

Murchison Middle School Site Summary

Address	3700 North Hills Drive Austin, TX 78731
Number of Permanent Campus Facilities	4
Original Year of Construction	1967
Total Campus Building Area (combined)	119,751 SF



Introduction

Murchison Middle School campus is located at 3700 North Hills Drive in Austin, Texas. Murchison Middle School was established in 1967, and consists of one primary building and three additional campus buildings. These permanent campus buildings include the Main School Building (BLDG-052A), which contains administration, classrooms, two gymnasiums, locker rooms, a theater, band halls, cafeteria, and a library. The remaining buildings include the Classroom Building (BLDG-052B), which contains 14 classrooms; and the Storage Building (BLDG-052C), and the Greenhouse Building (BLDG-052D).

Meeting Log		Revision Log		
Date	Meeting	Revision	Date	Summary of Content
6/16/16	Interview	00	9/28/16	Draft Issue
7/6/16 - 7/8/16	Assessment	01	1/26/17	Added comments from PM Craig Estes as indicated on email dated 10/31/16, comments from Principal Rebekah Van Ryn as indicated on email dated 10/31/16, and comments from Teacher James Wood as indicated on email dated 10/31/16. See pages 2-10, 27, and 29-30.
10/17/16	Cluster Meeting (Attended)			
10/17/16	Follow-Up			
10/20/16	Follow-Up			
10/27/16	Follow-Up			

