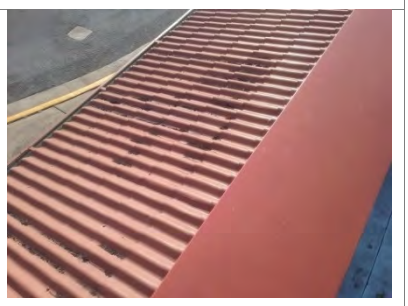
Exterior Doors



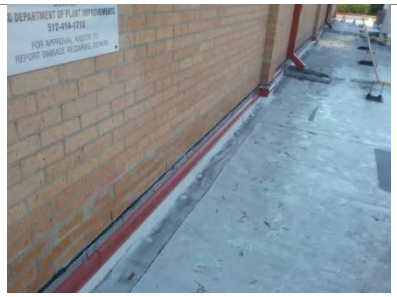
Roofing Deficiency Examples





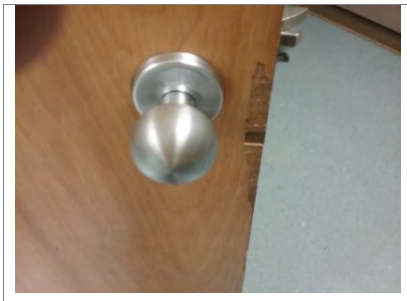
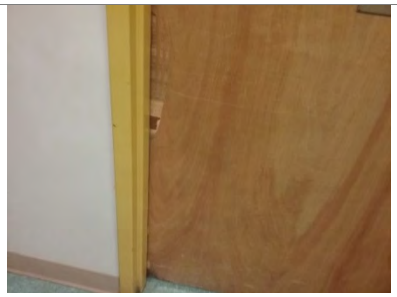
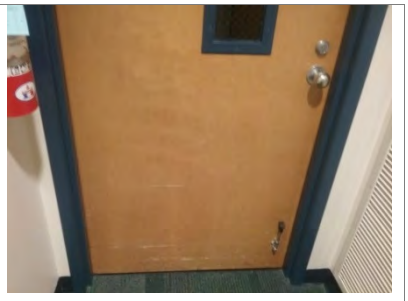
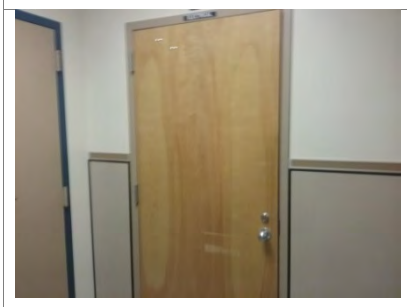
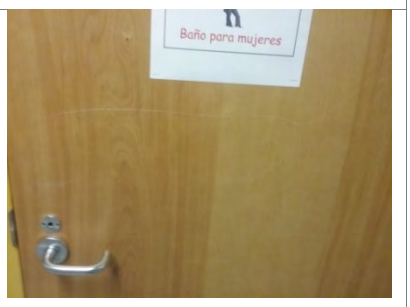








