Davis Elementary School Site Summary

Address	5214 Duval Road Austin, Texas 78727
Number of Permanent Campus Facilities	2
Original Year of Construction	1993 and 1999
Total Campus Building Area (combined)	72,150 SF

Introduction

The Davis Elementary School campus is located at 5214 Duval Road in Austin, Texas. Davis Elementary School was established in 1993, and consists of two permanent campus buildings. The Main School Building (BLDG-179A) includes administration offices, classrooms, gymnasium, and cafeteria. The other permanent campus building is a Stand-Alone Classroom Building (BLDG-179B) constructed in 1999, which is connected to the main building by a covered walkway.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
7/28/16	Interview	00	9/2/16	Draft Issue
7/29/16	Assessment	01	12/15/16	Added comments from Principal Jenny Daniels and CAC as indicated on email dated 11/9/16. See page 3.
9/26/16	Cluster Meeting (Attended)	02	1/12/17	Added comments from PM Chris Lewis as indicated on email dated 10/28/16. See pages 2-3, 5, and 13-14.

Main School Building – BLDG-179A

Building Purpose	Administration, Classrooms, Gymnasium and Cafeteria
Building Area	62,168 SF
Inspection Date	July 29, 2016
Inspection Conditions	96°F - Partly 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 walls are brick facade with pre-finished metal panels above doors and windows and at the upper half of the gymnasium and cafeteria. There is a pre-finished metal siding at the main entrance with a combination stucco and metal panel soffit. The majority of the school is framed with metal studs. The gymnasium and cafeteria enclosure is CMU (concrete masonry unit). The exterior walls were observed to be in good condition. Facility staff reported pest control as an ongoing issue.	Good
	Exterior Windows	The exterior windows are painted metal frames with single-pane glazing. There is a painted hollow metal framed, full-height window system in corridor C6 along the ramp. The exterior windows were observed to be in good condition. There was condensation on the south facing windows on the classroom wings at the time of the assessment. This may impact the useful life of the painted finish. The paint was beginning to peel on the window system at corridor C6. PM Chris Lewis reported leaking windows within the 100- and 200- wings.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Doors	The exterior doors are painted metal with painted hollow metal frames. The exterior doors have half lite glazing, and the main entrances have integral painted hollow metal framed glazing above and on either side. The exterior doors were observed to be in good condition with a minor issue being the weather stripping on the south doors of corridor C6.	Good
Roofing	The building has a built-up roof covering with gutters and downspouts routed underground to a storm drain system. There is one interior roof drain at the ramped portion of corridor C6. There are pre-finished metal standing seam walkway covers on the east side of the building. The roof covering appeared to be in good condition with minor leaks reported over the gymnasium and cafeteria. There was minor blistering around the mechanical units on the gymnasium roof and the northwest corner of the kitchen roof. There was a downspout near room B201 that appeared to be leaking on its adjacent brick wall, possibly due to a clog.		Good
Interior Construction	Interior Walls	The interior walls consist of gypsum board on metal studs with control joints at interior door corners. The gymnasium and cafeteria interior is painted CMU. There is a fabric-covered movable partition between the cafeteria and gymnasium. The bookroom area was being remodeled at the time of the assessment. The interior wall construction appeared to be in good condition with typical wear and tear. The kitchen cooler walls on the inside of the kitchen were deteriorating at the floor due to moisture.	Good
	Interior Doors	The interior doors are wood veneer in painted metal frames with wire glass vision panels. There are metal kick plates on the doors to the cafeteria and gymnasium. There is a manual roll-up counter door between the cafeteria and kitchen. The interior doors were observed to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There are exterior stairs present outside of the kitchen. The exterior stairs were reported to be in average condition.	Average
	Interior Stairs	There are wood-finished interior steps at the front of the stage and at the north exit from backstage. The interior stairs were observed to be in good condition.	Good
Interior	Interior Wall Finishes	The interior wall finish is paint with plastic laminate wainscoting in corridors with a wood top trim piece. The	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Finishes		restrooms have ceramic tile on the lower portion and paint above. The cafeteria has acoustic wall panels mounted at an angle on the upper portion of wall. The interior wall finishes were observed to be in good condition. There were a few minor stains on the acoustic panels in the cafeteria. There was a portion of the plastic laminate wainscot missing in the corridor adjacent to the library storage where work appeared to be ongoing.	