Main School Building – BLDG-052A

Building Purpose	Administration Offices and Classrooms
Building Area	102,586 SF
Inspection Date	July 6,7,8, 2016
Inspection Conditions	97°F - Hot and 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	<p>The exterior of this large primary building is a brick façade. The building consists of two stories and has two courtyard atriums. The halls and staircases are covered by the corridor from above, but open to the elements. They are in average condition.</p> <p>There is a life safety issue which was reported by staff. The railing balusters around the courtyard atriums are too far apart, allowing children to slip through or climb over and stand on the overhanging ledge of the courtyard atrium. Principal Rebekah Van Ryn reported that the railing anchors and rebar are corroded and separating from the concrete base of the ledge.</p> <p>Staff also reported that excessive rain water pools and enters through the doors at the west entrance of the building due to the downspouts being buried. Sand bags were observed lining the sidewalk.</p> <p>The brick façade appeared to be in average condition with specific areas that are cracked (northeast corner of the small gymnasium) and areas with missing cornice bricks (southeast corner of the cafeteria).</p> <p>The exterior closet housing the kitchen water heater is 4 inches below grade, which causes water to collect inside. The louver doors are rusted, and the roof needs to be replaced. This small closet appeared to be in average condition.</p> <p>Teacher James Wood reported that there is water infiltration under the glass walls in the foyer.</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Windows	<p>The windows have bronze metal frames and appear to be single paned.</p> <p>The exterior window system was observed to be in average condition. The windows were observed with fogged glass and the surrounding caulk was cracked. Teacher James Wood, also reported that the glazing compound is missing from many panes and cracked glass is present.</p>	Average
	Exterior Doors	<p>Through out the campus, there are many exterior double metal doors connecting air conditioned corridors to non- air-conditioned corridors.</p> <p>These doors are heavily used but open and close well and were in average condition. Teacher James Wood reported a number of other deficiencies present: poor seals, non-functioning closures, missing closure covers, leaking closures, or cracked hinge points, and doors do not reliably close.</p>	Average
Roofing	<p>There are 14 different roof areas for this building: More than half of the roofs are single-ply membrane, while others were standing seam metal. Of the single-ply type, only the areas over the small gymnasium, locker rooms, and band/art wing were in average condition. The remainder of the roofs (over the cafeteria, kitchen, and covered halls) appeared to need replacement. The roof over the water heater closet (A-20) adjacent to the kitchen was in very poor condition. The roof-covered entry sidewalk on the cafeteria side (A-25) lacks a metal cap over the brick parapet, and signs of deterioration were evident. The roof over the kitchen (A-27) was in very poor condition, and water was ponding from an AC unit. The roof over the cafeteria showed signs of ponding, and staff have reported leaks. It was reported that the skylights leak in both the small and large gymnasiums. Teacher James Wood reported the following: evidence of ponding was observed at all roof locations, insufficient slope and too few drains at all locations, no parapet cap or deteriorated caps at all locations, and flashing was improperly installed or missing.</p> <p>The large standing seam metal roof covering the second floor classroom area appeared to be in average condition from above; however, classrooms under these roofs have significant leak stains on the ceiling of each classroom. Principal Rebekah Van Ryn reported that a metal cap is not sufficient to prevent storm water infiltration.</p>		Poor
Interior Construction	Interior Walls	<p>The interior walls are painted gypsum board in all offices and classrooms. There are brick walls at corridors. There is CMU (concrete masonry units) in the exterior classroom walls, gymnasiums, and locker rooms. There is ceramic tile in the restrooms and locker room areas.</p> <p>All finishes appeared to be in good condition.</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	The interior doors are wood veneer with a metal frame and lites. Some are metal in metal frames with a lite. The doors appeared to be in average condition. The paint on most of the frames was chipped and the doors are worn, and scratched.	Average
	Interior Specialties	Lockers are metal with vents, in non-air conditioned corridors. Lockers in the first-floor atrium area, where they are exposed to sun and rain, and were faded with peeling paint. Lockers in locker rooms are also metal with vents or metal mesh type. The lockers were in good condition.	Good
Stairs	Exterior Stairs	The one exterior staircase at the west end of the building is concrete. The stairs were viewed to be blackened from water damage. Teacher James Wood reported that the traction strips are loose with some bolts sheared. The stairs were observed to be in average condition.	Average
	Interior Stairs	The interior stairs are located in non-air conditioned spaces at the ends of the open courtyard atriums. They are typical metal frame and pans with poured concrete treads. They have metal-paneled balusters and handrails with a non-slip painted surface. They appeared to be in average condition.	Average
Interior Finishes	Interior Wall Finishes	Administration areas, corridors, and classrooms have painted gypsum board interior walls while restrooms are CMU block above ceramic tile. The walls appeared to be in poor condition. The painted finish on the CMU block in the restrooms on the east end of the second floor was peeling and chipped. There were also missing baseboards in second floor corridors.	Poor
	Interior Floor Finishes	The interior floor finishes are VCT (vinyl composition tile) in the majority of the classrooms on the first floor. The second floor of the building consists of a 9 inch square floor tile that is most likely original to the building and is suspected of being asbestos. Carpet flooring is located in the library, home economics classroom, theater, choir room, and administration areas. The carpet was torn in the choir room. The ceramic tile, in the restrooms, which had been patched with non-matching tile, had some chipped areas. There were wood floors on the stage and in the gymnasiums which. They appeared to be in average condition.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The majority of interior ceilings are metal grid with acoustical tile in classrooms and administration areas. There are gypsum board ceilings in restrooms. The remaining ceilings (in the two gymnasiums and the locker rooms) are Tectum brand acoustical ceiling panels. The acoustical tiles and grid were old, sagging, water-stained, and unclean especially in the locker room areas. The grid was unclean and rusted on the second floor.	Poor
Conveying		BLDG-052A is outfitted with a Dover hydraulic two-story elevator in the center of the courtyard. The machine room houses the elevator's hydraulic sump, pump, and controls east of the elevator car on the first floor. Facility staff report that the elevator was original construction and had frequent service calls. An ADA (Americans with Disabilities Act) vertical lift for a single person exists in the gymnasium. The facility staff report frequent service calls were made regarding this lift. The conveying equipment was observed in good condition.	Good
Plumbing	Plumbing Fixtures	The plumbing fixtures for this facility are rated as being average. The two-level facility contains multiple plumbing applications which serve public restrooms, staff restrooms, private male/female multi-stall column-type locker room showers, janitorial closets with service sinks, classrooms with laboratory sinks, a culinary classroom, and one commercial kitchen. The building's restrooms typically consist of plumbing fixtures made from molded composite or vitreous china materials. Many of the restroom sinks are made from molded composite materials, while the floor/wall-mounted toilets and urinals are made from vitreous china. The restroom fixtures through out the facility are equipped with manual push metering faucets and manual flush valves. Many of the classrooms are equipped with chemical-resistant clean-up sinks or stainless steel sinks mounted in countertops with a manually actuated faucet with four-arm handle. This building has the following plumbing deficiencies: The male/female locker rooms' multi-shower columns have either broken nozzles or broken handles. It was also reported by staff that some of the plumbing fixtures in the locker rooms are the original fixtures. Teacher James Wood reported that the locker rooms have no functioning showers. At the time of the assessment, the janitorial closets were observed to contain old janitorial	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>sinks.</p> <p>Classrooms 208 and 214 were observed to have two sink faucets that are not operating properly at the time of assessment. It was also observed that none of the chemistry classrooms that appear to be housing hazardous materials (room 207) have actual safety showers for use in case of emergency.</p> <p>The plumbing fixtures in this building are old but were operating normally.</p>	
	<p>Domestic Water Distribution</p>	<p>The commercial kitchen is serviced by two vertical gas water heaters (99-gallon capacity), and the culinary classroom is serviced by a vertical electric water heater (40-gallon capacity).</p> <p>The domestic water distribution system had the following deficiencies at the time of assessment:</p> <p>At the time of assessment, an extremely old water heater was observed to be servicing the commercial kitchen and reported to also service the locker room. PM Craig Estes reported that this water heater was replaced during Summer 2016. At the time of the assessment, it was observed that this water heater was installed in 1996 and had excessive corrosion from a leaking hot water supply line. The water heater shell was severely corroded, and the distribution piping insulation was damaged from leaking pipes. The adjacent water heater, that also services the commercial kitchen, was installed in 2009 and was tied together with the hot water supply lines are leaking. Another deficiency observed was that the mixing valves in the male/female locker room showers had excessive corrosion on the pipe and valve boxes.</p> <p>The domestic water distribution system was rated to be in average condition at the time of assessment. Teacher James Wood reported there is no hot water fed to the locker rooms.</p>	<p>Average</p>

