Address	4900 Gonzales Street
	Austin, TX 78702
Number of Permanent Campus Facilities	3
Original Year of Construction	1957
Total Campus Building Area (combined)	112,679 SF



#### **Introduction**

The Allan Elementary School campus is located at 4900 Gonzales Street, Austin, Texas. Allan Elementary School was built in 1957. It consists of the Main School Building (BLDG-142A), which has administration offices, classrooms, cafeteria, library, and gymnasium; the Classroom Building (BLDG-142B); and the Mechanical Building (BLDG-142C). The main building and the classroom building are connected by a covered walkway.



# Main School Building – BLDG-142A

Building Purpose	Administration Offices, Classrooms, Cafeteria, and Gymnasium
Building Area	101,010 SF
Inspection Date	August 15 and 25, 2016
Inspection Conditions	August 15 - 85°F - Raining August 25 - 85°F - Cloudy
Facility Condition Index	



## **System Deficiency Overview**

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a brick façade.  The exterior of the building appeared to be in average condition. There was soffit paint peeling throughout the campus. There was a bent gutter over the kitchen area loading dock.	Average
	Exterior Windows	The windows are single-pane aluminum metal-framed inset into the brick façade. The newer library area windows are double-pane.  The windows appeared to be in good condition. Some of the single-pane original window putty was cracked, and some windows were caulked in place.	Good
	Exterior Doors	There are many double exterior metal doors with lites throughout the building. Some exterior doors are solid metal with no lites. The courtyard doors are single-pane residential-type sliding doors.  The exterior doors appeared to be in good condition. Paint on the door frames and the inside of the doors was chipped in well-used areas.	Good
Roofing		ed to be in good condition. Roof A01 was significantly e tear. On the southeast corner, there were many tree	Good



System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Construction	Interior Walls	The interior walls are glazed ceramic tile in the classrooms, administration area, gymnasium, cafeteria, and lobby. There is CMU (concrete masonry unit) in the newer library area and gymnasium. The corridors in the new library area are gypsum board, brick, and CMU. The interior walls appeared to be in good condition.	Good
	Interior Doors	The interior doors are wood veneer with a lite in metal frames. Some are solid wood doors without side lites.  The interior doors appeared to be in average condition.  The paint at door window frames and astragals was chipped. The second floor female restroom door was severely delaminated.	Average
	Interior Specialties	The lockers are painted metal throughout the school. The lockers are not used. The lockers were were observed to be in good condition.	Good
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	The interior stairs are concrete with metal non-slip edging on the tread. The railings are metal attached to the ceramic tile wall on either side.  The stairs were observed to be in good condition.	Good
Interior Interi Finishes	Interior Wall Finishes	The interior walls are 80% glazed ceramic tile throughout the building. There is some painted gypsum board in the classrooms and administration area. There is painted CMU in the gymnasium, library, and cafeteria areas. There is occasionally wood paneling in some classrooms.  The wall finishes were observed to be in good condition.	Good
	Interior Floor Finishes	The interior floor finishes are VCT (vinyl composition tile) and suspected asbestos tile in the administration offices, corridors, cafeteria, and classrooms. Ceramic tile is in the restrooms and kitchen. The flooring is rolled carpet in the family library and carpet tiles in the new library. There is wood flooring in the gymnasium. There is wood flooring on both stages.  All floor finishes were observed to be in good condition. There were some stains on the carpet in the family library area.	Good
	Interior Ceiling Finishes	The interior ceilings are acoustical ceiling tile in metal grid in the classrooms and lobby. There are 12x12 perforated tiles on the ceiling in the lobby, administration, library, and cafeteria areas. There are gypsum board ceilings in the restrooms and the library.	Average