	Interior Floor Finishes	The interior floor finish is VCT (vinyl composition tile) in the classrooms and corridors. There is carpet in the administration areas, library, and main entrance foyer. The interior floor finish appeared to be in average condition due to cracking and bubbling issues with the VCT throughout the school. This is typically due to moisture from the foundation interacting with the adhesive, creating organic matter build-up. The carpet in the foyer was installed to remedy the cracking tile. The VCT will need to be replaced more frequently than its expected useful life. The rubber flooring in the ramp portion of corridor C6 was coming off at the transition to the wall.	Average
	Interior Ceiling Finishes	The interior ceiling finish is ACT (acoustic ceiling tile) in the corridor and classrooms. The restrooms throughout have painted gypsum board. The interior ceiling finish appeared to be in average condition due to age with normal maintenance required.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has public restrooms for men, women, and students, and separate staff restrooms located throughout the facility. These restrooms typically have vitreous china hand sinks in counters with manual faucets, along with vitreous china floor-mount and wall toilets with manual flushing mechanisms, and vitreous china wall-hung urinals in the male restrooms with manual flushing mechanisms. There are service sinks in the janitorial closets, and water coolers located throughout the facility, typically near the public restrooms. These fixtures were original to the building and aged accordingly. Most fixtures appeared to be in good condition.	Good
	Domestic Water	All of the plumbing fixtures are serviced with domestic cold water. There is a GWH (gas water heater) in a	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Distribution	mechanical room adjacent the kitchen that serves the kitchen fixtures. There is an additional EWH (electric water heater) in the gymnasium storage that was not accessible. The GWH serving the kitchen appeared to be in good condition.	
	Other Plumbing	The roof drains are equipped with metal grate covers to prevent debris from entering the drainage system. The roof drains appeared to be in average condition.	Average
Mechanical/ HVAC	The major mechanical equipment for this building is a distributed GSHP (ground source heat pump) system. There are several CUs (condensing units) on the roof of the kitchen and cafeteria that serve DX AHUs (air handling units). The outside air for the cafeteria and gymnasium is served through individual ERUs (energy recovery units) for each AHU. CU-C1, which serves the cafeteria's AHU-C1, was making a loud noise. This loud noise is directly associated with the compressor and indicates and internal issue with the compressor. The remaining units on the roof were observed to be in good condition. The classrooms are each served through floor-mounted GSHP console units. These GSHP units were all in average condition. The AHUs serving the gymnasium were inaccessible. The AHUs serving the cafeteria and kitchen were in good condition. PM Chris Lewis reported two HVAC units at the stage and one at the gymnasium constantly shut down and have been an ongoing meintenance issue.		Average
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/ annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by a Silent Knight control panel. The fire alarm system appeared to be in good condition. The Interview Notes reported the control panel beeped occasionally.	Good
	Fire Protection/ Suppression	The building is protected by portable fire extinguishers placed throughout the facility. All observed portable fire extinguishers had inspection tags dated within the last year as required.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Electrical	Electrical Distribution	The electrical service enters the building from the exterior service transformer to the 277/480-volt 1600-amp main switchboard “MSB” located in the electrical room “MAINELEC.” There are multiple branch panelboards and step-down transformers located in various electrical rooms throughout the building. The electrical distribution equipment appeared to be in good condition. The building does not have a lightning protection system.	Good
	Lighting	The building's exterior lighting consists of HID (high-intensity discharge) light fixtures located along the entire perimeter. The interior lighting consists of downlights and 2’x4’ fluorescent recessed troffers and 1’x4’ fluorescent pendant-mounted light fixtures. The interior and exterior lighting appeared to be in good condition. There were exit signs present in the building that appeared to be in good working condition.	Good
	Communications & Security	There is a security system including surveillance cameras in the building. There is a public address system and telecommunications system in the building. The systems appeared to be in good condition with no deficiencies to report. The Interview Notes suggested a lack of card readers from the courtyards into the central corridor.	Good

