Pleasant Hill Elementary School Site Summary

Address	6405 Circle S Road Austin, TX 78745
Number of Permanent Campus Facilities	1
Original Year of Construction	1985
Total Campus Building Area (combined)	65,298 SF

Introduction

The Pleasant Hill Elementary School campus is located at 6405 Circle S Road in Austin, Texas. Pleasant Hill Elementary School was established in 1985 and has only one permanent campus building on site. The Main School Building (BLDG-130A) is connected to portable classroom buildings by concrete sidewalks. A small addition was under construction for new restrooms near administration.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
7/26/16	Interview	00	9/9/16	Draft Issue
7/28/16	Assessment	01	1/4/17	Added comments from PM Andrew Miller as indicated on email dated 10/31/16. See pages 7 and 17.
9/21/16	Cluster Meeting (Attended)			

Main School Building – BLDG-130A

Building Purpose	Administration Offices, Classrooms, Cafeteria, and Gymnasium
Building Area	65,298 SF
Inspection Date	July 28, 2016
Inspection Conditions	90°F - Sunny and hot
Facility Condition Index	

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The building exterior walls are brick veneer over CMU (concrete masonry unit) structural backup. There is a nine-course decorative band of glazed brick in the brick façade. The brick veneer façade appeared to be in good condition. Sealant joints appeared to be dry, cracked and generally at end of life. It was reported that pests were able to enter the building through mechanical piping penetrations through exterior walls around the building perimeter.	Good
	Exterior Windows	The exterior windows are metal framed with operable sash and single-pane glazing. At the classroom wings, many of the windows are residential-grade, anodized aluminum, single-hung windows set into a hollow metal storefront system. These pre-finished windows have been field painted to match the storefront system. The horizontal factory-finished exterior windows appeared to be in average condition. Sealants were dry and cracked. The aluminum windows that were modified to fit into the storefront system were observed to be in poor condition and were reported to leak. These windows were observed to have missing PVC (polyvinyl chloride) glazing strips with glass edges visible, resulting in air infiltration. The aluminum windows and hollow metal frames were not compatible as a system.	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Doors	The exterior doors are steel in individual hollow metal frames or within a storefront system. The exterior doors have large vision panels and/or side-lites at major building entrances. The building exterior doors were observed to be in average condition. Many of the exterior doors had peeling paint and heavy oxidation. It was reported that 50% of the doors could be breached, but nothing unusual about the hardware was observed.	Average
Roofing	The primary building roof is built-up and is likely original to the 1985 construction. The low-sloped roof drainage is to internal roof drains. There are steep-sloped, formed metal roofs at major building entrances and a low-slope metal canopy at the bus loading area. The roof appeared to be in average condition; however, the built-up roof had aged beyond its expected service life. The steep-sloped metal roofs appeared to be in good condition. The bus loading metal canopy appeared to be in good condition.		Average
Interior Construction	Interior Walls	The interior walls are primarily CMU. In the classroom wings, framed gypsum board partitions create the restroom cores and separate pairs of classrooms. The light wells walls located at the classroom wing corridors are constructed of framed gypsum board. Large common spaces such as the library, gymnasium, and auditorium have CMU walls. Interior windows found throughout the school are single-glazed with hollow metal frames. A folding wall separates the cafeteria and gymnasium. The interior walls and windows were observed to be in good condition. The folding partition at the cafeteria/gymnasium was reported to be deteriorating, and a replacement was requested.	Good
	Interior Doors	The interior doors are solid core wood with hollow metal frames. The doors located in classroom wings have vision panels and some have a side-lite. The interior doors and hardware were observed to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	Concrete stairs with metal railing are located at the loading dock near the kitchen. The concrete stairs and railings were observed to be in good condition.	Good
	Interior Stairs	In COR 1 and COR 2, there are full-width concrete ramps that transition floor levels from the main entrance to the cafeteria/gymnasium wing. The cafeteria stage	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		has wood steps for access. The concrete ramps and the wood steps at the stage were observed to be in good condition.	
