Sims Elementary School Site Summary

Address	1203 Springdale Road Austin, TX 78721
Number of Permanent Campus Facilities	6
Original Year of Construction	1956
Total Campus Building Area (combined)	44,337 SF

Introduction

The Sims Elementary School campus is located at 1203 Springdale Road on the northeast corner of the intersection with East 12th Street in Austin, Texas. The campus consists of six single-story buildings; all linked by open and covered walkways. Three buildings contain classrooms. One of these three, BLDG-139A, contains a gymnasium addition. Another, BLDG-139B, contains a library addition. BLDG 139C contains administration offices and a staff lounge. BLDG-139D contains the campus kitchen and cafeteria. BLDG-139E contains only classrooms. A sixth structure, BLDG-139F, had been demolished and is currently being replaced with a new building containing staff restrooms. This building was not accessed due to the ongoing construction.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
6/7/16	Interview	00	9/6/16	Draft Issue
6/15/16 - 6/16/16, 7/20/16	Assessment	01	1/25/17	Added comments from Sr. Architect Florence Rice as indicated on email dated 10/17/16. See pages 3-6, 15-18, 24, 35-36, 44-45, and 51-52.
9/6/16	Cluster Meeting (Attended)			

DRAFT

Classroom and Gymnasium Building – BLDG-139A

Building Purpose	Classrooms and Gymnasium
Building Area	12,434 SF
Inspection Date	June 15-16 and July 20, 2016
Inspection Conditions	June 15 - 90°F, Sunny June 16 - Mostly sunny July 20 - 85°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 of the building consists of the original, single-story brick façade. Plaster finish is included at the exterior walls of the gymnasium located at the east end of the building. The exterior wall of the gymnasium is currently being remodeled. The brick, other than at the gymnasium, terminates above at a 24-inch to 36-inch-wide painted panel soffit. The wide eaves appeared to do a good job of protecting the walls from deterioration. Several sheet metal housings were observed at the base of the walls which served to cover ground-level utility line penetrations into the walls. It was recently reported that rodents are prevalent, and these penetrations could serve as a source of entry.	Average
	Exterior Windows	The exterior windows are single-hung, single-glazed and are made of aluminum. All windows have been retrofit on their interior sides with newer single-hung, single-glazed windows. The retrofit interior windows appeared to provide insulation to the original windows. Some glazing was observed to be scratched. All assemblies appear to be in good condition.	Good
	Exterior Doors	Exterior doors are painted, hollow metal doors set in painted, hollow metal frames. Some of the doors have single-glazed view panels. Double-walled, translucent fiberglass panels surround the entrance doors. Assemblies appeared to be in good condition, and all	Good

DRAFT

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		hardware appeared to be operational. The staff reported that the fiberglass panels surrounding the entrance doors are scratched and that visibility through these panels is desired.	
Roofing	There are three roof surfaces on this building. The largest roof surface of approximately 12,300 SF (square feet) covers the classroom wing. The next largest surface of approximately 1,940 SF covers the gymnasium. A third, smaller roof area of approximately 220 SF covers the gymnasium office on the north side of the gymnasium. A modified bitumen roof system is installed on all three surfaces. Painted metal gutters and downspouts discharge to concrete splash blocks. The three roof surfaces appeared to be of a similar age and appeared to have approximately ten years of life remaining. An area of membrane degradation is located at the center ridge of the gymnasium roof. There is also some ballast aging adjacent to the roof-mounted AHU (air handling unit) caused by condensation dripping from the uninsulated refrigerant line. Sheet metal, including gutters and downspouts, appeared to be in good condition.		Average
Interior Construction	Interior Walls	Primary walls between classrooms are built with concrete masonry units (CMU) with an approximate 16-inch-high brick base or wainscot. Corridor walls consist of an exposed wood frame with painted louver, wood panel or fabric-covered tack panels. The gymnasium walls are formed with glazed ceramic structural tile units. The walls appeared to be original and for their age appeared serviceable.	Average
	Interior Doors	Doors are painted hollow core and solid core wood doors. The existing hollow-core, wood doors appeared to be deteriorated and not an appropriate choice for the abuse present in a school environment. For the most part, the hardware appeared to be worn and have loose operation. Sr. Architect Florence Rice reported that all 200-wing classroom doors were replaced during Summer 2016.	Average
	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 predominant finish is paint on CMU. The gymnasium walls are a glazed structural tile. Restroom walls are a paint finish above a hard tile wainscot. Though much of the finish appeared old, it appeared to be in good serviceable condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Floor Finishes	A resilient tile finish exists in the corridor and classrooms. The wall base is either brick or vinyl. Porcelain tile exists in the restrooms, and the tile wainscot also serves as the wall base. Sr. Architect Florence Rice reported that the flooring within the gymnasium was replaced with Taraflex in Summer 2016. The gymnasium wall base is vinyl. For the most part, finishes were maintained and in good condition.	Good
	Interior Ceiling Finishes	Ceilings in the classrooms, corridors, and some restrooms consist of a painted, blown, acoustic finish. The gymnasium ceiling consists of 4'x8' perforated painted panels. ACT (acoustic ceiling tile) in the gymnasium foyer and gymnasium restrooms are in poor condition. The acoustic finishes appeared to be in good condition. The gymnasium ceiling appeared to be mis-aligned, old and the surfaces in poor condition. ACT elsewhere also appeared to be old, chipped, mis-matched, and in poor condition.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains predominantly single-use restrooms throughout the facility, with multi-use restrooms found outside of the gymnasium. Typical restrooms have floor and wall-mounted vitreous china water closets with manual flush valves. Typical classrooms contain a single-basin stainless steel sink with a drinking fountain attached. Stainless steel and vitreous china drinking fountains can be found throughout the buildings, typically in the corridor close to the restroom facilities; the majority were operational, but some were not delivering water or were delivering poor flow at the time of assessment. The gymnasium office restroom contains a handicap-accessible single stall shower with a detachable shower head; the shower appeared to be in good working condition. The majority of plumbing fixtures were in working condition, but showed minor signs of deterioration. Some plumbing fixtures showed signs of corrosion around their base.	Average
	Domestic Water Distribution	Domestic hot water to the gymnasium shower is provided by a 19.9-gallon EWH (electric water heater) located in the gymnasium closet within the gymnasium office. Domestic hot water is not supplied to the	Average

DRAFT

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		classroom plumbing fixtures. The domestic water system was in average condition with typical wear and tear associated with the system's age and general daily use.	
	Other Plumbing	Exterior downspouts appeared to have minor debris that could cause blockage; these should be cleaned periodically to ensure proper drainage when needed.	Average
Mechanical/ HVAC	The building's HVAC (heating, ventilating, and air conditioning) system is primarily composed of geothermal heat pumps for both heating and cooling the classrooms and a single split system feeding one of the classrooms. The gymnasium contains RTUs (roof top package units), and a packaged in-wall system in the gymnasium office for individual zone temperature control. Room 203 appeared to have an updated geo-thermal heating unit with an AC system feeding from outside the building, working in average condition. Individual geothermal heat pump systems used for each remaining classroom were reported to be 25 to 30 years old. Water source heat pumps in each classroom were not accessible, assumed to be inside each individual unit and working properly. Multiple units were making screeching or loud vibration noises upon start-up and shutdown. The building's RTUs were aged and out of date, showing signs of corrosion and rust. One of the units (RTU-4) had insulation falling off the refrigerant lines and had a condensation drip onto the roof. Many roof top vents showed signs of age and deterioration. Additionally, the electric room at the front of the building's MDFA (main distribution frame A) was inaccessible. The following were reported to be housed inside the closet: exhaust fan EF-SC014228 and PU-SC014229 (possibly the fire pump, but unable to verify as the area was not accessible). A boiler is stored in the MECH room off the gymnasium (MECHGYM). It appeared to have the inlet and outlet lines cut and was no longer in operation. Additionally, two heating units reside in the corridor of the gymnasium entrance, one on either side, that appear to be original to the building and were no longer in operation. Each single-use restroom inside the classroom contains an exhaust fan. Additionally, the gymnasium had its own set of exhaust fans. All were reported and observed to still be in working condition, but were out of date and should be replaced. The HVAC system was in average condition; however, some pieces of equipment were past their expected design life and showed signs of deterioration. Sr. Architect Florence Rice reported that the abandoned fan coil units in the 200-wing classrooms were removed during Summer 2016.		Average
Fire Protection	Fire Alarm	The building's fire alarm and detection system consists of pull stations, smoke detectors, strobe lights, and annunciators. Detectors and indication were found in all classrooms, corridors, gymnasium storage, gymnasium, and restrooms. Pull stations were found near the building's entrances. Faculty reported that an inaccessible room (MDFA) contained equipment related	Average