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Other Plumbing	<p>The drains accessed on this facility were predominantly all designed with an interior type drainage system. In addition, all drains observed were equipped with a carbon dome type cover.</p> <p>The other plumbing system for this facility was rated to be in good condition at the time of assessment. Teacher James Woods reported there is an uncapped sanitary sewer line in the cafeteria that vents into the cafeteria space. It was also reported that vent stacks on the roof are located near roof top HVAC (heating, ventilation, and air conditioning) equipment air intakes.</p>	Good
Mechanical/ HVAC		<p>The mechanical/HVAC system was rated to be in average condition at the time of the facility condition assessment.</p> <p>This building has multiple HVAC applications. The majority of the mechanical equipment assets consist of packaged RTUs (roof top units), packaged OAU (outdoor air units), packaged and split heat pump/air conditioning systems, and indoor AHUs (air handling units). Many of the packaged HVAC units are RTUs, while indoor AHUs are supported by the building's main 225-TON centrifugal water chiller system that is serviced by a two-cell external cooling tower with a rated capacity of 413-TON and a 5,590-MBH gas-fired flexible water tube boiler.</p> <p>Twenty-two HVAC systems were assessed on the roof top. These systems have capacities that range from 1,500 to 13,000 CFM (cubic feet per minute). The assessed roof top HVAC systems' refrigeration capacities range from 3- to 120-TON. Of the 22 HVAC systems assessed on the roof top, only eight were installed in the last five years. The remaining 14 systems were installed in either 1998 or 2005. Twelve indoor AHUs were assessed throughout the two-level building. These AHUs range from 5,000 to 6,500 CFM and service multiple areas on their respective floor levels.</p> <p>During the assessment, new HVAC equipment was observed to be installed in place of older existing equipment. It was also observed that new RTUs had been installed over the band area, small gymnasium, kitchen, and male/female locker room area. Additionally, some of the indoor AHUs were brand new (AHU-12 and AHU-13 within the large gymnasium and AHU-8 and AHU-11 with room 300), but had yet to be fully commissioned.</p> <p>The Staff reported the following deficiencies and/or completed/planned renovations in regards to the facilities mechanical/HVAC systems:</p> <p>It was reported that there are no HVAC systems that service the restrooms in the courtyard.</p> <p>There were multiple deficiencies from the roof top down to the first level. RTUs in A-28 were aged and out of date. Many of the units were originally charged with outdated refrigerant type R-22. The older RTUs, specifically RTU-3, 3A, and 3B, had severely damaged compressor cooling fins and had an external shell that was extremely weathered. Many of the packaged units on the roof, regardless of age, utilize natural gas for their heating requirements. The main natural gas line that</p>	Average