Interior Finishes	Interior Wall Finishes	The building interior wall finishes are mostly painted surfaces. The building's restrooms have ceramic tile on walls. The walls in the kitchen are painted CMU. The interior wall finishes were observed to be in good condition despite some visible scuffing in high-traffic areas.	Good
	Interior Floor Finishes	The interior floors throughout most of the building are vinyl tile with a 4-inch base. Carpet is found in the library, administration spaces, and the PTA workroom. The kitchen has a quarry tile floor. Restrooms throughout the building have ceramic tile flooring. The vinyl flooring appeared to be in good condition relative to its age. However, the vinyl floor at COR 5 had been replaced and was still reported to have problems with adherence due to moisture coming up though the slab. Loose tiles are reported in COR1, the K classroom wing, and in other areas of the facility. The carpet, quarry tile, and ceramic tile floors were observed to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceilings are primarily suspended acoustical tiles. Restroom ceilings have painted gypsum board surfaces. The acoustical tile in the kitchen is vinyl covered. The interior ceilings were observed to be in good condition. However, it was reported that the grid hangers in COR 5 were rusting.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has public restrooms for students and separate staff restrooms located throughout the facility. These restrooms typically have vitreous china hand sinks with manual faucets, along with vitreous china toilets with manual flushing mechanisms. There are service sinks in the janitorial closets, trough-style vitreous china handwashing sinks located near the gymnasium, and water coolers located throughout the facility, typically near the public restrooms. The kitchen includes additional plumbing fixtures such as stainless steel wash sinks and a small restroom equipped with a vitreous china wall toilet and sink. The restroom plumbing fixtures were observed to be in poor condition as the fixtures were aged and had	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		noticeable wear. Several water coolers were nonfunctioning or damaged. Numerous plumbing fixtures were damaged or leaking. It was reported that numerous toilet seals and flanges were failing. Rust was observed on select sinks and janitorial service sinks. The plumbing fixtures were observed to be in poor condition.	
	Domestic Water Distribution	The sinks located throughout the facility, with the exception of the kitchen, lounge, PTA workroom, library and gymnasium office are not equipped with hot water. The sinks located in the kitchen are serviced with hot water from a GWH (gas water heater)-3, located in the kitchen mechanical room. The remaining areas are served by local, small EWHs (electric water heaters). The mechanical drawings indicate a small EWH was in the administration area, but the area was under construction and was inaccessible at the time of assessment. The domestic water distribution equipment appeared to be in average condition. The kitchen water heater was observed to be functioning, but nearing the end of its useful life due to age and use. Damaged piping insulation was observed in some areas.	Average
	Other Plumbing	The roof is equipped with roof drains. Floor drains are located in the interior portion of the building. The other plumbing appeared to be in poor condition due to age. The roof drains were rusty and need replacement. The roof drain located nearest the cooling tower was partially clogged. Standing water covering the top of the roof drain cover was observed after rainfall the previous day. It was reported that during the last roofing project, tar flowed into the roof drains and has caused problems in the past. It was also reported that there were no overflow drains on the roof. Roof gravel was partially blocking several roof drains. Condensate drain lines were discharging onto the ground and walkways.	Poor
Mechanical/ HVAC	The major mechanical equipment consists of ceiling-mounted WSHPs (water source heat pumps), a cooling tower and heat exchanger for heat rejection, a boiler for building heating, and a RTU (roof top unit) for kitchen make-up air. These serve the HVAC (heating, ventilating, and air conditioning) system along with roof-mounted EFs (exhaust fans). The HVAC system appeared to be in poor condition. Seventy WSHPs, ranging in capacity from an estimated 3- to 6-TON, were located in the ceiling plenum throughout the facility and were unavailable for individual assessment. It was		Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		reported that 15 WSHPs were being replaced this summer and that the remaining 55 WSHPs need replacement as well. Portable coolers were observed in select areas of the building at the time of assessment. The cooling tower appeared to have been installed within the last three years and appeared to be in good condition. The heat exchanger and distribution pumps appeared aged and need replacement. A new boiler was being installed at the time of assessment. A condensing unit located on the exterior of the building was