Exterior System Deficiency Examples

Exterior Windows

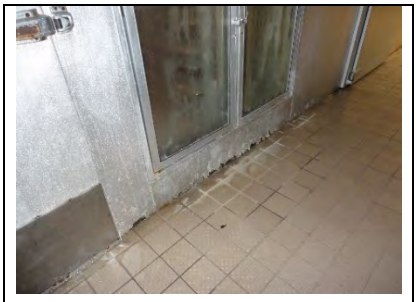

Exterior Doors

Roofing Deficiency Examples



Interior Construction Deficiency Examples

Interior Walls



Interior Finishes Deficiency Examples

Interior Wall Finishes

Interior Floor Finishes






Mechanical/HVAC System Deficiency Examples

Stand-Alone Classroom Building – BLDG-179B

Building Purpose	Classrooms
Building Area	9,981 SF
Inspection Date	July 29, 2016
Inspection Conditions	96°F - Partly cloudy
Facility Condition Index	

System Deficiency Overview

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

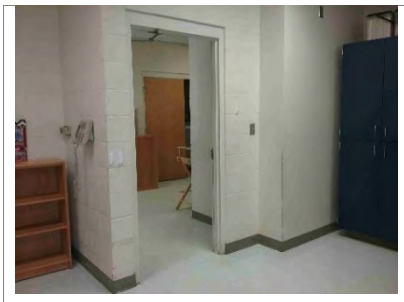
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are brick facade with a stucco soffit at the recessed entrances. The exterior walls are backed by CMU. The exterior walls were in good condition.	Good
	Exterior Windows	The exterior windows are painted metal frames with single-pane glazing. The exterior windows were in good condition.	Good
	Exterior Doors	The exterior doors are painted metal with painted hollow metal frames. The exterior doors have two glazing panels, one on the upper portion and one on the lower portion of the door. The exterior doors were in good condition.	Good
Roofing	The roof covering is modified bitumen with gutters and downspouts at the perimeter. There is a pre-finished metal walkway cover that connects to BLDG-179A. The modified bitumen roof covering appeared to be in good condition with no reported leaks. The metal walkway cover was in good condition as well with a few dented areas on top.		Good
Interior Construction	Interior Walls	The interior walls are mostly CMU with metal stud and gypsum board walls between classrooms. The interior walls were in good condition.	Good

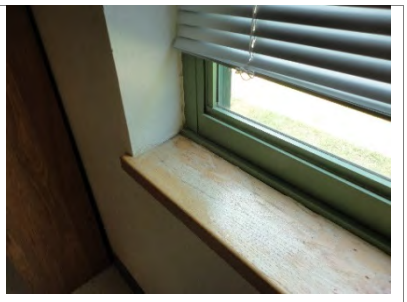
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	The interior doors are wood veneer doors with painted metal frames. The doors have wire glass vision panels and stainless steel kick plates. There are large swing doors from classroom to classroom. The interior doors were 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 wall finish is paint on CMU or gypsum board. The restrooms have ceramic tile on the lower portion of the wall and paint above. The interior wall finish was in average condition due to normal wear and tear. Room 404 had more severe wear at corners and doors. The wood sills at the windows' sealant had deteriorated.	Average
	Interior Floor Finishes	The interior floor finish is VCT throughout with ceramic tile flooring in the restrooms. The floor finishes were in good condition, showing signs of normal wear.	Good
	Interior Ceiling Finishes	The interior ceiling finish is ACT and a grid system. There are gypsum board headers at the corridors to the restrooms in each classroom. The interior ceiling finishes were in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has public restrooms for men, women, and students, and separate staff restrooms located throughout the facility. These restrooms typically have vitreous china hand sinks in counters with manual faucets, along with vitreous china floor-mount and wall toilets with manual flushing mechanisms. There are service sinks in the janitorial closet, and water coolers located near the janitorial closet. These fixtures appeared to be in good condition.	Good
	Domestic Water Distribution	The plumbing fixtures are serviced with domestic cold water. There is an EWH in the janitorial closet that serves the service sink. There were no directly observed deficiencies.	Good
	Other Plumbing	The roof drains are equipped with metal grate covers to prevent debris from entering the drainage system. The roof drains appeared to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Mechanical/ HVAC	The major mechanical equipment consists of packaged GSHPs. The outside air is served through an ERU located in a mechanical room on the north side of the building. These units were original to the building and were in average condition.		Average
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horn/strobe combinations, pull station, and smoke detectors. The fire alarm system appeared to be in good condition.	Good
	Fire Protection/ Suppression	The building is protected by portable fire extinguishers placed throughout the facility. The observed inspection tags were current.	Good
Electrical	Electrical Distribution	The electrical service enters the building through an 800-amp disconnect switch located on the exterior near the service transformer. Three 120/208-volt branch panelboards are located in the mechanical room “HP9.” The electrical distribution equipment appeared to be in good condition, although panelboard “L2” in mechanical room “HP9” had open breaker spaces. The building does not have a lightning protection system.	Good
	Lighting	The interior lighting consists of 2’x4’ fluorescent recessed troffer light fixtures. The lighting for the building appeared to be in good condition.	Good
	Communications & Security	There is a security system including surveillance cameras in the building. There is a public address system and telecommunications system in the building. The systems appeared to be in good condition with no deficiencies to report. The Interview Notes suggested a lack of cameras at the playground.	Good