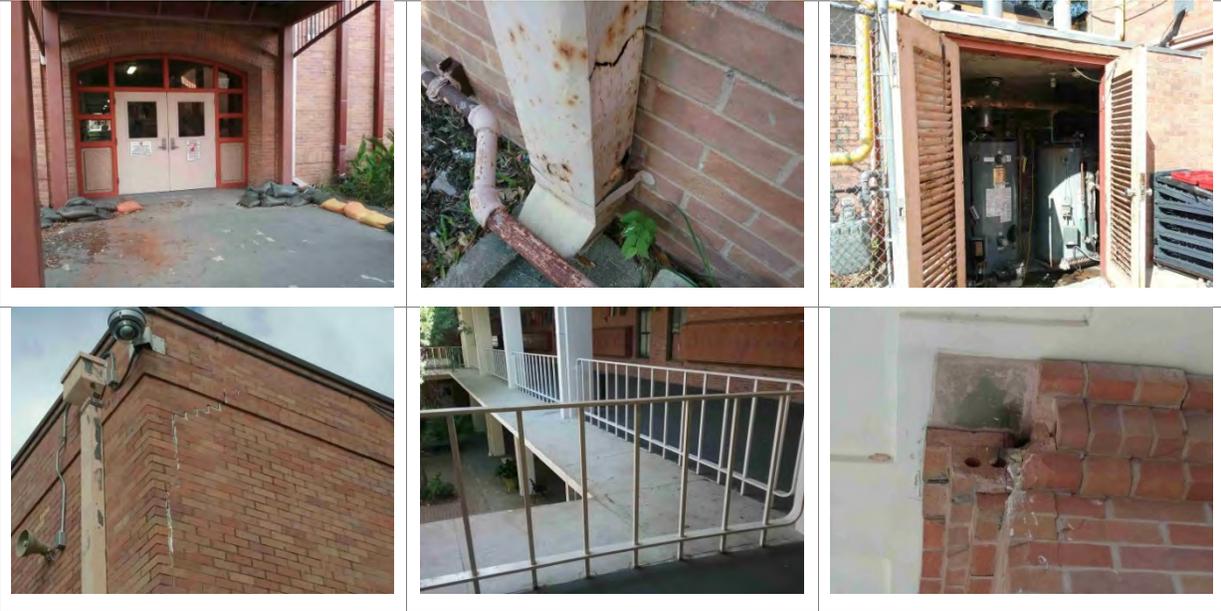
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>feeds many of the units on the south side of the building was extremely corroded and should be addressed as soon as possible to avoid a natural gas leak; the natural gas line was located on the north side of A-28 (band room). The remaining areas assessed were A-27 (kitchen), A-38 (main classrooms first and second floors), A-03 (small gymnasium area), and A-02 (male/female locker room area). These areas all have units that were charged with R-22, and associated ductwork or piping insulation was damaged from exposure to the elements. AHU-1, OAU-3, and OAU-4 are three examples of damaged insulation and ductwork that should be addressed to further the efficiency of the systems. Teacher James Wood reported that there are a number of hot and cold areas through out the school. It was also reported that several gas and electrical conduit lines that feed HVAC equipment are supported on the roof.</p>	
<p>Fire Protection</p>	<p>Fire Alarm</p>	<p>The building contains a fire alarm system by Silent Knight consisting of an electronic main panel, detectors, pull stations, and horn/strobe combination units.</p> <p>The fire alarm system was observed in average condition.</p> <p>The main electronic panel in the administration office indicated a ground fault was present, and an audible alarm continually annunciated at certain intervals.</p>	<p>Average</p>
	<p>Fire Protection/ Suppression</p>	<p>The building is not equipped with a fire sprinkler/suppression system; however, it is protected by portable fire extinguishers stationed through out the building. Many of the portable fire extinguishers had not been inspected within the last year. Area-49 (north concession stand building) is equipped with a fire extinguisher that has not been inspected since 2006.</p>	<p>N/A</p>
<p>Electrical</p>	<p>Electrical Distribution</p>	<p>The electrical service (utility transformer, exterior switchboard, and capacitor bank for the facility) is located on the northwest side of the complex and feeds a boiler room west of the male locker room. Inside the boiler room is a 480/277VAC, 2000A switchboard that appears to feed numerous subpanels through out the building. Additional panels in the boiler room supply transformers, subpanels, and mechanical equipment.</p> <p>The electrical distribution equipment appeared to be in average to good condition. A majority of the panels were replaced in 2007/2008. The majority of the equipment appeared to be in average condition due to age or missing protective devices.</p> <p>The kitchen contains two panels that could be nearing the end of their design service life. The breaker cover was removed from one panel ("R") and the "L" panel's breaker cover left an exposed area near the bottom of</p>	<p>Average</p>