aged and appeared to be in poor condition. The RTU located above the kitchen for the kitchen exhaust hood make-up air appeared to be in poor condition due to age. The electrical disconnect was rusted and needed replacement. Electrical conduit was penetrating the ductwork located in the kitchen. The EFs serving restroom exhaust appeared to be in average condition. The kitchen EF and nearby EFs appeared to be in poor condition due to their age. A nonfunctioning EF was observed on the roof near the kitchen. It was reported that the electrical rooms and janitorial closets throughout the building need EFs. It was reported that the mechanical units in the K-wing were unique to the building. The outside air is ducted to each unit through the exterior wall of each classroom. This requires that the maintenance staff change more filters than a typical combined outside air unit, and the additional building penetrations lead to pest management issues. It was also reported that the HVAC controls run on a Microsoft XP operating system that is no longer supported for security upgrades by Microsoft. The AISD Service Center staff is concerned that this situation can become a security threat.	
Fire Protection	Fire Alarm	The building has a fire alarm control panel by Silent Knight. The system consists of alarms and signaling devices such as horns/annunciators, strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm devices appeared to be aged and past their design life. The facility staff reported that the system was old, and that the alarm sounded off on a regular basis.	Poor
	Fire Protection/ Suppression	There are fire sprinklers located in the janitorial closets and above the auditorium stage. A fire suppression system is located in the kitchen. Additionally, fire extinguishers are located throughout the building The fire protection/suppression systems were observed to be in average condition. It was reported that the galvanized pipe to the sprinkler head in CCCafe janitorial closet needs replacement. Fire extinguishers were observed to have been inspected within the last year with the exception of the extinguishers located in the PTA workroom and art room.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Electrical	Electrical Distribution	The electrical service enters the building at the 277480-volt 2000-amp main switchboards located in the Main Electrical room near the gymnasium/cafeteria. The service feeds transformers and high-voltage panelboards are located in various electrical rooms throughout the building. There are six transformers rated at 480-volt primary that step-down to 120/208-volt secondary. The 2000-amp main switchgear and distribution panel equipment appeared to be in poor condition. A majority of the assets appeared to be aged, and the main switchgear was identified as having no main circuit breaker within the panel. Facility staff reported that the conduit to the main panel was routed along the floor and had deteriorated from the recently replaced cooling tower, and the wire was exposed. The building does not have a lightning protection system. PM Andrew Miller reported the MCC (motor control panel in the mechanical room is obsolete and requires replacement.	Poor
	Lighting	The building's exterior lighting consists of downlights, HID (high-intensity discharge), and LED (light-emitting diode) fixtures that are located along the entire perimeter. The interior lighting consists primarily of T8 light fixtures and high-bay HID lights in the gymnasium. The lighting for the building appeared to be in poor condition. There are exit signs present in the building that appeared to be functioning at the time of assessment; however, many of the exit lights appeared to be aged. Many interior and exterior light fixtures appeared to have aged past their design life. Observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures. In the interview notes, facility staff reported that the glass within the parabolic light had fallen out and broken on the floor. Facility staff reported that there was inadequate exterior lighting throughout the grounds and building perimeter, and new lights should be added to the courtyard near the main mechanical room.	Poor
	Communications & Security	There is a Gemini security system including surveillance cameras in the building. The security system appeared to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The building is equipped with a new VOIP (Voice Over Internet Protocol) telecommunications systems. Telecommunication system appeared to be in good condition with no reported deficiencies. According to facility staff, they have requested that a forced entry code be provided for situations where there is a staff member being forced under stress to access the building. The code would notify AISD Police of dangerous activity at the school. Facility staff also reported that the existing exterior cameras had poor coverage due to tree interference and that the public address system cannot be heard in the cafeteria or the exterior playscape areas.	