Interior Construction Deficiency Examples

Interior Doors

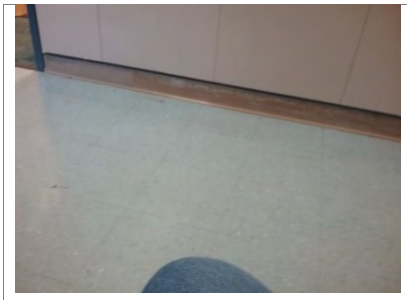






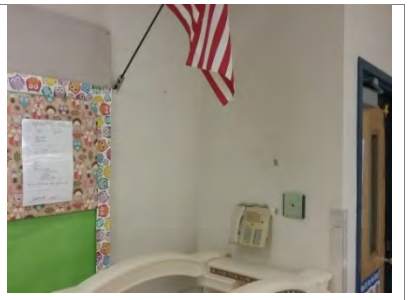
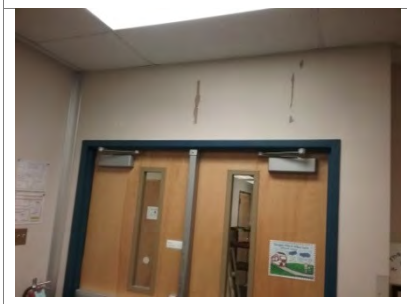
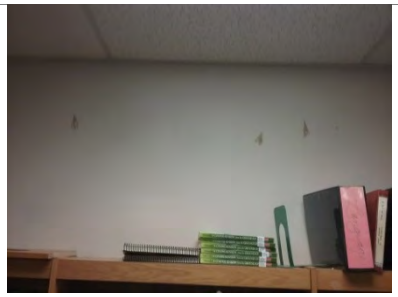
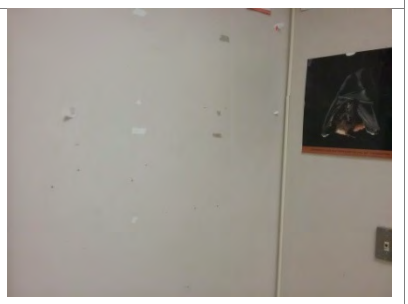
Stairs Deficiency Examples

Exterior Stairs

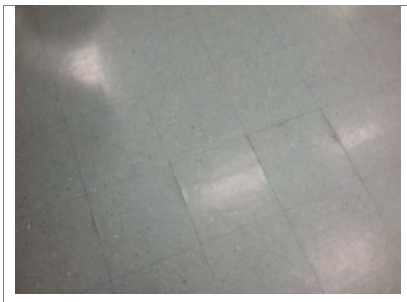
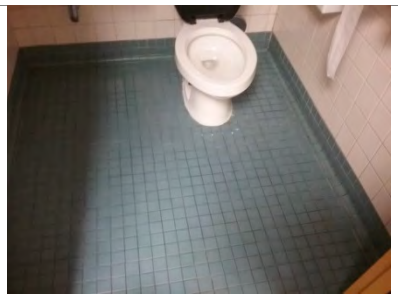
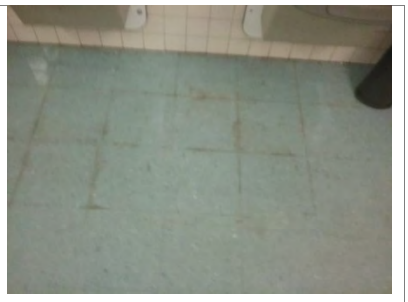
Interior Finishes Deficiency Examples

Interior Wall Finishes

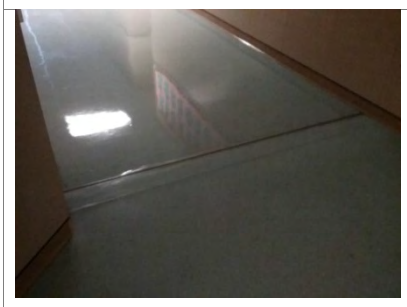
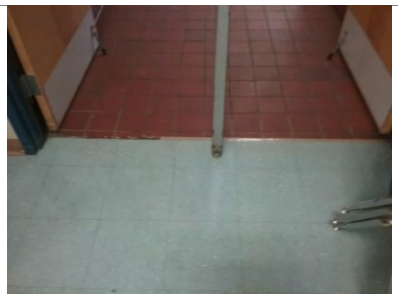
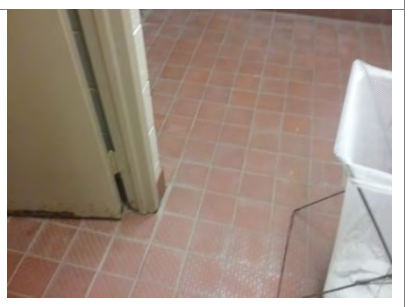