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>the panel.</p> <p>Panel L1 (located in the corridor of the Administration Office section), Panel L2 (located in the backstage theater area), and Panel TP1A (located in the housekeeping room east of the large gymnasium) have breaker voids</p> <p>The 100kVA transformer in the MDF (main distribution frame) room east of the gymnasium appears to be nearing its life expectancy. Consider replacing the unit soon.</p> <p>It has been noted by facility staff that office circuits trip regularly. The facility staff also indicated that the stage, kitchen, and band practice room need new panels.</p>	
	Lighting	<p>The uncovered exterior consists of what appears to be high-intensity discharge (HID) fixtures. The covered exterior consists of surface mount ceiling fixtures and wall mount fixtures. The facility staff reported exterior lights on the 300-wing did not function properly, and poor lighting existed around the portable buildings. Teacher James Wood reported some exterior light covers are broken and screwed into place.</p> <p>The exterior lighting is in average condition.</p> <p>The interior lighting consisted of fluorescent troffer fixtures with the occasional screw type fixture in closets. The theater is equipped with specifically designed lighting to support the stage. The facility staff reports poor illumination in the female and male locker rooms and corridor, and that the gymnasium and courtyard light fixtures cannot be repaired with replacement parts.</p> <p>The interior lighting is in average condition.</p> <p>There are exit signs at every exit; however, various signs were not illuminated.</p>	Average
	Communications & Security	<p>There is a Gemini security system installed with multiple keypads at various entrances. Motion detectors are installed in interior areas, and security cameras are installed through out the interior of the building and strategically on exterior corners. There are also door frame-mounted proximity readers for access into certain entrances. Multiple communication closets exist, which house network switches, hubs and routers, in a rack-style configuration. The facility appears to have wireless routers installed in classroom ceilings, with routers installed at inside exterior locations around the courtyard.</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>There were no damaged security panels or cameras observed. The facility staff reported that there is limited exterior camera coverage and an office call box does not exist. Teacher James Wood reported a number of issues with the data conduit in the courtyard area: damaged conduit, open junction boxes, or cut/exposed cabling.</p> <p>The equipment was observed in good condition.</p>	