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System	Subsystem	Condition and Deficiency Overview	System
			Condition Rating
		The gymnasium has tectum acoustical panels in metal grid.	
		The ceiling systems were observed to be in average condition. The perforated tiles were coming loose in the cafeteria and faculty corridor. The ceiling paint was peeling in the second floor male restroom.	
Conveying	north end of corridor of machine room, which programmable logic con east end of corridor 5.  The last documented it associated equipment approximately approximately associated and corridor of the corridor o	with a 2,100-pound, hydraulic, two-story elevator on the 5, constructed by Schindler Elevator Corporation. The houses the elevator's hydraulic sump, pump, and troller, is located adjacent to the car and accessed at the inspection was in October 2015. The elevator and all opeared to be in operable condition. The emergency stop ipment were not tested. The car was sent successfully to ek down to the first floor.	Good
	The conveying equipmer	nt was observed to be in good condition.	
Plumbing	Plumbing Fixtures	The facility contains multiple plumbing applications that service two levels, consisting of student restrooms, staff restrooms, janitorial closets with service sinks, and one commercial kitchen.  The restrooms typically have vitreous china floor-mount toilets with manual flushing valves and vitreous china sinks with manual or metering faucets. The classrooms are typically equipped with laminated particle board vanities with stainless steel sink/bubbler combinations mounted inside the vanity. There are also wall-mounted service sinks in the janitorial closets.  Staff reported that the female restroom on the east side of corridor seven was recently remodeled for handicap access and the adjacent janitorial closest (CC120) was renovated in 2015. The Staff also reported that all plumbing fixtures in this building should be renovated due to their excessive age. Additonally, it was reported that the janitorial closet wall-mount sinks should be replaced with floor sinks. Lastly, the Staff reported that many of the classroom sinks have had multiple maintenance repairs due to leaks.  The building's plumbing fixtures were observed to be in good condition.  The plumbing fixtures observed throughout the building were aged, and some appeared to be from the facility's original construction. Though the fixtures were aged, they were all functioning at the time of assessment. The	Good



System	Subsystem	Condition and Deficiency Overview	System
		fixtures, such as trough urinals, toilets and sinks.  Another observed deficiency was that restroom partitions were corroding throughout the building.  Additionally, the gymnasium contained outdated porcelain water fountains and the janitorial closets contained old porcelain wash sinks.	Condition Rating
	Domestic Water Distribution	The plumbing fixtures in the commercial kitchen appeared to be serviced by one vertical gas water heater located in a mechanical room adjacent to the commercial kitchen. The water heater has the ability to produce 200 MBH and hold 100 gallons.  The Staff reported that the cast iron domestic water distribution piping located in the crawlspace under the building needed to be replaced.  The domestic distribution system appeared to be in good condition. No major deficiencies were observed for the domestic water distribution system during the assessment.	Good
	Other Plumbing	The drains for this facility are predominantly designed with an external type drainage system equipped with gutters and downspouts. However, some internal roof drains are equipped with carbon dome-type drain covers.  The facility's drainage system was observed to be in good condition at the time of assessment.	Good
Mechanical/ HVAC	systems that service two indoor water source herecovery units), small to conditioning units. All of a common water loop system cooler tower with a flow horizontal gas-fired boiled Building C0142).  There are 62 HVAC system coof-mounted exhauminute), and the estimate refrigeration capacities of the staff reported that replaced. Additionally, the air quality problems, such in spaces where large voices.	iple HVAC (heating, ventilation, and air conditioning) floor levels. The major mechanical equipment consists of eat pump units, packaged roof top units/HRUs (heat large roof top exhaust/supply air fans, and split system air the indoor water source heat pump units are supported by ystem. The system has an in-line external packaged fluid v capacity of 1,440 GPM (gallons per minute) and two ers with rated output capacities of 3,000 MBH (located in terms throughout the building. The estimated capacities of 1,300 CFM (cubic feet per lated capacity for the HRU is 2,500 to 5,000 CFM. The fithe HVAC units range from 1.5- to 20-TON.  In 2015, the HVAC system servicing the BIGGYM was the staff reported that throughout the building, there were the as high humidity, musty/moldy smells, and poor cooling of people were assembled.  System for this facility appeared to be in average condition.	Average