DRAFT

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		to the fire system. Electrical equipment could not be assessed. No major deficiencies were observed during the assessment.	
	Fire Protection/ Suppression	No sprinkler systems were detected in the building. Visual assessment of the fire extinguishers determined they were in average condition.	Average
Electrical	Electrical Distribution	The main distribution panels (greater than 200-amp) were in average to good condition and had been replaced in the past ten to 20 years. The building has several smaller 100-amp panels that were near or at their end of life. Panel E located in the main classroom corridor on the gymnasium side appears to be from the late 1970s / early 1980s and should be considered for replacement due to age. Panel B, located in the 'ELECGYM' room, appears to be from the early 1970s and should be replaced due to its overall age. Panel TP1B, located in 'STO200', was in good condition but its access was blocked by cardboard boxes. One common deficiency was the lack of access to panels located in the 'ELECGYM' and 'STO200' rooms. These rooms appeared to serve as storage and required moving several items to access the panels.	Average
	Lighting	Interior lighting is predominantly ceiling-mounted fluorescent fixtures. Some bulbs were burned out and need replacement. Interior lighting was in average to good condition. Exterior lighting is halide fixtures that are installed on the covered walkways adjoining the facility buildings. These fixtures varied in age and were in average to poor condition. The exterior of the gymnasium has a branch wiring deficiency due to an interior electrical outlet installed on the brick wall. This outlet also has an exposed gap into the wall. This outlet should be replaced with a new weatherproof, exterior-grade outlet, and the gap sealed.	Average
	Communications & Security	The building has a variety of previous communication systems throughout the classrooms, e.g. coaxial (CATV), telephone, and modern networking. The school also features VOIP (voice over internet protocol) phones through networking. Sr. Architect Florence Rice reported that the abandoned CATV and telephone receptacles were removed during Summer 2016. The building has five interior security cameras, located in the main classroom corridor, the gymnasium corridor,	Average

DRAFT

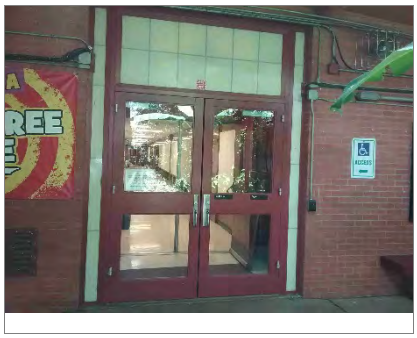
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		and inside the gymnasium. Four cameras are located near each entrance (two for main corridor and two for gymnasium corridor) and one inside the gymnasium. There was one motion detector at the front entrance to the building on the courtyard side. There were two exterior cameras, one facing the courtyard and one on the rear corner of the gymnasium. The exterior security had inadequate coverage as reported by facility staff. Clocks throughout the building are battery powered. Staff reported that clocks do not keep accurate and consistent time.	

DRAFT

Exterior System Deficiency Examples

Exterior Walls

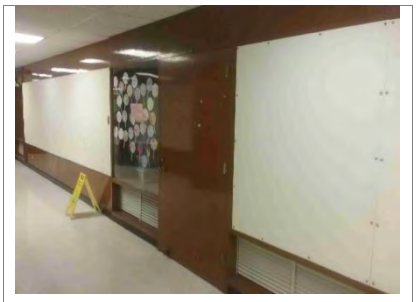
Exterior Doors



Roofing Deficiency Examples

Interior Construction Deficiency Examples

Interior Doors



DRAFT

Interior Finishes Deficiency Examples

Interior Ceiling Finishes

Plumbing System Deficiency Examples

Plumbing Fixtures

Domestic Water Distribution

Other Plumbing

Mechanical/HVAC System Deficiency Examples







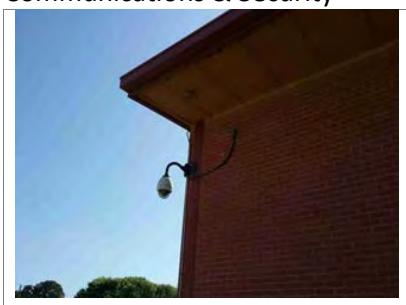



Electrical System Deficiency Examples

Electrical Distribution

Lighting

Communications & Security



Classroom and Library Building – BLDG-139B

Building Purpose	Classrooms, Main Restrooms, and Library
Building Area	17,056 SF
Inspection Date	June 15-16, 2016
Inspection Conditions	June 15 - 90°F, Sunny June 16 - Mostly sunny
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 of the building consists of the original, single-story brick façade. Double-walled, translucent fiberglass panels surround the entrance doors. A plaster finish is included at the exterior walls of the library located at the northeast corner of the building. The brick, at the classroom wing, terminates above at a 24-inch to 36-inch-wide painted panel soffit. The wide eaves appeared to do a good job of protecting the walls from deterioration. The most critical deficiency observed occurred at the bottom of a corner window at the northwest end of the building. Cracking had occurred through the brick. There are several sheet metal housings located at the base of the classroom walls which serve to cover ground-level utility line penetration into the walls. One housing on the north side of the building had separated from the wall. Utility lines penetrating the brick did not appear to be sealed. Elsewhere, temporary patching was applied at brick penetration locations. An open hole in the plaster at the library exterior wall was observed. It was recently reported that rodents are prevalent, and these penetrations could be serving as a source of entry. The soffit along the north side of the building had been patched but appeared to be rotted at the outer edge from subsequent water damage.	Average

DRAFT

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Windows	All but the library windows are single-hung, single-glazed and are made of aluminum. The library windows are fixed, single-glazed and are also made of aluminum. All windows are retrofit on the interior with newer single-hung, single-glazed windows. The retrofit interior units appeared to provide insulation properties to the exterior windows that they are fitted against. All assemblies appeared to be in good condition.	Good
	Exterior Doors	Exterior doors are painted, hollow metal doors set in painted, hollow metal frames. All of the doors except one have single-glazed view panels. All doors and door hardware has chipped paint and signs of wear, but appears to be operational.	Average
Roofing	There are three roof surfaces on this building. The largest roof surface of approximately 18,190 SF covers the classroom wing. This is a modified bitumen roof system. The next largest surface of approximately 1,500 SF covers the library. The library roof is a built-up roof system. A third, smaller roof area of approximately 24 SF covers the east entry doors. Roofs consist of two, flat fiberglass panels trimmed with painted aluminum angles at the edges and a ridge cap covering the panels down the middle. The largest classroom wing roof drains to painted metal gutters and downspouts that discharge to concrete splash blocks. The other two roofs do not have drains or gutters but instead are sloped for sheet flow over the perimeter edges. The staff reported that at least one of the roofs on this building has been replaced within the last ten years. The large, modified bitumen roof over the classroom wing appeared to be in good condition with approximately ten years of life remaining. Gutters, downspouts, and splash blocks appeared to be in good condition. There were several trees, however, that were in contact with the south edge of the roof. The built-up roof above the library addition also appeared to be in good condition with approximately 12 years of life remaining. The small, east entry roof appeared to have been patched and aged. The staff reported roof leaks at this entry.		Average
Interior Construction	Interior Walls	CMU walls are installed between classrooms. Corridor walls consist of an exposed wood frame with painted louver, wood panel or fabric-covered tack panels. Exterior brick walls that once formed entries at the middle of the building have since been enclosed and the once-exterior walls now form an interior corridor intersection. The library walls are CMU and traditional stud construction. All interior walls except library walls lie within an area that is currently being renovated. Walls in the library are in good condition, but assessment of the building was difficult because 90% of	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		this building is currently being renovated. Only the library walls were accessed.	
	Interior Doors	Most of the interior doors have been removed due to current remodeling. Those that remain had signs of wear and appeared to be in poor condition. Sr. Architect Florence Rice reported that all 300-wing classroom doors were replaced during Summer 2016.	Average
	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	All interior wall finishes except the library walls lie within an area that is currently being renovated. Library wall finishes consist of paint on CMU and paint on gypsum wallboard. Some walls are finished with stained wood paneling. All library wall finishes appeared to be in good condition. Walls in the library are in good condition but assessment of the building was difficult because 90% of this building is currently being remodeled. Only the library was assessed.	Good
	Interior Floor Finishes	All floor finishes and wall bases have been removed. Only the library carpet floor remains. The carpet is outside of the area of construction. The library carpet appeared to be in good condition. Only the library was assessed.	Good
	Interior Ceiling Finishes	All ceilings except those in the corridors consist of a painted, blown, acoustic finish. A 2'x2' acoustic ceiling tile (act) and grid is installed in the corridors. The painted acoustic ceilings appeared to be in good condition. The ACT in the corridors appeared to be a mix of styles and is chipped, stained and generally in poor condition. All of these ceilings except the library ceiling are currently in the area of renovation.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building was under renovation when assessment occurred. The majority of the plumbing fixtures have been completed removed as part of the upgrade. The library workroom (LIBWKRM) contained a single-basin stainless steel sink with hot and cold water connections. The condition of all plumbing areas was unable to be assessed due to the construction. Sr. Architect Florence Rice reported that the 300-wing student restrooms were renovated in Summer 2016.	N/A