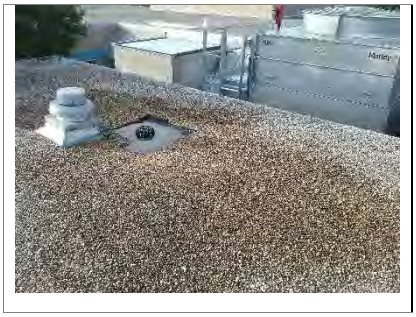
Exterior System Deficiency Examples

Exterior Walls

Exterior Windows

Exterior Doors

Roofing Deficiency Examples



Interior Construction Deficiency Examples

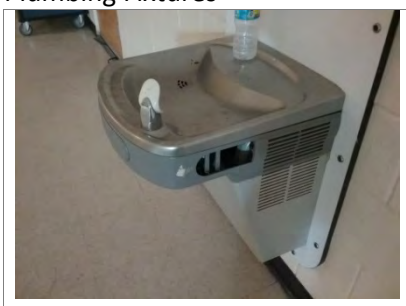
Interior Walls

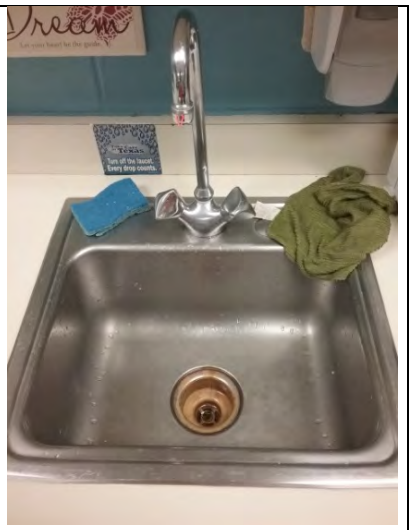
Interior Finishes Deficiency Examples

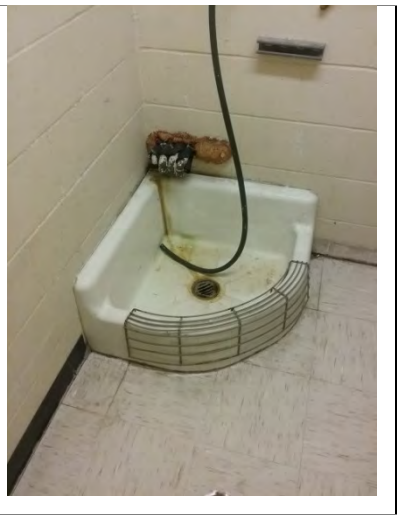
Interior Floor Finishes

Plumbing System Deficiency Examples

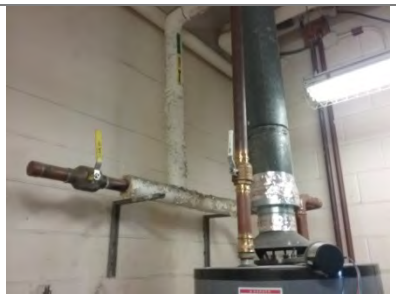
Plumbing Fixtures



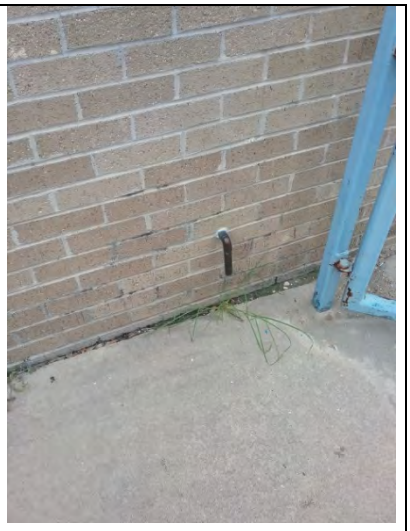




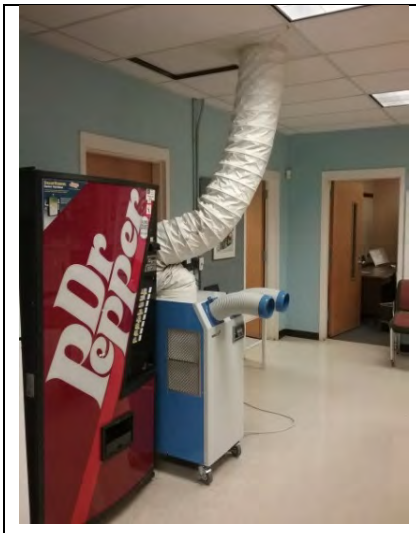
Domestic Water Distribution



Other Plumbing



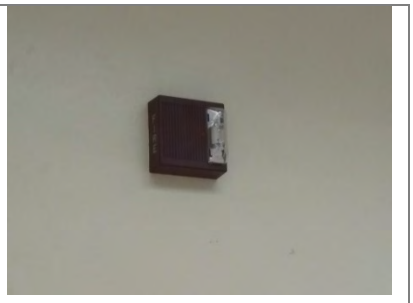
Mechanical/HVAC System Deficiency Examples