System	Subsystem	Condition and Deficiency Overview	System
			Condition Rating
	Many of the deficiencies observed were aging of equipment and enclosure and piping/insulation damage due to excessive corrosion. Another widespread observed deficiency was the use of outdated R-22 refrigerant in the existing HVAC systems. Additionally, all of the horizontal classroom units on the first and second floors were observed to potentially utilize R-22 refrigerant. Also, the large outdoor air units on the first and second floors had surpassed their typical design service life and utilized R-22 refrigerant. Lastly, the outdoor air unit located on the west side of corridor 1 on the second floor appeared to be out of service because the electrical disconnect was in the off position.		
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 combinations, pull stations, and detectors. The fire alarm system is controlled by a Silent Knight control panel.  The fire alarm system was observed to be in good condition. The main electronic control panel indicated all systems were normal.	Good
	Fire Protection/ Suppression	The building is not equipped with a fire sprinkler/ suppression system. It is protected by portable fire extinguishers stationed throughout the building.  All portable fire extinguishers observed were inspected within the last year.	N/A
Electrical	Electrical Distribution	The electrical service (utility transformer, exterior switchboard, and capacitor bank for the facility) appear to be located on the west side of the complex adjacent to the kitchen. There are two electrical rooms housing the initial electrical distribution equipment, including 480VAC 2000 amp, 240VAC 1200 amp, and 480VAC 1600-amp switchboards supplying transformers and subpanels throughout the building. Additional transformers and panels are located in corridors, electrical rooms, the kitchen, and the stage and feed power throughout the building.  The electrical distribution equipment was observed to be in average condition due to age. There were numerous panels that had been replaced as additional load was required. The 500-kVA transformer located in the northern electrical room adjacent to the kitchen was nearing the end of its typical service design life. Panelboard AC-4, located adjacent to the male restroom in corridor 8, was showing considerable corrosion inside the panel door. The Wilson 240VAC 1200-amp switchboard, located in the northern electrical room adjacent to the west kitchen wall, was nearing the	Average



System	Subsystem	Condition and Deficiency Overview	System
			Condition Rating
		end of its typical service design life. The Square D 408VAC 1600-amp switchboard, located in the northern electrical room adjacent to the west kitchen wall, was nearing the end of its typical service design life. A wall plate located in corridor 3 had become detached, leaving exposed cabling. A junction box located in corridor 2 was missing an enclosure cover, leaving cabling exposed.  Rocker-style switches exist for corridor lighting, which are outdated and difficult to find replacement parts.  Various exterior lighting illuminate by photocells and not timers, which often need replacing.  The facility requested lighting be installed in crawl spaces and additional receptacles be added in classrooms.	
	Lighting	The exterior of the building is outfitted with what appears to be wall-mount HID (high-intensity discharge) fixtures located near the roofline of the building. There are exterior-style flood fixtures mounted at certain corners of the building, and covered walkways are illuminated by surface-mounted ceiling fixtures. The parking lot and property areas are illuminated with pole lights. The interior lighting consists of troffer, flush ceiling-mount, and hanging fluorescent fixtures. Most closets and mechanical rooms are illuminated with screw-type fixtures. The stage is equipped with specifically designed lighting to support stage productions, and the gymnasium contains hanging fluorescent fixtures.  The lighting was observed to be in average condition.  The exterior lighting seemed to be sparse. An exterior flood-style fixture was inoperable. The exterior lighting was observed to be in average condition.  There are exit signs at every exit. Various signs were not illuminated	Average
	Communications & Security	There is a Gemini security system currently installed with multiple keypads at various entrances. Motion detectors are installed in interior areas, and security cameras are installed throughout the interior of the building and strategically on exterior corners and walls. There are also door frame-mount proximity readers for access into certain entrances, and a call box is located at the front entrance. Multiple communication closets exist, housing network switches, hubs, and routers in a	Good



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System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		rack-style configuration. The facility appears to have wireless routers installed in classroom ceilings strategically throughout the building.  There were no damaged security panels or cameras observed.	
		The equipment was observed to be in good condition.  A wireless router located in room 304 appeared to be hanging from a CAT 5 cable in the ceiling.	

# **Exterior System Deficiency Examples**

# **Exterior Walls**







# **Exterior Windows**





## **Exterior Doors**





# **Roofing Deficiency Examples**







# **Interior Construction Deficiency Examples**

**Interior Doors** 







# **Interior Finishes Deficiency Examples**

**Interior Floor Finishes** 



**Interior Ceiling Finishes** 









# **Plumbing System Deficiency Examples**

# **Plumbing Fixtures**





# Mechanical/HVAC System Deficiency Examples











# **Electrical System Deficiency Examples**

## **Electrical Distribution**



















Communications & Security





# Classroom Building – BLDG-142B

Building Purpose	Classrooms
Building Area	110,577 SF
Inspection Date	August 15 and 25, 2016
Inspection Conditions	August 15 - 85°F - Raining
	August 25 - 85°F - Cloudy
Facility Condition Index	