DRAFT

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Domestic Water Distribution	A small point-of-use water heater was found in the library workroom (LIBWKRM). It was installed in 2014 and appeared to be in good condition. Domestic hot water is not supplied to the remaining plumbing fixtures, restrooms, and drinking fountains. Sr. Architect Florence Rice reported that the hot water is now supplied to the 300-wing restrooms after Summer 2016 renovations. The condition of all plumbing areas was unable to be assessed due to the construction.	N/A
	Other Plumbing	A single roof drain was found but the grate over it was observed to be broken. The condition of all plumbing areas was unable to be assessed due to the construction.	N/A
Mechanical/ HVAC	The building's HVAC system consists of geothermal heat pump systems heating and cooling the classrooms. The library also contains four individual geothermal heat pump systems. All units in the classrooms and library are reported to be 25 to 30 years old. There is concern about the useable life remaining on these systems. Water source heat pumps in each classroom were not accessible, assumed to be inside each individual unit and working properly. Two of the units were not able to be inspected due to ongoing construction in the individual classrooms. Some of the units were reported to make loud vibration noises upon start-up and shutdown. This could be an indicator of an underlying more serious problem. The units should receive regular maintenance until they are able to be replaced to maintain functionality. If significant repair is needed to an individual system, it should be replaced with a more modern system. A heated water pump resides in room ELEC300. It was reported that the pump is no longer in use. All plumbing fixtures abandoned in place should be removed. There is an exhaust fan located in the KILN room; the fan appeared to be in good working condition. Exhaust fans were not verified in the restrooms due to the ongoing renovation. An AHU with a blower and compressor was discovered in room ELEC300 outside the building that appears to feed the restrooms. Room ELEC300 was extremely crowded with debris and items stored by the school. Connections showed signs of corrosion, and missing/damaged insulation on the connecting piping. The unit was past its general life expectancy and should be replaced to maintain functionality of the system. Room 313 houses an in-wall heating and cooling unit; the unit appeared to be working and in average condition but was past its expected operational life and should be replaced to maintain functionality of the system. This unit uses R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. This system may need to be replaced before it meets its operational end of life due to refrigeration restrictions. Room 313 sub-rooms B and D have wall-mounted heating units. During the assessment, they were not operating, but the blower turned on with a switch in 313B. It was noted by the staff that before the		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	geothermal system, an old radiator system was in place. These units could be connected to the old radiator system (removed from other rooms as part of the renovation as they were not being used). Units appeared to be original to the building, and it is unclear whether they are still used. If units are still in use, they should be replaced to maintain the functionality of the heating system to these rooms. Two heating units reside in the corridor of the entrance, one each between rooms 307 and 309, and the restrooms and BKRM300. They appeared to be original to the building and are no longer in operation. Additionally, AC units that were no longer in use for each classroom were housed in the ceiling. Roof vents and exhaust fans appeared to be in average condition, showing signs of age. All HVAC equipment no longer used and abandoned in place should be removed. Sr. Architect Florence Rice reported that the abandoned fan coil units in the 300-wing classrooms, vestibules, and room 313 workspace were removed during Summer 2016 renovations.		
Fire Protection	Fire Alarm	The building was undergoing renovations during the assessment, but fire detection and indication (strobes and annunciators) are present in every classroom and also in storage rooms throughout the building. Pull stations are located at building entrance/exits. No deficiencies were found.	Average
	Fire Protection/ Suppression	Visual assessment of the fire extinguishers determined they were in average condition	Average
Electrical	Electrical Distribution	The majority of the main panels for the building (200-amp or larger) were in good condition. The building has two smaller 100-amp panels in the corridors and one within room CC300. The two 100-amp corridor panels appeared to be from the 1970s and are recommended for replacement due to their age. The 100-amp panel in CC300 was replaced in 2009. Panel LD in ELEC300 was inaccessible without moving items from the storage room. This panel should be made accessible in case of an emergency.	Average
	Lighting	Interior lighting throughout the building consists of fluorescent fixtures. Due to the slope of the ceiling, some were mounted at the ceiling, while others were hung to allow for even height with ceiling-mounted lighting fixtures. Interior fixtures had an occasional bulb burned out that needs to be replaced. Exterior lighting was found to be inadequate. Most building entrance/exits lacked exterior lighting. The side parking lot entrance to the building (north side) had one exterior light centered between room ELEC300 and the building entrance. The halide bulb fixture was missing	Average

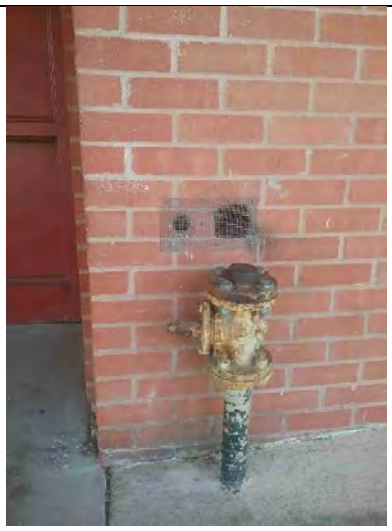
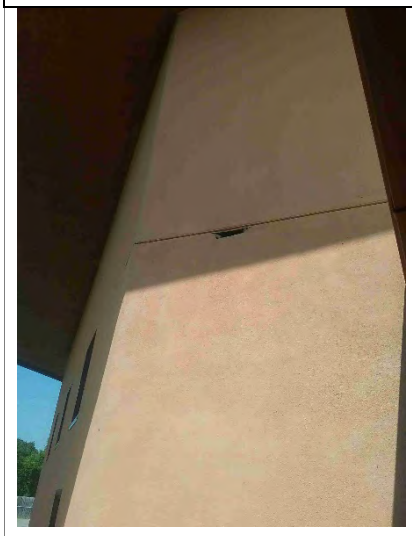
DRAFT

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		the bulb cover. The only other lighting fixtures present on the exterior were mounted on the covered walkways that adjoined buildings. These fixtures technically do not belong to a specific building but varied in age and type. The branch wiring electrical outlets throughout the classrooms varied in age. It is evident more outlets have been added through different renovations. The electrical outlets mounted in the rear walls of the classrooms were dated and are recommended for replacement. Some of these outlets were deficient due to overall age and modified / trimmed outlet covers to accommodate cabinets mounted on the walls. These outlets are planned to be relocated as part of the current renovations.	
	Communications & Security	Interior security cameras are located at the ends of the corridors near entrance/exit doors. Exterior cameras are located on the back corner of the building and on the north end of the building overlooking the side parking lot / Springdale Rd. It appears that areas of the exterior lack security camera coverage. The faculty at the school have voiced concerns that the security camera coverage is inadequate. Clocks throughout the building are battery powered. Sr. Architect Florence Rice reported that the abandoned CATB and telephone receptacles were removed during Summer 2016 renovations.	Average

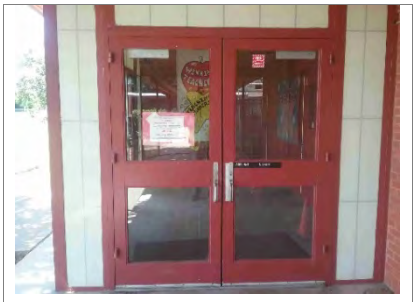
Exterior System Deficiency Examples

Exterior Walls

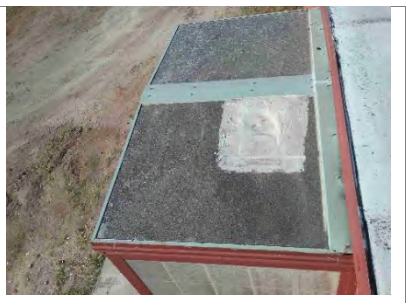



Exterior Doors



Roofing Deficiency Examples

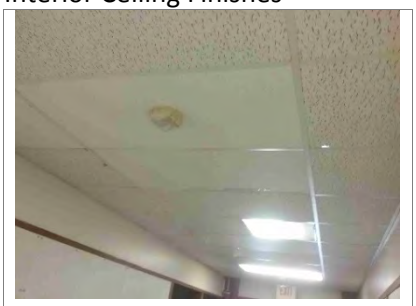


Interior Construction Deficiency Examples

Interior Doors

Interior Finishes Deficiency Examples

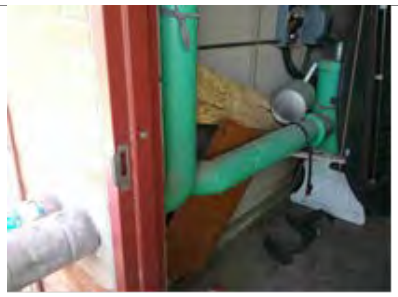
Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures