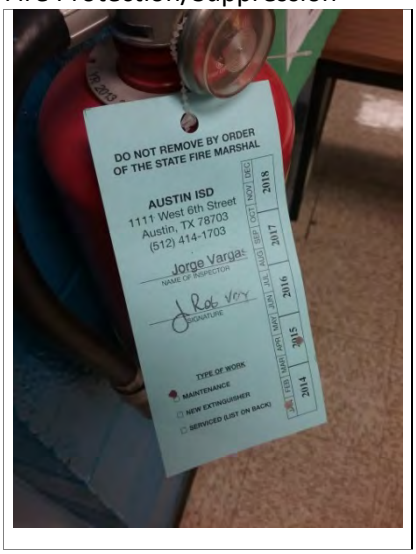


Fire Protection System Deficiency Examples

Fire Alarm

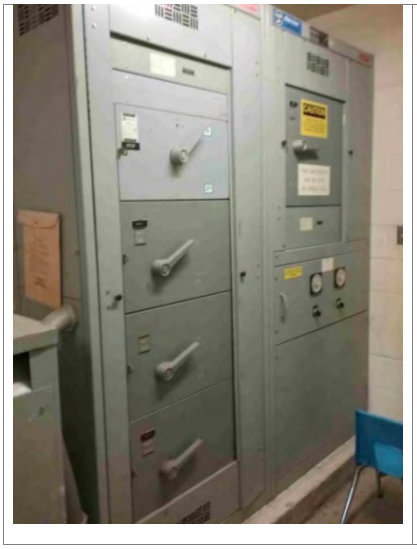



Fire Protection/Suppression

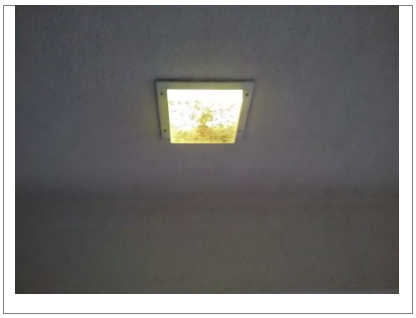


Electrical System Deficiency Examples

Electrical Distribution



Lighting



Pleasant Hill Elementary School Campus Summary of Recommendations

This document is based on current conditions observed during fieldwork and provides recommendations for corrective actions by each discipline. The following recommendations provide a summary of the findings.

Main School Building Recommendations

Exterior

1. Replace the aluminum windows within the hollow metal frames. Consider fixed glazing that is more compatible with hollow metal frames, unless there is a requirement for ventilation through the window system.
2. Replace sealants at masonry joints and around windows.
3. Paint all exterior doors and hollow metal frames.
4. Further study the cause for security breaches at exterior doors.
5. Investigate and block access points for pests at mechanical piping penetrations.

Roofing

1. Repair or replace roof areas observed with standing water and reslope to proper drainage points.
2. Consider replacement of the building's built-up roof within the next five years.

Interior Finishes

1. Determine the cause of water infiltration in the floor in COR5. Replace vinyl floor tiles as needed.
2. Determine the cause and extent of deterioration of the folding partition in the cafeteria/gymnasium, and repair or replace the partition as needed.
3. Determine the cause of rust in the COR5 ceiling grid hangers, and replace hangers as needed.

Plumbing

1. Continue preventive maintenance on aged plumbing fixtures and plan for replacement in the future as fixtures continue to age.
2. Repair water coolers that are nonfunctional.
3. Repair or replace leaking plumbing fixtures.
4. Replace toilet seals and flanges where needed.
5. Replace rusted plumbing fixtures.
6. Track the installed years of water heaters, and plan for replacement as the typical design service life for a water heater is 10 to 15 years.
7. Repair damaged piping insulation.
8. Clean out roof drains to eliminate standing water on the roof.
9. Remove gravel and debris covering roof drain entry points.
10. Reroute condensate drain lines into an approved sanitary sewer drain.

Mechanical/HVAC

1. Ensure routine preventive maintenance is conducted for cleaning ductwork to promote efficient and clean air flows to all of the facilities' spaces.
2. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, repainting, or repairing to prevent further deterioration.
3. Repair or replace any damaged or missing piping insulation as needed.
4. Replace the heat exchanger.
5. Replace distribution pumps.
6. Replace the remaining 55 WSHPs.
7. Replace the outdoor condensing unit.

8. Replace the RTU and electrical disconnect above the kitchen.
9. Reroute electrical conduit in kitchen ductwork and seal duct penetrations.
10. Replace aged EFs.
11. Consider installing a dedicated outside air unit in the K-wing.
12. Upgrade HVAC controls system to improve security.

Fire Protection

1. Inspect outdated fire extinguishers and replace as needed.
2. Consider replacing the galvanized pipe leading to the fire sprinkler in the CCCafe janitorial closet.
3. Continue annual inspections of the fire alarm system and replace any aged fire alarm devices throughout the building along with inspection of the fire alarm panel to verify its functionality.

Electrical

1. Remove any floor receptacles as they are being phased out of use district-wide.
2. Replace all outdated light fixtures with LED fixtures and dimming capabilities.
3. Replace all exit signs with LED fixtures, and add more exit signs where required.
4. Replace all aged and outdated electrical switchgear and panels within the building that were noted.
5. Replace outdated exterior light fixtures with LED light fixtures, and add new ones as needed.
6. Inspect all card readers for functionality. Replace defective card readers, including all associated appurtenances as necessary.
7. Replace MCC in mechanical room (requested by PM Andrew Miller).