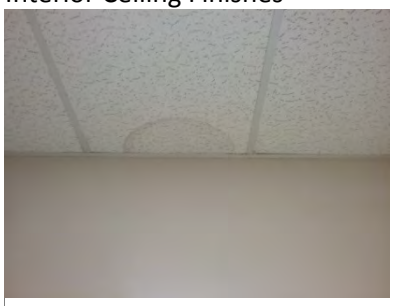
Interior Floor Finishes

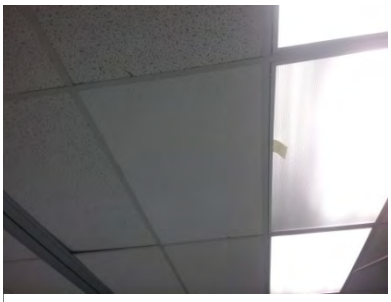




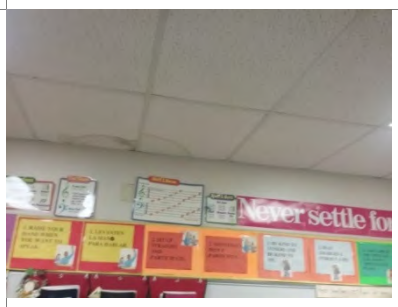


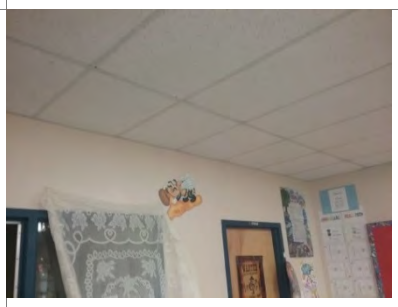
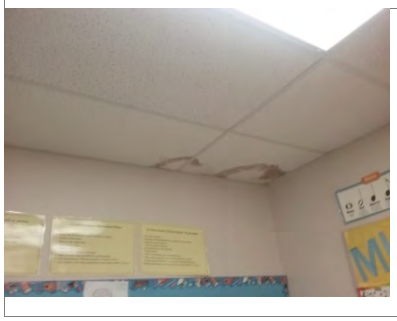
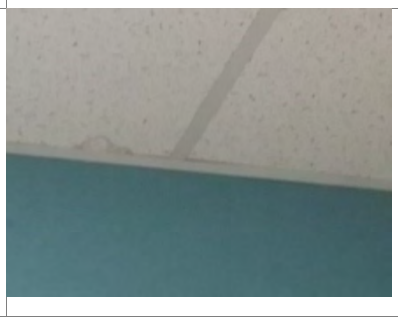