Interior Construction Deficiency Examples

Interior Walls





Electrical System Deficiency Examples

Electrical Distribution

Davis 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

Exterior

1. Provide pest control treatment.

Plumbing

1. Continue preventive maintenance on aged plumbing fixtures and plan for replacement in the future as fixtures continue to age at all campus facilities.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Clean and flush out all of the roof and interior floor drainage piping at all facilities.

Mechanical/HVAC

1. Adjust HVAC controls or other equipment, such as dehumidifiers, installed to assist the HVAC equipment in mitigating the humidity observed in all facilities. If any of the HVAC equipment is planned to be replaced, such as any of the AHUs or package units, it should be replaced with an updated asset that includes an integral dehumidification that will assist with humidity issues.
2. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.
4. Repair or replace any fin assemblies of HVAC equipment that show extensive wear and tear.
5. Plan and track replacement of equipment that uses R-22 refrigerant in all facilities. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment obsolete.
6. Ensure routine preventative maintenance is conducted for cleaning ductwork to promote efficient and clean air flows to all of the facilities' spaces.
7. Create a test and balance as well as a commissioning plan for any newly replaced equipment including their support systems such as chilled water or heating water as well. New equipment may have different performance compared to the old.

Fire Protection

1. Continue annual inspections of the fire protection system (at the main school) and the portable fire extinguishers (at all facilities).
2. Consider installing and providing fire sprinkler system to the school campus.

Electrical

1. Review the exterior lighting levels and repair/replace as needed to ensure security and safety.
2. Provide egress lighting where required for all buildings.
3. Provide security cameras inside and outside of buildings where necessary for proper security and safety coverage. Ensure that the scheme is compatible with the lighting.
4. Conduct a lightening protection study to determine lightening protection needs.
5. Replace existing sodium vapor and metal halide exterior luminaires with LED luminaires (requested by facility staff and PM Chris Lewis).

Main School Building Recommendations

Exterior

1. Replace door weather-stripping/door sweep on the south doors of corridor C6.
2. Investigate and repair leaking windows within the 100- and 200-wings (requested by PM Chris Lewis).

Roofing

1. Further investigate the clogged downspout outside classroom B201.

Interior Construction

1. Repair the kitchen cooler walls at the floor to ensure the cooler envelope is intact.

Interior Finishes

1. Further investigation and testing should be conducted on the floor tile and flooring adhesive. Replacement flooring will be necessary more frequently than average due to moisture issues.

Mechanical/HVAC

1. Create a two year replacement plan for CU-C1.
2. Create a replacement plan for the console GSHP units.
3. Repair or replace HVAC units at the stage and gymnasium that constantly shutdown. Consider contacting the manufacturer for additional troubleshooting (requested by PM Chris Lewis).

Electrical

1. Provide two circuit breaker covers for the open spaces in panelboard “L2” in mechanical room “HP9.”

Stand-Alone Classroom Recommendations

Interior Finishes

1. Paint room 404.
2. Provide corner guards.

Mechanical/HVAC

1. Create a replacement plan for the console GSHP units.