## **System Deficiency Overview**

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a brick façade.	Good
		The exterior of the building appeared to be in good condition.	
	Exterior Windows	The windows are single-pane aluminum metal-framed inset into the brick façade.	Average
		The exterior windows appeared to be in average condition. The putty around the windows was cracked, especially in the restrooms.	
	Exterior Doors	There are double exterior metal doors with lites throughout the building. There are also single doors with	Good
		lites to individual classrooms.	
		The exterior doors appeared to be in good condition.  Some exterior door windows were scratched and faded.	
Roofing	The building has a single	e-ply roof.	Good
	The roof appeared to be	in good condition.	
Interior Construction	Interior Walls	The interior walls are gypsum board in the classrooms and glazed ceramic tile in the corridors.	Good
		The walls appeared to be in good condition.	
	Interior Doors	The interior doors are wood veneer with a lite in metal frames. Some are solid wood doors without side lites.  The interior doors appeared to be 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



System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Finishes	Interior Wall Finishes	The interior walls are painted gypsum board in the classrooms. The corridors are gypsum board at the top and glazed ceramic tile. There is ceramic tile in the restrooms.  The wall finishes were observed to be in good condition.	Good
	Interior Floor Finishes	The interior floor finishes are VCT in the corridors and classrooms. The main corridor floor is suspected to be asbestos tile. Ceramic tile is in the restrooms.  The floor finishes appeared to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceilings are ACT in metal grid in the classrooms and corridors. There are gypsum board ceilings in the restrooms.  The ceiling finishes appeared to be in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The facility contains multiple plumbing applications that service one floor level, consisting of student restrooms, staff restrooms, and janitorial closets with service sinks. The restrooms typically have vitreous china floor-mount toilets with manual flushing valves and vitreous china sinks with manual or metering faucets. The classrooms are typically equipped with laminated particle board vanities with stainless steel sink/bubbler combinations mounted inside the vanity. There are also wall-mounted service sinks in the janitorial closets.  The Staff reported that all plumbing fixtures in this building should be renovated. The Staff also reported that the aged janitorial closet wall-mount sinks should be replaced with floor sinks.  The building's plumbing fixtures were observed to be in average condition. The restrooms appeared to contain original porcelain fixtures, such as toilets and handwashing sinks. Though the fixtures were aged, they were all functioning at the time of assessment.	Average
	Domestic Water Distribution	The plumbing fixtures observed in this facility are not serviced by any domestic water distribution equipment, such as vertical water heaters. System is not present.	N/A
	Other Plumbing	The roof drains for this facility were predominantly designed with an external-type drainage system equipped with gutters and downspouts.  The roof drainage system appeared to be in good condition.	Good
Mechanical/	This building has two types of HVAC systems that service one floor level. The Avera		



System	Subsystem	Condition and Deficiency Overview	System
			Condition Rating
HVAC	major mechanical equipment consists of floor-mounted horizontal packaged unit		
	ventilator systems and a large outdoor air unit.		
	There are 11 HVAC systems throughout the building. The refrigeration capacities of the individual classroom unit ventilators range from 1.5 to 20 TON		
	of the individual classroom unit ventilators range from 1.5- to 20-TON.		
	The mechanical/HVAC systems for this facility were observed to be in average condition. The classroom HVAC units observed in the facility had estimated		
	installation dates of 1989 and had surpassed their typical service design life. The		
	units were also potentially charged with R-22 refrigerant. R-22 refrigerant is being		
	phased out of use and eventually will render the equipment that utilizes it		
	obsolete. Outdoor air unit 5 was installed in 1995 and was nearing the end of its		
	typical service design life	e. This unit also utilized R-22 refrigerant.	
Fire Protection	Fire Alarm	The building contains a fire alarm system that consists	Good
		of alarm and signaling devices such as horns/	
		annunciators, strobes, horn/strobe combinations, pull	
		stations, and detectors. An electronic control panel was	
		not located in the building, and it is believed that the	
		system communicates with a main control panel in BLDG-142A.	
		The fire alarm system was observed to be in good	
		condition.	
	Fire Protection/	The building is not equipped with a fire sprinkler/	N/A
	Suppression	suppression system. It is protected by portable fire	IN/A
	Capproceion	extinguishers stationed throughout the building.	
		All portable fire extinguishers observed were inspected	
		within the last year.	
Electrical	Electrical Distribution	An exterior-accessed mechanical room "HP-150" exists	Average
		on the southeast corner. This room contains	
		panelboards that feed power to end devices, subpanels,	
		and mechanical equipment.	
		The electrical distribution equipment appeared to be in good condition.	
	Lighting	The exterior of the building is outfitted with what	Good
		appears to be wall-mount HID fixtures located near the	
		roofline of the building. Covered walkways are	
		illuminated by surface-mounted ceiling fixtures.	
		The interior lighting consists of troffer fluorescent	
		fixtures with an occasional screw-type fixture in closets.	
		There are exit signs at every exit that were illuminated.	
		The lighting appeared to be in good condition.	
	Communications &	There is a Gemini security system currently installed	Good
	Security	with multiple keypads at various entrances. Motion detectors are installed in interior areas, and security	