Other Plumbing

Mechanical/HVAC System Deficiency Examples



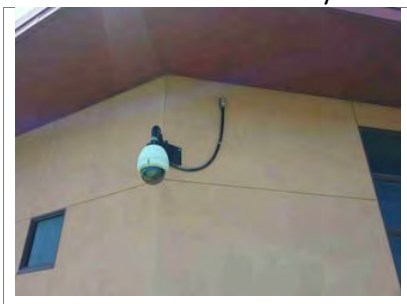



Electrical System Deficiency Examples

Electrical Distribution

Lighting

Communications & Security



Administration Building– BLDG-139C

Building Purpose	Staff Lounge, Administration, and Nurse's Office
Building Area	2,482 SF
Inspection Date	June 16, 2016
Inspection Conditions	90°F, Mostly Sunny
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 of the building is predominantly brick. An addition to the original building contains two administration offices and the nurse's office. The bottom half of the exterior walls of this addition consists of brick matching the original construction. The upper half of the exterior walls is cement plaster. The administration area is reported to have had renovations within recent years. The south façade of the building faces a courtyard, and a roof overhang covers a walkway that extends parallel to this wall. The extensive overhang is finished overhead with a painted panel board soffit. The exterior surfaces appeared to be in good condition. The extended overhanging roof/soffit assembly appeared to protect the wall surface from the elements.	Good
	Exterior Windows	All but the addition windows are single-hung, single-glazed and are made of aluminum with exterior screens. The addition windows are fixed, single-glazed and are made of aluminum. All windows have been retrofit on their interior sides with newer single-hung, single-glazed windows that provide insulation properties. All assemblies appeared to be in good condition.	Good
	Exterior Doors	Exterior doors are both painted; hollow metal doors set in painted, hollow metal frames and painted solid-core wood doors set in painted wood frames. Some of both types of doors contain single-glazed vision panels. The door of the electrical closet on the north side of the building has a wood door and frame.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The doors appeared to be in good serviceable condition. However, the electrical closet door assembly was rotted and requires replacement. A large hole existed at the exterior of this door, and no landing existed.	
Roofing	There are two roof surfaces on this building. The largest roof surface of approximately 2,820 SF covers the older administration building. This surface is a modified bitumen system that drains to perimeter gutters and downspouts. The other roof surface is about 1,000 SF in size and covers the newer addition to the building. This smaller surface is also a bitumen roof system. It has a painted metal drip edge and fascia but no gutters and downspouts. The two roof surfaces appeared to be of a similar age and appeared to have approximately ten years of life remaining. Electrical conduit was well supported by chairs above the roof surface. Gutters, downspouts, and splash blocks appeared to be in good condition. There were several trees, however, that were in contact with the west end of the roof.		Average
Interior Construction	Interior Walls	There are CMU walls in the lounge. There are CMU and gypsum wallboard on conventional stud framing in the administration areas. The CMU walls in the lounge were in average condition. The administration suite was reported to be constructed within the last several years and was in good condition.	Average
	Interior Doors	The only interior doors are in the administration area. These are stained, solid-core wood doors set in painted, hollow metal frames. These assemblies appeared to be in very good condition.	Good
	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	Wall finish is paint on CMU in the lounge. Wall finishes in the administration area are paint on CMU and gypsum wallboard. Both the lounge and administration suite appeared to be in good condition.	Good
	Interior Floor Finishes	The floor finish is resilient tile in the lounge. The floor finish in the administration area is carpet tile. The administration suite carpet appeared to be in good condition. The resilient tile in the lounge also appeared to be in good condition though not recently refinished.	Good

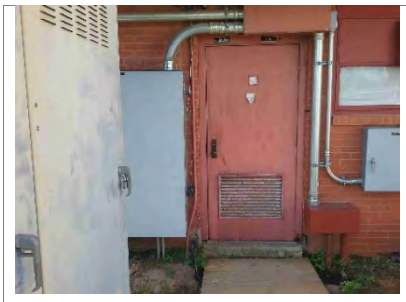
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The lounge ceiling is painted, blown acoustic finish. The administration ceiling is 2'X4' lay-in ACT and grid. Both ceilings appeared to be in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains a single-use restroom in the nurse's office, a single-use administration restroom, and a stainless steel basin sink in the teachers' lounge. Restrooms have floor-mounted vitreous china water closets with manual flush valves. The majority of the plumbing fixtures were in working condition, but showed minor signs of deterioration. Some plumbing fixtures showed signs of corrosion around their bases; this should be addressed to avoid further deterioration.	Average
	Domestic Water Distribution	Domestic hot water to the teachers' lounge and nurse's office is provided by two separate EWHs. Both water heaters appeared to be in good working condition. The domestic water system was in average condition with typical wear and tear associated with the system's age and general daily use.	Good
	Other Plumbing	Exterior rain water drains appeared to have minor debris that could cause a slight blockage; these should be cleaned periodically to ensure proper drainage when needed. Evidence of a leak was found underneath the sink in the teachers' lounge; this should be repaired to avoid damage to the EWH and to preserve functionality of the sink.	Average
Mechanical/ HVAC	A packaged air conditioning unit outside the building is used to cool the building. The unit appeared to be in average operating condition; however, it was outside its expected operational life. Slight corrosion and rust were seen on the connecting lines, with insulation slightly damaged and/or missing in sections. This unit should be replaced to maintain the functionality of the system. Additionally, this unit uses R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. This system may need to be replaced before it meets its operational end of life due to refrigeration restrictions. A combined heating and cooling unit with compressor and blower is housed in the ELECADM room. The unit was making a loud buzzing noise during assessment. This could be an indicator of an underlying more serious problem. The unit was outside of its expected operational life and should be replaced to maintain functionality. An exhaust fan in the nurse's restroom appeared to be in good working condition. A small packaged RTU was observed over the administration area and appeared aged with signs of corrosion and rust. It also had condensation on the outside of		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	the unit. This unit is using R22 refrigerant, which is out of date. Roof top vents showed signs of age and rust.		
Fire Protection	Fire Alarm	Fire detection and indication (strobes and annunciators) are located in all living spaces within the building. The building houses the main control panel for the complex. Faculty reported that the fire alarm trips randomly on a regular basis. A random fire alarm trip was observed during the assessment on June 15-16, 2016.	Average
	Fire Protection/ Suppression	No sprinkler systems were detected in BLDG-139C. Visual assessment of the fire extinguishers determined they were in average condition	Average
Electrical	Electrical Distribution	The main power feed for the facility is fed from the city transformer on the north side of the building near the street. Power is distributed throughout the facility from two main switchboards: a large three-cabinet 2000-amp switchboard and Panel DS, a smaller 1600-amp switchboard. These switchboards feed several 800-amp and 400-amp panels throughout the campus, which feed smaller panels throughout the buildings. The majority of the panels located throughout the building were in good condition. Exterior panel cabinets appeared aged due to weather exposure, but the internals were in good condition. The majority of the larger amp panels had been replaced in the past 20 years. Switchboard Panel DS has excessive debris inside the cabinet from an opening in the side of the cabinet. It is recommended that these gaps be sealed to prevent debris from entering. Panel HA, outside exterior room 'ELECADM', was locked and unable to be assessed. There is another panel to the right of room 'ELECADM' with no label that appeared to feed the administration area and provide spares. This panel appeared to be at least 30 years old and should be replaced due to its age. There is one interior main panel marked LP1 that should be replaced due to its age. The faculty have reported that this panel trips occasionally when several outlets are used at once. There is an extremely old main 400-amp breaker, dated from the 1960s, located in room 'ELECADM'. This breaker was off and is believed to have been decommissioned/abandoned in place. Room 'ELECADM' within the fenced-in electrical utility area has branch wiring deficiencies due to extension	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		cords being used in a permanent configuration. The extension cords were used to power equipment associated with the telephone system. It is strongly recommended that permanent wiring be used for permanent equipment.	
	Lighting	All interior lighting is fluorescent fixtures, either mounted on the ceiling or in the ceiling. All interior lighting appeared to be in good condition. Exterior lighting is limited to the covered walkway on the courtyard side adjoining BLDG-139A. The exterior lighting varied in age, and some fixtures were melted or cracked. The exterior lighting appeared to be in poor condition and inadequate for the entire building.	Average
	Communications & Security	Room 'ELECADM' located in the fenced-in utility feed area houses the existing phone system. It was not determined if this equipment is abandoned or still functioning. The overall condition of this equipment was poor, if still in operation. There was also a portion of phone wire that was hanging and frayed near the electrical maintenance room. It is believed the school now uses VOIP. Three security cameras (one interior and two exterior) were identified during the assessment. One was located within the admin front office. There were two exterior cameras: one located at the front entrance to the admin office and one facing north (towards BLDG-139B). There is no security coverage overlooking the fenced area of the electrical service equipment. Exterior security was inadequate, which was a common comment from the faculty for the entire campus. Clocks throughout the building are battery powered.	Average