Interior Ceiling Finishes



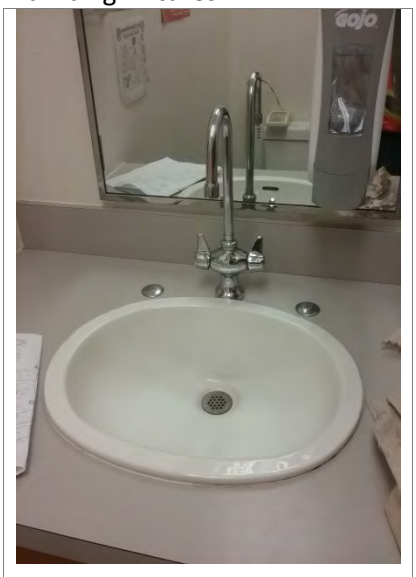




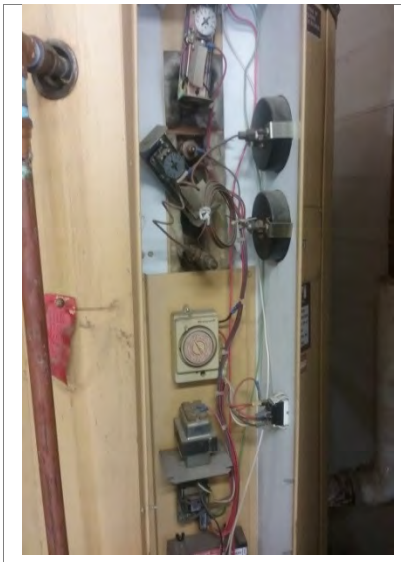




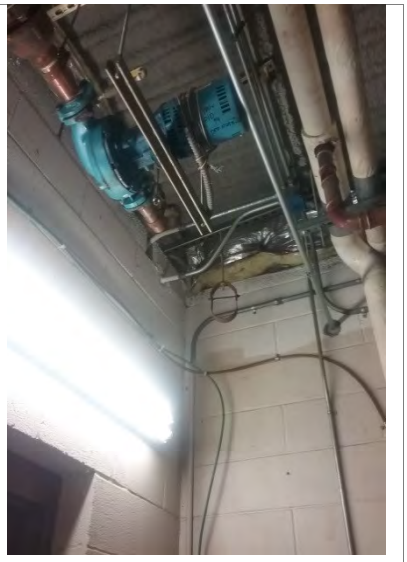
Plumbing System Deficiency Examples

Plumbing Fixtures

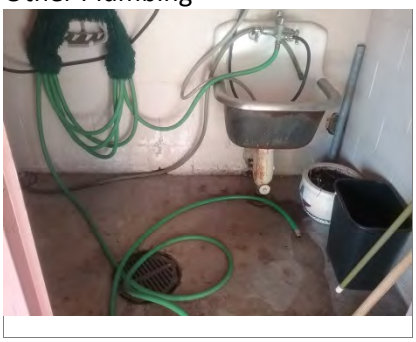


Domestic Water Distribution

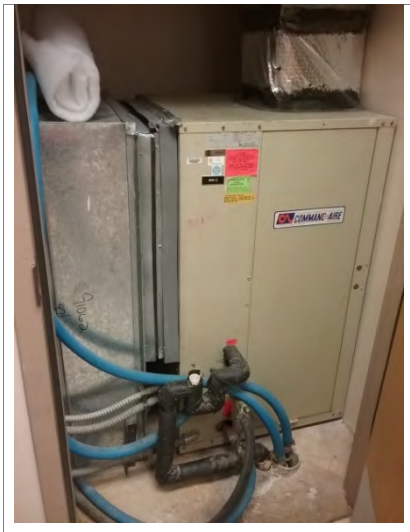




Other Plumbing

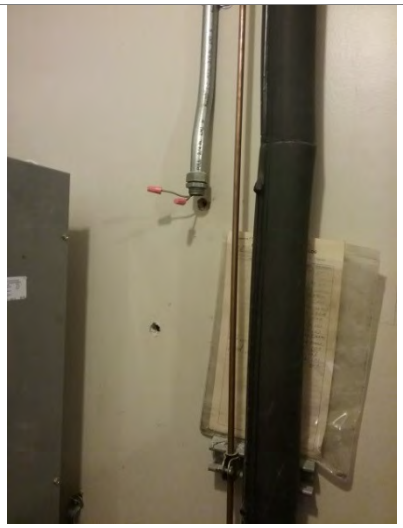


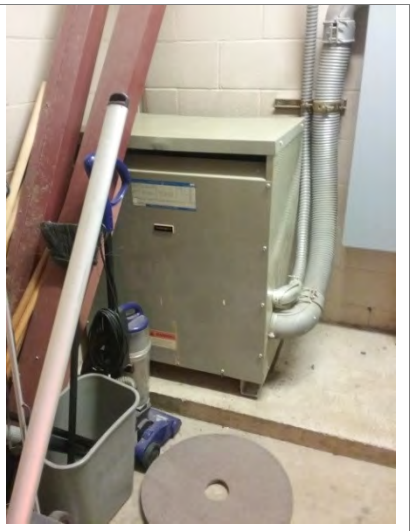
Mechanical/HVAC System Deficiency Examples