System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		cameras are installed throughout the interior of the building. There are also door frame-mount proximity readers for access into certain entrances. There were no damaged security panels or cameras observed. The facility appears to have wireless routers installed in classroom ceilings.  The equipment appeared to be in good condition.	

# **Exterior System Deficiency Examples**

### **Exterior Windows**



## **Exterior Doors**



# **Interior Construction Deficiency Examples**

## **Interior Doors**





# **Plumbing System Deficiency Examples**

**Plumbing Fixtures** 







# Mechanical/HVAC System Deficiency Examples





# Mechanical Building – BLDG-142C

Building Purpose	Mechanical Equipment
Building Area	1,092 SF
Inspection Date	August 15 and 25, 2016
Inspection Conditions	August 15 - 85°F, raining
	August 25 - 85°F. cloudy
Facility Condition Index	



## **System Deficiency Overview**

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a brick façade on the north and south sides and metal siding on the east and west sides.  The exterior of the building appeared to be in average	Average
		condition. The paint on the metal siding was peeling.	
		The bottom of the siding was badly rusted where the siding met the slab. The top of the louver on the east	
		side was rusted.	
	Exterior Windows	System not present.	N/A
	Exterior Doors	There is one set of double exterior metal doors.	Good
		The doors appeared to be in good condition.	
Roofing	The building has a single-ply roof.  The roof appeared to be in good condition.		Good
Interior Construction	Interior Walls	The interior walls are metal siding on the east and west walls and CMU on the north and south walls.	Average
		The walls appeared to be in average condition. The metal siding was rusted where the siding met the slab. Water was infiltrating at this location.	
	Interior Doors	System not present.	N/A
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior	Interior Wall Finishes	The interior walls are CMU and metal siding.	Average
Finishes		The metal siding was rusting in various areas. The	



System	Subsystem	Condition and Deficiency Overview	System
			Condition Rating
		finishes were observed to be in average condition.	
	Interior Floor Finishes	The interior floor is a concrete slab.	Good
		The finish appeared to be in good condition.	
	Interior Ceiling	The interior ceilings are corrugated metal on bar joists.	Poor
	Finishes	There was significant rust at various connections. The	
		ceiling appeared to be in poor condition.	
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	System not present.	N/A
	Domestic Water Distribution	System not present.	N/A
	Other Plumbing	The drains for this facility are predominantly designed with an external-type drainage system equipped with gutters and downspouts.  The other plumbing appeared to be in good condition.	Good
Mechanical/ HVAC	This building houses the horizontal gas-fired boilers and the fluid cooling tower (located on the roof) along with all associated piping that is part of the common loop HVAC system utilized throughout BLDG-142A and BLDG-142B.  The mechanical/HVAC system for this facility appeared to be in good condition. Fluid cooler CT-1's (SC020815) fill material was aged, dry rotted/cracked, and		Good
	dirty/scaled.		N/A
Fire Protection	Fire Alarm	System not present.	N/A
	Fire Protection/ Suppression	The building is not equipped with a fire sprinkler/ suppression system. It is protected by portable fire extinguishers stationed throughout the building.  All portable fire extinguishers observed were inspected within the last year.	N/A
Electrical	Electrical Distribution	The electrical distribution equipment is located mainly on the west wall of the building. One transformer and three panelboards make up the bulk of the equipment that supplies power to the building and the mechanical equipment.  The equipment appeared to be in good condition. Panelboard "P" was missing its enclosure latch, but appeared to be in good condition.	Good
	Lighting	The exterior of the building is outfitted with wall-mount fixtures. The interior lighting consists of hanging fluorescent fixtures.  The lighting was observed to be in average condition.  The exterior lighting is aged and does not illumintate the walkways well.	Average
	Communications &	System not present.	N/A