Exterior System Deficiency Examples

Exterior Doors



Roofing Deficiency Examples

Plumbing System Deficiency Examples

Plumbing Fixtures

Domestic Water Distribution

Mechanical/HVAC System Deficiency Examples

Fire Protection System Deficiency Examples

Fire Alarm

Electrical System Deficiency Examples

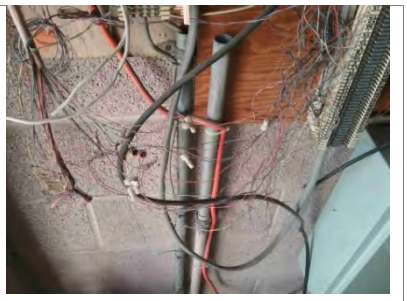
Electrical Distribution






Lighting

Communications & Security



Kitchen and Cafeteria Building – BLDG-139D

Building Purpose	Kitchen, Cafeteria, and Stage
Building Area	4,570 SF
Inspection Date	June 16, 2016
Inspection Conditions	90° F, Mostly Sunny
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 wall of the building is brick and matches all other buildings on campus. The north façade of the building faces a courtyard, and a roof overhang covers a walkway that extends parallel to this wall. The extensive overhang is finished overhead with a painted panelboard soffit. For the most part, the exterior appeared to be in good condition. However, there were some areas along the south side of the building requiring grout or sealant to be replaced at the brick coursing joints.	Average
	Exterior Windows	The exterior windows are single-hung, single-glazed and are made of aluminum. All windows have been retrofit on their interior sides with newer single-hung, single-glazed windows that provide insulation properties. All assemblies appeared to be in good condition.	Good
	Exterior Doors	Exterior doors are painted, hollow metal doors set in painted, hollow metal frames. Most of the doors have single-glazed view panels. All doors and hardware appeared to be in good, operational condition.	Good
Roofing	There are three roof surfaces on this building. One strip of roof covers the north veranda or walkway. Another small section covers a south portion of the cafeteria. The remaining and largest section of roof covers the remainder of the cafeteria, stage, and kitchen. The entire modified bitumen assembly is approximately 4,550 SF. These surfaces drain to perimeter gutters and downspouts.		Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	The three roof surfaces appeared to be of a similar age and appeared to have approximately 12 years of life remaining. Tree growth along the north edge of the north roof area was beginning to contact the roof surface.		
Interior Construction	Interior Walls	There are CMU walls in the cafeteria. The walls in the kitchen are structural glazed tile and gypsum wallboard. The cafeteria interior was currently in demolition and being prepared for renovation. It was not fully accessible for assessment. The kitchen walls appeared to be in good condition but aged.	Average
	Interior Doors	Kitchen doors are wood set in wood frames. Some of the doors have been removed from their frames. One door could not be properly closed. All door faces appeared to be in poor condition. Doors in the cafeteria were not accessible due to ongoing demolition operations.	Poor
	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 wall finish in the kitchen is paint on glazed wall tile or gypsum wallboard on the upper walls. The lower wall surfaces are glazed structural tile. The wall finish is paint on CMU in the cafeteria. The cafeteria was not accessible for detailed assessment due to ongoing interior demolition operations being performed in that area. The kitchen wall surfaces were in good condition but aged.	Average
	Interior Floor Finishes	The floor finish in the kitchen is stained concrete. The cover base in the kitchen is formed with the bottom course of structural glazed wall tile. Small fissure cracks in the concrete floor were evident but probably occurred during the time of original construction. These fine cracks should not affect the performance of the floor. The cafeteria floor was covered for protection and not accessible due to ongoing interior demolition operations being performed in that area.	Average
	Interior Ceiling Finishes	The kitchen ceiling is a 2'x4' vinyl-faced lay-in ceiling tile and grid system. The cafeteria ceiling is painted, blown acoustic. The kitchen ceiling was aged and appeared to be at the end of its life. Parts of the cafeteria ceiling have been removed as part of the ongoing demolition operations being performed in that area.	Poor

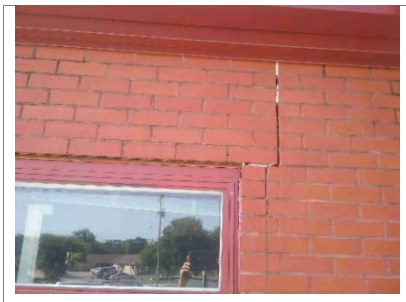
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains a stand-alone cafeteria with commercial kitchen attached. There is one single-use restroom located within the kitchen locker room (KITLOCRM) for kitchen staff to use. It contains a floor-mounted vitreous china water closet with manual flush valve. Various stainless steel and vitreous china wall-hung sinks are found throughout the kitchen for personal use. The kitchen contains stainless steel kitchen equipment, including a three-basin prep sink. Wall-hung vitreous china and stainless steel drinking fountains and vitreous china basin sink for hand washing can be found inside the cafeteria. The majority of plumbing fixtures were in average operational condition, but showed minor signs of deterioration. Some plumbing fixtures showed signs of corrosion around their base. This should be addressed to avoid further deterioration.	Average
	Domestic Water Distribution	Domestic hot water to the kitchen is provided by a 70-gallon EWH that is stored outside the kitchen and is exposed to the elements. The unit should be enclosed or moved indoors to prevent excessive wear or failure. The unit appeared in good working condition and was supplying hot water to the kitchen in a timely manner. The domestic water system was in average condition with typical wear and tear associated with the system's age and general daily use.	Average
	Other Plumbing	The floor drain underneath the three-basin stainless steel prep sink emitted a musty odor, but did not appear to be clogged. The drain should be cleaned and flushed. Facility staff reported the grease line in the kitchen to be undersized; this should be upgraded to ensure proper containment and disposal of grease. The plumbing distribution equipment was in average condition. Some damaged insulation and corroded piping was seen in some of the spaces. Repair or replace any damaged or missing piping insulation as needed, and address any corrosion issues by cleaning, repainting, and/or repairing to prevent further deterioration.	Average
Mechanical/ HVAC	The building's HVAC system is primarily composed of geothermal heat pumps and split system feeding the cafeteria and kitchen. The individual geothermal heat pump system used in the cafeteria is reported to be 25 to 30 years old. There is concern about the useable life remaining on this system. Two heat pumps (one		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	each) were located overhead in the janitorial office (CUSTOFC) and laundry rooms. They appeared to be in average condition. The one residing in CUSTOFC had a slow drip coming from it that should be repaired to ensure efficient operation. A split-system AC unit was located outside the building. The unit was in average condition and had not yet reached its expected operational life. A RTU was observed to have signs of wear and tear, associated with the age of the unit. The unit showed signs of corrosion and rust and uses R22 refrigerant, which is an outdated refrigerant. An old heating unit, which appeared to be original to the building, is located in the restroom off the kitchen locker room. It is no longer functional and may be part of the original radiator system. All abandoned-in-place HVAC equipment should be removed. Additionally, a large condensation drip was seen coming off the ductwork over the entrance to the stage. This should be repaired to maintain functionality of the system. Exhaust fans for the kitchen were still in working condition, but were out of date and should be replaced. The HVAC system is in average condition; however, some pieces of equipment showed signs of degradation and should be repaired to maintain functionality. Two brand new RTUs were in the process of being installed at the time of assessment. If these are replacing the current equipment, all HVAC equipment no longer used should be removed. Sr. Architect Florence Rice reported that the fan coil units serving the cafeteria were replaced during Summer 2016 renovations. The two heat pumps within the janitorial office were also reported to be replaced.		
Fire Protection	Fire Alarm	Fire detection and indication (strobes and annunciators) are present throughout the living spaces in the building. Pull stations are located at the building entrances/exits. No deficiencies were found during the assessment.	Good
	Fire Protection/ Suppression	No sprinkler systems were detected in the building. A range fire suppression unit resides in the kitchen to feed the range hood. No issues were reported with the system. The suppression tank is mounted at ceiling height. Specific information on the unit was not available, but it appeared to be in average condition. Visual assessment of the fire extinguishers determined they were in good condition.	Average
Electrical	Electrical Distribution	The building has three distribution panels that were deficient due to age or poor condition and are recommended for replacement. Panel CK is located next to the new two 2009 panels within the 'KITELEC' space. Panel CK is a small Square D panel (unknown amperage – possibly 100-amp) that appears to be at least 30 years old and should be replaced due to age. Panel C, located in the 'CUSTOFC' space, is a 100-amp GE panel that also appears to be at least 30 years old, and should be replaced due to age. The last panel is	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		located on the backside of the building in a fenced-in area next to the walk-in freezer area. The panel is a 225-amp Square D panel marked for 208-V only. This panel was in poor condition due to its age, missing its front cover, and had open knockout penetrations. This panel is recommended to be replaced.	
	Lighting	Interior lighting is fluorescent fixtures. The cafeteria is currently being remodeled, and several fixtures were removed. The building has exterior lighting in several areas: several outside of the kitchen at the walk-in freezer area, one to the left of the walk-in freezer area, one at the cafeteria entrance/exit on the south side of the building, and several on the covered walkway on the courtyard side. The fixtures varied in age and were in fair to poor condition. One fixture had a melted area on the bulb cover. No deficiencies were observed with branch wiring.	Average
	Communications & Security	The building has three security cameras: one located within the cafeteria area, one within the kitchen area, and one on the exterior building corner near the walk-in freezer area. Due to the close proximity of BLDG-139A and BLDG-139C, there is additional exterior security camera coverage on this building. No security deficiencies were found during the assessment. No networking system was observed, but the kitchen manager's office was inaccessible to verify. The building has a coaxial system for interior televisions. No major deficiencies were observed. Clocks throughout the building are battery powered.	Average