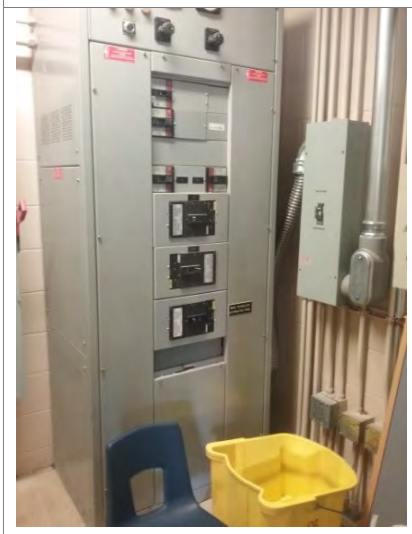


Electrical System Deficiency Examples

Electrical Distribution

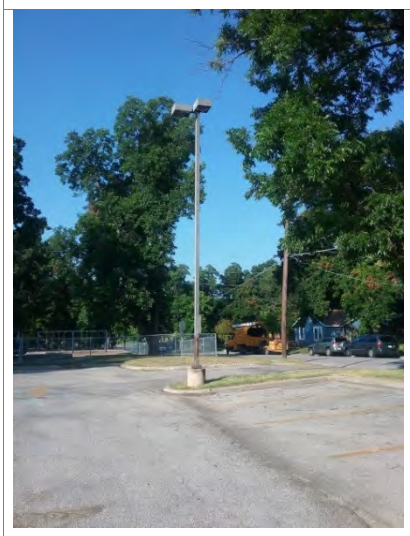
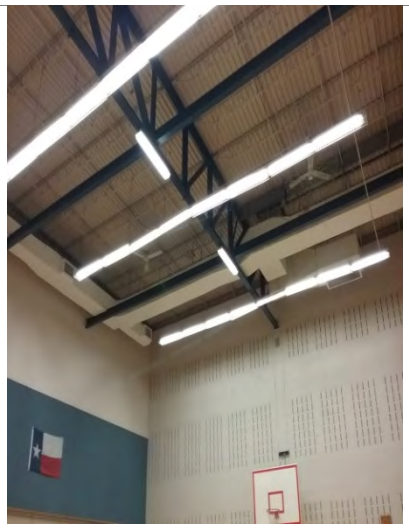




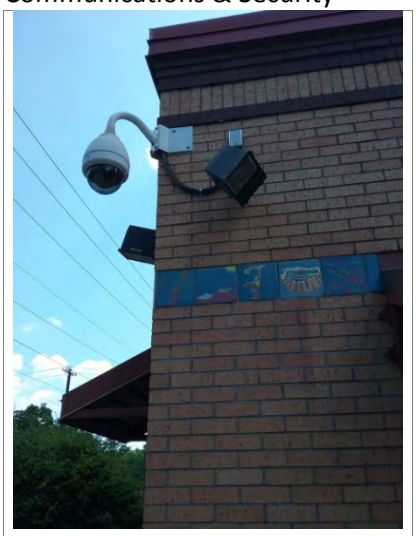


Lighting



Communications & Security



Metz 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

Main School Building Recommendations

Roofing

1. Investigate areas of roofing which appear to be leaking into classrooms below A-, B-, and C-wings and COR5.
2. Repair flashings that may be causing leaks near the cafeteria outside COR5 and in the middle of B-wing. Verify that membrane flashings at hip roof above the library are water proof.

Stairs

1. Repaint stair handrails with a very hard architectural coating to minimize the need for repainting as often.

Interior Finishes

1. Further investigate structural issues at the kitchen corner foundation and loading dock roof structure. Repair the masonry joint at the loading dock roof structure to allow for movement. Structural monitoring may be required.
2. Repair the leaking concrete block wall and damage to adjacent finishes in the kitchen after the structural issue in this area is addressed.
3. Investigate and seal penetration points for rodents at the crawlspace access grate below the building. Continue pest management program with district exterminators.
4. Paint the stair railing with hard architectural coating to minimize future repainting or replace with galvanized rail.
5. Repaint/replace damaged exterior doors.
6. Replace damaged ceiling tiles with new matching ceiling tiles.
7. Replace damaged floor tiles with matching product.
8. Replace five damaged wood doors. Refurbish 30% of wood door surfaces. Provide kick plates.
9. Touchup texture and paint classroom walls.

Plumbing

1. Continue preventive maintenance on aged plumbing fixtures or plan for replacement in the future as fixtures continue to age.
2. Repair or replace any damaged or missing piping insulation as needed.
3. Paint/protect gas lines on the roof from further rusting as needed.
4. Track the installation date of the water heater and plan for replacement as the typical design service life for a water heater is 10 to 15 years.
5. Remove the abandoned water heater, circulation pump and associated piping from the kitchen mechanical room.

Mechanical/HVAC

1. Plan for replacement of the ground source fan coil units as these units appear to be past their design service life.
2. Plan for replacement of the RTUs as these units appear to be past or near the end of their design service life.
3. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, repainting, or repairing to prevent further deterioration.
4. Repair or replace any damaged or missing piping insulation as needed at all facilities.

Electrical

1. Repair or replace all exterior lighting that has discolored lenses, and provide additional exterior lighting to illuminate areas to prevent vandalism.
2. Remove any floor receptacles as they are being phased out of use district-wide.
3. Replace all outdated luminaires with LED (light-emitting diodes) luminaires with dimming capabilities.
4. Replace all existing exit signs with LED fixtures, and add more exit signs where required for all buildings.

5. Replace non-functional cameras, and add more cameras where required for all areas identified by the staff, particularly in the corridors and play areas.
6. Identify and repair the issue with the kitchen panel reported by the staff.
7. Inform Facilities that electrical rooms are not to be used for janitorial storage.