System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Security		

# **Exterior System Deficiency Examples**

### **Exterior Walls**







# **Interior Construction Deficiency Examples**

### **Interior Walls**



## **Interior Finish Deficiency Examples**

# **Interior Ceiling Finishes**





## **Mechanical/HVAC System Deficiency Examples**



### **Electric System Deficiency Examples**

### **Electrical Distribution**



# **Allan 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**

#### Electrical

1. Verify all EXIT signs are in operable condition.



#### **Main School Building Recommendations**

#### Exterior

- 1. Repair and repaint soffits where paint is peeling.
- 2. Repair or replace the bent gutter near the kitchen loading dock.
- 3. Repair all windows that have cracks or are caulked in place.

#### Roofing

- 1. Trim trees so they are not touching roof areas.
- 2. Investigate and repair roof A01 for significant bubbling throughout the roof and a tear in the material.

#### Interior Construction

- 1. Repair or replace restroom doors where delaminated.
- 2. Repaint chipped door frames and exit door interiors.
- 3. Repair or resurface scratched doors.

#### Interior Finishes

- 1. Replace or repair perforated ceiling tiles in the cafeteria and the faculty corridor where tiles are hanging loose.
- 2. Clean the carpet in the family library to eliminate stains.

#### **Plumbing**

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

#### Mechanical/HVAC

- 1. Plan for and track equipment that uses R-22 refrigerant. The refrigerant is being phased out of manufacturing and construction use in the near future and will make all equipment that utilizes R-22 refrigerant obsolete.
- 2. Continue conducting preventive maintenance checks and services for HVAC systems. Plan to repair or replace all aged and out-of-date HVAC equipment.
- 3. If any of the HVAC equipment is to be replaced, such as AHUs or packaged units, replace with an updated asset that includes an integral dehumidification wheel that will assist with humidity issues.

#### Electrical

- 1. Consider replacing panels and transformers that are nearing the end of their typical service design life.
- 2. Assess the exterior lighting in the west parking lot for additional illumination. Replace exterior fixtures that are deficient
- 3. Replace rocker-style switches for corridor lights with an updated option.
- 4. Determine whether the exterior lighting on photocells can be added to a centralized timer.
- 5. Install additional lighting in crawlspace areas.
- Install additional receptacles in classrooms.
- 7. Assess Panelboard AC-4 for excessive corrosion.
- 8. Install and secure covers on junction boxes that present exposed cable.

#### **Classroom Building Recommendations**

#### Exterior

- 1. Repair or replace window putty where it is cracked and chipped.
- 2. Replace windows in exterior classroom doors that are scratched.



#### Interior Construction

1. Repair doors that are delaminating and scratched from use.

#### **Plumbing**

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

#### Mechanical/HVAC

- 1. Plan for and track equipment that uses R-22 refrigerant. The refrigerant is being phased out of manufacturing and construction use in the near future and will make all equipment that utilizes R-22 refrigerant obsolete.
- 2. Continue conducting preventive maintenance checks and services for HVAC systems. Plan to repair or replace all aged and out-of-date HVAC equipment.

#### Electrical

- 1. Replace or add additional exterior light fixtures.
- 2. Replace the latch on Panelboard "P".

#### **Mechanical Building Recommendations**

#### Exterior

- 1. Replace or repair the rusted metal siding.
- 2. Replace or repair the rusted louver.

#### **Interior Finishes**

1. Replace or repair the rusted metal siding. Replace or repair the rusted corrugated ceiling.

#### Mechanical/HVAC

1. Clean or replace the fluid cooling tower's fill. Clean fluid cooler enclosure to prevent corrosion from occurring.

#### Electrical

1. Replace exterior lighting to provide adaquate illumination.