Exterior System Deficiency Examples

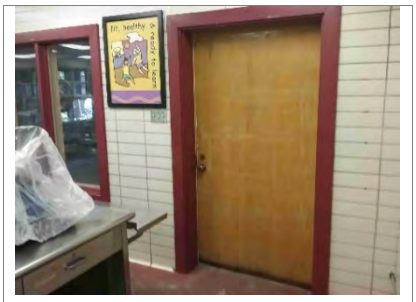
Exterior Walls



Roofing Deficiency Examples

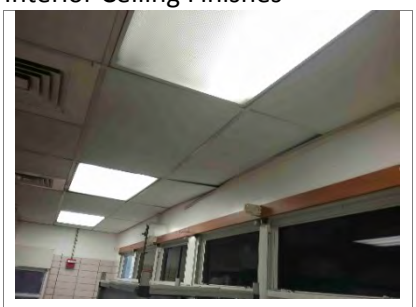
Interior Construction Deficiency Examples

Interior Doors



Interior Finishes Deficiency Examples

Interior Ceiling Finishes



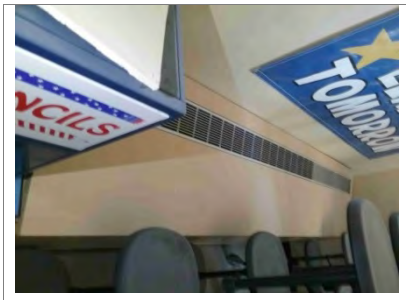
Plumbing System Deficiency Examples

Plumbing Fixtures

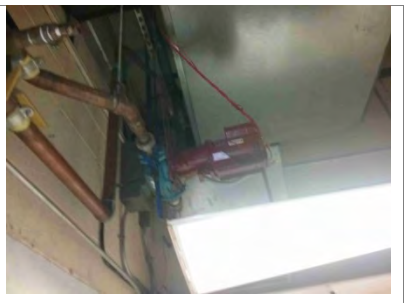
Domestic Water Distribution

Other Plumbing

Mechanical/HVAC System Deficiency Examples

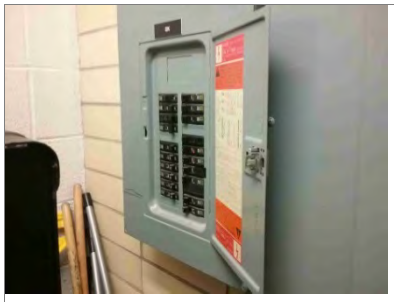






Electrical System Deficiency Examples

Electrical Distribution



Lighting

Stand-Alone Classroom Building – BLDG-139E

Building Purpose	Classrooms
Building Area	7,503 SF
Inspection Date	June 15-16, 2016
Inspection Conditions	June 15 - 90°F, Sunny June 16 - Mostly sunny
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 of the building consists of the original, single-story brick façade. Double-walled, translucent fiberglass panels surround the entrance doors. The brick terminates above at a 24-inch to 36-inch-wide painted panel soffit. There were six sheet metal housing boxes located at the base of the wall that serve to cover ground-level utility lines penetrating the base of the exterior wall. These housings have become detached from the face of the wall, and the penetrations may not be properly sealed. Elsewhere, there were abandoned wall penetrations that were not properly sealed. It was recently reported that rodents are prevalent, and these penetrations could serve as the source of entry.	Good
	Exterior Windows	The exterior windows are single-hung, single-glazed and are made of aluminum. All windows have been retrofit on their interior sides with newer single-hung, single-glazed windows. The retrofit windows appeared to have been installed to provide insulation properties. All assemblies appeared to be in good condition.	Good
	Exterior Doors	Exterior doors are painted, hollow metal doors set in painted, hollow metal frames. Some of the doors have single-glazed view panels. All doors, frames, and hardware appeared to be in good operational condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	A single modified bitumen roof covers the building. The assembly is approximately 8,380 SF in size. This surface drains to perimeter gutters and downspouts. The roof surfaces appeared to be in good condition and to have approximately ten years of life remaining. Metal flashing, roof gutters, and downspouts appeared to be in good condition.		Good
Interior Construction	Interior Walls	Primary walls between classrooms are CMU with an approximate 18-inch-high tile wall base or wainscot. Corridor walls consist of an exposed wood frame with painted louvers low on the walls with wood panel or fabric-covered tack panels above. Corridor walls appeared to have been renovated at some point in time and were in good condition.	Good
	Interior Doors	Corridor doors appear to be recently replaced. Corridor doors are stained, solid core wood doors, with half view lights in painted wood frames. All other doors are stained hollow core wood doors in wood frames. Corridor doors appeared to have recently been replaced. Other doors appeared to have been refurbished at some point in time and were in good condition. The hardware for these doors was also in good condition.	Good
	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 finish consists primarily of paint on CMU walls between the classrooms. The main corridor walls are paint on wood frame with either painted wood panel infill or wallcovering-finished tack panels. It appeared that surfaces have been recently repainted and new tack panels installed.	Good
	Interior Floor Finishes	There is a resilient floor finish throughout, with porcelain tile at the two building entries and in the restrooms. Vinyl base is installed throughout with ceramic tile wainscots forming the base at the restrooms. It appeared that these finishes were in good condition.	Good
	Interior Ceiling Finishes	The ceiling finish throughout is 2'x2' ACT set in a metal grid. It appeared that these finishes had recently been replaced and were in good condition. The small area of ceiling in the janitorial closet south of the west entry showed signs of considerable water damage. The source of the water damage was unable to be	Good

DRAFT

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		determined. The area of roof adjacent to this damage did not appear to have been compromised.	
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains in-classroom, single-use restrooms. Typical restrooms have floor-mounted vitreous china water closets with manual flush valves. Typical classrooms contain a single-basin stainless steel sink with a drinking fountain attached. Stainless steel drinking fountains can be found in the corridor. The majority of plumbing fixtures were in working condition, but showed minor signs of deterioration. Some plumbing fixtures showed signs of corrosion; this should be addressed to avoid further deterioration.	Average
	Domestic Water Distribution	Domestic hot water is not supplied to the classroom plumbing fixtures. Supply water fixtures appeared to be in average condition.	Average
	Other Plumbing	Multiple restrooms were emitting an unpleasant odor. The plumbing should be more thoroughly inspected and flushed, cleaned or repaired as necessary.	Average
Mechanical/ HVAC	The building's HVAC system is composed of geothermal heat pumps feeding the classrooms. The individual geothermal heat pump system used for each classroom is reported to be 25 to 30 years old. There is concern about the useable life remaining for these systems. Water source heat pumps in each classroom were not accessible, assumed to be inside each individual unit and working properly. Controls on the unit were slightly different than those observed in BLDG-139A, but the units were thought to be similar in age and condition. Multiple units made screeching or loud vibration noises upon start-up and shutdown. They should receive regular maintenance until they are able to be replaced to maintain functionality. If significant repair is needed to an individual system, it should be replaced with a more modern system. Evidence of water damage was noted around a ceiling duct in the storage room (OSSTO). It is not clear whether this duct is still part of the current HVAC system. If it is still functional, repairs should be made to prevent further damage. If it is not operational, it should be removed, and the surrounding ceiling should be repaired. Each single-use restroom inside the classroom contains an exhaust fan. The exhaust fan in the restroom off room 104 was working but made a screeching noise when on. The fan should be repaired to maintain functionality of the system. Exhaust fans were reported and observed to still be in working condition, but were out of date and should be replaced. Roof vents showed signs of degradation due to age. The HVAC system was in average condition; however, some pieces of equipment were past their expected design life and showed signs of degradation. Sr. Architect Florence Rice reported that the abandoned fan coil units in the 100-wing classrooms were removed during Summer 2016.		Average

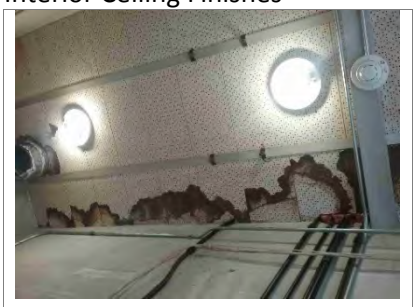
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Fire Protection	Fire Alarm	The building has fire detection and indication (strobes and annunciators) in all classrooms and the corridor. Pull stations are located at the building exits. No deficiencies were found during the assessment.	Good
	Fire Protection/ Suppression	No sprinkler systems were detected in building E. Visual assessment of the fire extinguishers determined they were in good condition	Average
Electrical	Electrical Distribution	The electrical distribution was in average condition. Two panels are recommended for replacement due to age or deficiencies. Panel F, located in the main corridor, was estimated to be 35 years old, and should be replaced due to its age. There is an exterior panel that feeds each classroom's AC system that was missing the front cover to hide wiring terminations and is approximately 30 years old. Although replacement is recommended, installation of the correct front cover would make this panel acceptable.	Average
	Lighting	Interior lighting is typically fluorescent fixtures throughout the building. Exterior lighting is limited to the covered walkway areas. The front entrance to the building has an interior exit light that is hanging by the wiring and was found to be deficient.	Average
	Communications & Security	The building has modern network distribution throughout the building and appears to utilize VOIP for phone service. The building also has existing phone service lines which could not be assessed for functionality. The exterior room space 'OSSTO' has a junction box for the phone cabling, which was found to be in poor condition. Sr. Architect Florence Rice reported that the abandoned CATV and telephone receptacles were removed during Summer 2016. Security for the building was in poor condition. There are two interior security cameras at the end of the corridor near the two entrance/exits. Interior classrooms appear to have motion detectors installed. No exterior security cameras were observed during the assessment. Exterior cameras should be installed for additional security coverage. Clocks throughout the building are battery powered.	Average

Exterior System Deficiency Examples

Exterior Walls

Interior Finish Deficiency Examples

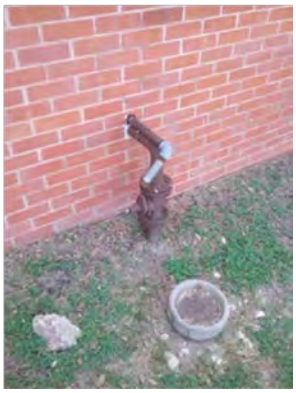
Interior Ceiling Finishes



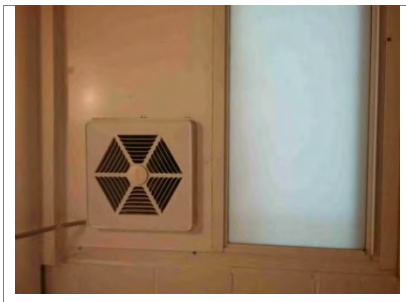
Plumbing System Deficiency Examples

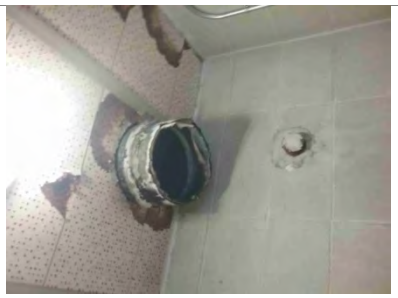
Plumbing Fixtures

Other Plumbing



Mechanical/HVAC System Deficiency Examples

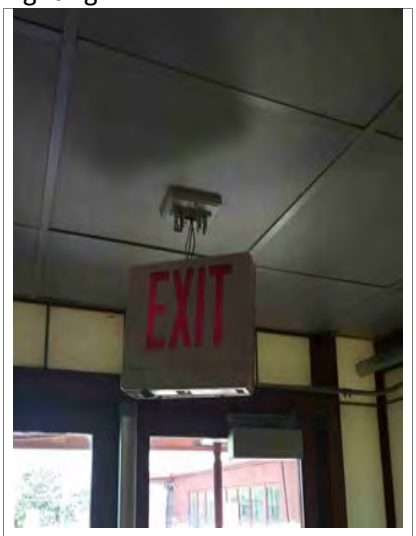




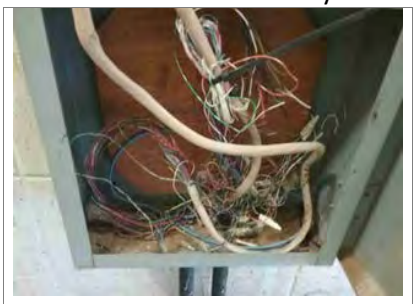
Electrical System Deficiency Examples

Electrical Distribution

Lighting



Communications & Security



Faculty Restroom Building - BLDG-139F

Building Purpose	Restrooms
Building Area	Approximately 400 SF
Inspection Date	
Inspection Conditions	
Facility Condition Index	

System Deficiency Overview

Building-139F was not assessed due to active and ongoing construction of the new structure.

DRAFT

Sims 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

Plumbing

1. Replace aged plumbing fixtures to maintain a functioning system.
2. Repair or replace drinking fountains delivering no or low flow.
3. Repair minor leaks under sinks.
4. Multiple restrooms are emitting an unpleasant odor; plumbing should be more thoroughly inspected and cleaned or repaired as necessary.
5. Clean and flush out all floor drains to ensure adequate drainage. It was reported these are not draining properly.
6. Repair or replace any damaged or missing piping insulation as needed.
7. Clean debris from rain drains.
8. Verify that new plumbing being installed as part of the renovation in BLDG-139B is in excellent working condition when complete.
9. Kitchen hot water heater should be enclosed or moved to an indoor space to minimize deterioration due to the outdoor elements.
10. Verify adequacy of the grease line's size in the kitchen and update or replace as necessary.
11. Repair or replace plumbing fixtures showed signs of corrosion.

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. Inspect inaccessible equipment noted as not covered by this assessment, and make any repairs as necessary.
3. Address any equipment that was noted with excessive noise/vibration by repairing the motor, changing the belt, or other means to promote efficiency.
4. Repair or replace any geothermal heat pump HVAC system that is still in use but approaching end of useful life.
5. Perform annual preventive assessments and necessary maintenance on the exhaust fans to ensure proper functionality.
6. HVAC equipment that is beyond its expected design life needs to be replaced before failure occurs.
7. Remove any abandoned-in-place HVAC equipment that is no longer in use.
8. Replace any units that are still using R-22 refrigerant. It is an outdated refrigerant that is being phased out of use. They may need to be replaced before they meet their design life due to refrigeration restrictions.
9. Repair sources of ceiling condensation and drips as noted in various building above.

Fire Protection

1. Troubleshoot and repair the cause of the intermittent fire alarm.
2. Continue annual assessments of the fire protection system and the portable fire extinguishers.

Electrical

1. Install a global time keeping system for the entire campus.
2. Replace deficient panelboards as listed in the individual building recommendations below.
3. Replace burned-out interior light bulbs throughout campus.
4. Install exterior lighting at building entrances that currently have no lighting.
5. Replace exterior lighting fixtures throughout the campus that are in poor condition or damaged.

6. Replace the interior electrical outlet on the gymnasium's exterior with an outdoor-rated outlet fixture. Seal the gap between the exterior face and outlet.
7. Install additional exterior security cameras throughout the campus for improved coverage. BLDG-139E lacks exterior security.
8. Replace poor condition electrical outlets on the back wall of classrooms in BLDG-139B if not replaced during renovation.
9. Repair and reroute the telephone cabling in room ELECADM in BLDG-139C if still in use. Consider removing the equipment if no longer in service. Install permanent branch wiring for the telephone equipment if still in use. Extension cords should not be used as 'permanent' wiring.
10. Properly decommission or remove the 1960s 400-amp main panel located in room ELECADM in BLDG-139C.
11. Relocate or move items that are blocking access to electrical panels outlined in this report.
12. Faculty reported large amounts of abandoned wire cabling in the ceiling of the buildings. It was also reported that the cabling is not in cable trays. Abandoned cabling should be removed if no longer in use.

Classroom and Gymnasium Building Recommendations

Exterior

1. Wall penetrations should be inspected for seals. If compromised, these should be resealed.
2. The sheet metal housings located at the base of the exterior walls should be inspected. Loose housings should be sealed and re-secured to exterior walls.
3. Replace translucent fiberglass transoms and sidelights adjacent to exterior entrance doors with new transparent panels.

Roofing

1. Evaluate and monitor the condition of the gymnasium roof for patching.

Interior Construction

1. Replace interior hollow-core wood doors & hardware. Evaluate the replacement or refurbishment of all other interior doors and/or door hardware. (Sr. Architect Florence Rice reported all classrooms doors were replaced in Summer 2016).
2. Evaluate the condition of tile and panel ceilings for partial or complete replacement.

Plumbing

1. Aged plumbing fixtures should be replaced to maintain a functioning system.
2. Repair or replace drinking fountains delivering no or low flow.
3. There is evidence of small leaks under some of the in classroom sinks which should be repaired.
4. Multiple restrooms are emitting an unpleasant odor; plumbing should be more thoroughly inspected and cleaned or repaired as necessary.
5. Clean and flush out all floor drains to ensure adequate drainage. It was reported these are not draining properly.
6. Repair or replace any damaged or missing piping insulation as needed.
7. Clean debris from rain drains.

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. Inspect inaccessible equipment noted as not covered by this assessment, and make any repairs as necessary.
3. Address any equipment that was noted with excessive noise/vibration by repairing the motor, changing the belt, or other means to promote efficiency.

4. Repair or replace the geothermal heat pump HVAC system that is still in use and is approaching end of useful life.
5. Perform annual preventive assessments and necessary maintenance on the exhaust fans to ensure proper functionality.
6. HVAC equipment that is beyond its expected design life needs to be replaced before failure occurs.
7. Remove any abandoned-in place HVAC equipment that is no longer in use.

Fire Protection

1. Continue annual assessments of the fire protection system, range fire suppression system and the portable fire extinguishers.

Electrical

1. Replace Panel E, located in the main corridor, due to age.
2. Replace Panel B, located in room ELECGYM, due to age.
3. Move items blocking access to Panel TP1B, located in STO200.
4. Relocate or move items blocking access to electrical panels in room ELECGYM.
5. Replace burned-out interior bulbs.
6. Replace exterior light fixtures that are in poor condition.
7. Replace the interior electrical outlet on the gymnasium's exterior with an outdoor-rated outlet fixture. Seal the gap between the exterior face and outlet.
8. Install additional security cameras for better exterior security coverage.

Classroom and Library Building Recommendations

Exterior

1. Investigate the source of the crack to the brick at the northeast corner of the building. If the cracking also occurs in the foundation below the brick, this structural deficiency should be corrected. If no structural damage is apparent, then the crack in the brick should be sealed.
2. Inspect all sheet metal housings located at the base of the exterior walls. Seal loose housings and re-secure to exterior walls.
3. Inspect wall penetrations for seals. If seals are non-existent or compromised, they should be resealed.
4. Investigate the source of damage to the rotted soffit on the north side of the classroom wing and determine if the source has been corrected. If this is an ongoing problem, the source of the leak should be corrected. The rot-damaged soffit should then be repaired.
5. Survey exterior doors for hardware and weather stripping deficiencies and correct accordingly.

Roofing

1. Trim trees away from the edge of roofs and remove debris.
2. Remove and replace the fiberglass panel roof currently over the east entry with a warrantied roof system.

Interior Construction

1. All of the interior except for the library addition is currently under renovation. Most of the interior doors have been removed. Remove and replace any remaining interior doors. (Sr. Architect Florence Rice reported all classroom doors were replaced in Summer 2016).

Interior Finishes

1. Evaluate the corridor's suspended ceiling system for possible replacement.

Plumbing

1. Verify that new plumbing being installed as part of the renovation is in excellent working condition when complete.

2. Repair or replace any damaged or missing piping insulation as needed.

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. Inspect inaccessible equipment noted as not inspected due to ongoing renovations, and repair as necessary.
3. Perform annual preventive assessments and necessary maintenance on the exhaust fans to ensure proper functionality.
4. Repair or replace the geothermal heat pump HVAC system that is still in use and is approaching end of its useful life.
5. Replace the heating/cooling unit in room 313 that uses R-22 refrigerant. It is an outdated refrigerant that is being phased out of use. The unit may need to be replaced before meet its design life due to refrigeration restrictions.
6. HVAC equipment that is beyond its expected design life needs to be replaced before failure occurs.
7. Remove any abandoned-in-place HVAC equipment that is no longer in use.
8. Address any equipment that was noted with excessive noise/vibration by repairing the motor, changing the belt, or other means to promote efficiency.

Fire Protection

1. Continue annual assessments of the fire protection system and the portable fire extinguishers.

Electrical

1. Replace 100-amp panels located in the corridor due to age.
2. Move or relocate items blocking access to Panel LD in room ELEC300.
3. Replace interior bulbs that have burned out.
4. Replace the bulb cover on exterior lighting fixture at room ELEC300.
5. Install additional exterior lighting on entrances/exits to the building.
6. Replace aged, poor condition electrical outlets on the back walls of each classroom.
7. Install additional exterior security cameras in areas that lack coverage.

Administration Building Recommendations

Exterior

1. Replace the electrical closet exterior door, frame, and hardware. Inspect and repair the surrounding area for rot.
2. Fill the hole in the ground that lies against the building, below the door. Install a new concrete landing below the door.

Roofing

1. Trim trees away from the edge of the roof and remove the accumulation of debris.
2. Aged plumbing fixtures should be replaced to maintain a functioning system.
3. Repair or replace drinking fountains delivering no or low flow.
4. There is evidence of a small leak under the sink in the teachers' lounge that should be repaired.
5. Repair or replace any damaged or missing piping insulation as needed.
6. Clean debris from rain drains.

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. Replace the cooling unit located outside the building that uses R-22 refrigerant. It is an outdated refrigerant that is being phased out of use. The unit may need to be replaced before meeting its design life due to refrigeration restrictions.
3. Address any equipment that was noted with excessive noise/vibration by repairing the motor, changing the belt, or other means to promote efficiency.
4. Perform annual preventive assessments and necessary maintenance on the exhaust fans to ensure proper functionality.
5. HVAC equipment that is beyond its expected design life needs to be replaced before failure occurs.
6. Inspect inaccessible equipment noted as not covered by this assessment, and make any repairs as necessary.

Fire Protection

1. Continue annual assessments of the fire protection system and the portable fire extinguishers.

Electrical

1. Clean and seal Switchboard Panel DS to prevent additional debris from entering the cabinet.
2. Replace the exterior panel to the right of room ELECADM due to age.
3. Replace Panel LP1 due to age and frequent breaker overloads.
4. Remove or label the 1960s 400-amp main breaker as decommissioned in room ELECADM.
5. Replace exterior light fixtures that are cracked or melted.
6. Install permanent branch wiring (remove extension cords used as permanent wiring) for the telephone system equipment in room ELECADM.
7. Repair and properly secure telephone cabling located in room ELECADM if still in use. Consider removing this equipment if the telephone system is no longer in service.

Kitchen and Cafeteria Building Recommendations

Exterior

1. Reseal or re-point grout in the masonry walls as required.

Roofing

1. Trim trees away from the roof edge.

Interior Construction

1. Replace kitchen interior doors and hardware.

Interior Finishes

1. Replace the kitchen lay-in, vinyl-faced ceiling tiles and grid.

Plumbing

1. The hot water heater should be enclosed or moved to an indoor space to minimize deterioration due to the outdoor elements.
2. Aged plumbing fixtures should be replaced to maintain a functioning system.
3. There is evidence of small leaks under some of the sinks that should be repaired.
4. Clean and flush out all floor drains to ensure adequate drainage. It was reported these are not draining properly.
5. Repair or replace any damaged or missing piping insulation, as needed.
6. Verify the adequacy of the grease line's size and update or replace as necessary.

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. Inspect inaccessible equipment noted as not covered by this assessment, and make any repairs as necessary.
3. Address any equipment that was noted with excessive noise/vibration by repairing the motor, changing the belt, or other means to promote efficiency.
4. Remove any abandoned-in-place HVAC equipment that is no longer in use.
5. Repair the source of the condensation drip coming from ductwork seen above stage entrance.
6. Repair the drip coming from the heat pump located in CUSTOFC.
7. Repair or replace the geothermal heat pump HVAC system that is still in use and is approaching its end of useful life.
8. Perform annual preventive assessments and necessary maintenance of the exhaust fans to ensure proper functionality.

Fire Protection

1. Continue annual assessments of the fire protection system, range fire suppression system and the portable fire extinguishers.

Electrical

1. Replace Panel CK, located in the KITELEC space, due to age.
2. Replace Panel C, located in CUSTOFC space, due to age.
3. Replace the exterior panelboard, located next to the walk-in freezer area on the building's exterior. This panel is deficient due to age, the missing front cover, and missing knockout ports.
4. Replace exterior light fixtures that have melted parts.

Stand-Alone Classroom Building Recommendations

Exterior

1. Reseal and reattach the sheet metal housings located at the base of the exterior walls to the wall.
2. Determine if the utility penetrations that these metal housings cover require sealing.

Interior Finishes

1. Investigate the source or history of damage to the ceiling tiles in the janitorial closet south of the west entry. Once it is determined that the source of water damage is or has been corrected, replace the ceiling tiles.

Plumbing

1. Aged plumbing fixtures should be replaced to maintain a functioning system.
2. There is evidence of small leaks under some of the in-classroom sinks that should be repaired.
3. Multiple restrooms are emitting an unpleasant odor; plumbing should be more thoroughly inspected and cleaned or repaired as necessary.
4. Repair or replace any damaged or missing piping insulation as needed.

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. Address any equipment that was noted with excessive noise/vibration by repairing the motor, changing the belt, or other means to promote efficiency.
3. Repair evidence of water damage that was noted around a ceiling duct in the storage room (OSSTO). If the duct is still functional, repairs should be made to prevent further damage. If it is not operational, it should be removed, and the surrounding ceiling should be repaired.
4. Repair the exhaust fan off of room 204 that makes a loud screeching noise when on

5. Perform annual preventive assessments and necessary maintenance on the exhaust fans to ensure proper functionality.
6. HVAC equipment that is beyond its expected design life needs to be replaced before failure occurs.
7. Repair or replace the geothermal heat pump HVAC system that is still in use and is approaching end of its useful life.
8. Remove any abandoned-in-place HVAC equipment that is no longer in use.

Fire Protection

1. Continue annual assessments of the fire protection system and the portable fire extinguishers.

Electrical

1. Replace Panel F, located in the main corridor, due to age.
2. Replace exterior panelboard due to age, or at a minimum, replace the missing front cover to hide exposed wiring.
3. Install exterior lighting on the rear building entrance/exit.
4. Repair the broken exit lighting at the front entrance to the building.
5. Repair/secure poorly routed telephone cabling in room OSSTO.
6. Install exterior security cameras for increased security. No cameras were present on exterior.