Exterior System Deficiency Examples

Exterior Walls



Exterior Windows



Roofing Deficiency Examples



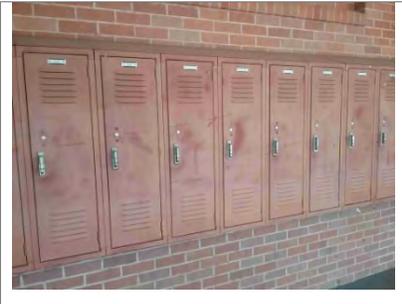


Interior Construction Deficiency Examples

Interior Doors



Interior Specialties



Stairs Deficiency Examples

Exterior Stairs



Interior Finishes Deficiency Examples

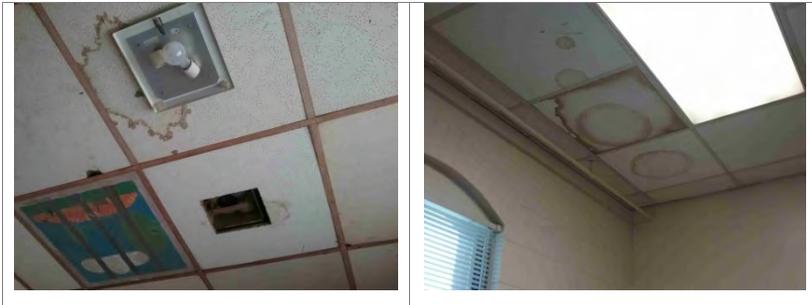
Interior Wall Finishes



Interior Floor Finishes



Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures



Domestic Water Distribution





Mechanical/HVAC System Deficiency Examples



Electrical System Deficiency Examples

Electrical Distribution



Classroom Building – BLDG-052B

Building Purpose	Classroom
Building Area	15,902 SF
Inspection Date	July 6,7,8, 2016
Inspection Conditions	97°F - Hot and 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	This building was built in 1998. The exterior of the building is a brick façade. The building consists of two stories. The exterior walls appeared to be in good condition.	Good
	Exterior Windows	The windows are bronze metal framed and were in good condition with no observed deficiencies.	Good
	Exterior Doors	The exterior doors are double metal doors with lites. They appear to be in average condition, The second floor doors showed a bent metal threshold.	Average
Roofing	The roof is a single ply membrane. The roof appeared to be in good condition.		Good
Interior Construction	Interior Walls	The interior walls are painted gypsum board in all classrooms. There is CMU in the classrooms on the corridor walls, and the remainder of the walls are ceramic tile in the restrooms. They were in good condition, with the exception of instances of peeling paint.	Good
	Interior Doors	The interior doors are wood veneer with a lite in metal frames. There are solid metal doors to mechanical/electrical rooms. All were viewed in good condition.	Good
	Interior Specialties	The lockers are metal with vents. They appeared to be in good condition.	Good
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	There are two interior staircases that are metal frames and pans with poured concrete treads and metal	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		handrails. They appeared to be in good condition.	
Interior Finishes	Interior Wall Finishes	The wall finishes are painted gypsum board and CMU in the classrooms. There is ceramic tile in the restrooms. The interior wall finishes appeared to be in good condition with no major deficiencies observed. .	Good
	Interior Floor Finishes	The majority of floor finishes are 12"x12" vinyl tile. There are concrete floors in the corridors and ceramic tile in the restrooms. They appeared to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceilings are metal grid with 2'x4' acoustical tile, while restroom ceilings are gypsum board. The ceilings appeared in average condition. Room 402 had a damaged tile from a plumbing leak above.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The one level facility contains multiple plumbing applications which serve public restrooms, staff restrooms, and janitorial closets with service sinks. The building's fixtures are serviced by a large commercial high efficiency, gas-fired condensing boiler with a heat output capacity of 663 MBH. Chilled water is fed from the campus's main mechanical room centrifugal water chiller system rated at 225-TON. The building's restrooms typically consist of vitreous china wall-mounted sinks with vitreous china floor/wall-mounted toilets and wall-mounted urinals. The restroom fixtures through out the facility are equipped with manual push metering faucets and manual flush valves. The restroom fixtures in this building are typically aged, but all in good working condition. This building had no notable plumbing deficiencies at this time.	Good
	Domestic Water Distribution	The domestic water distribution system services multiple plumbing fixtures and mechanical/HVAC equipment located through out the building. The facility staff reported that this building had hot water in the restrooms that is too hot. All of the domestic water distribution equipment and piping appeared to be in good condition at the time of the facility condition assessment.	Good
	Other Plumbing	The drains accessed on this facility were predominantly all designed with an interior type drainage system. In	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>addition, all drains observed were equipped with a carbon dome type cover.</p> <p>The other plumbing system for this facility was rated to be in good condition at the time of assessment.</p>	
Mechanical/ HVAC		<p>This building has multiple HVAC applications. The majority of the mechanical equipment assets consist of packaged and split heat pump systems. All of the classrooms are equipped with stand-alone through-wall unit ventilators that have an estimated refrigerant capacity of 2- to 5-TON and can supply 750 to 1,500 CFM conditioned air. There are also four split package units that are located on the external shell of the building that service two large packaged supply air fans with direct expansion coils.</p> <p>Twenty-one HVAC pieces of equipment were assessed on the first and second floors of the building. The building has the following deficiencies:</p> <p>All of the HVAC units observed in this building are utilizing R-22, which is an old refrigerant that is being phased out soon. Additionally, room 402's unit ventilator is being leaked on, possibly from the above classroom 422's unit ventilator.</p> <p>The HVAC system for this building is average due to the age and quality of the HVAC equipment</p>	Average
Fire Protection	Fire Alarm	<p>The building contains a fire alarm system by Silent Knight consisting of an electronic main panel, detectors, pull stations, and horn/strobe combination units. The Silent Knight main control panel is located on the second floor in mechanical room 421.</p> <p>The equipment appears to be in good condition.</p>	Good
	Fire Protection/ Suppression	<p>The building is not equipped with a fire sprinkler/suppression system; however, it is protected by portable fire extinguishers that are stationed through out the building. Many of the portable fire extinguishers observed were not inspected within the last year.</p>	Average
Electrical	Electrical Distribution	<p>A small electrical room exists on the northeast corner of the first floor, housing a transformer and multiple panelboards. The equipment appears to have been installed in 1998. Mechanical room 421 on the second floor houses two additional transformers feeding multiple panelboards.</p> <p>The equipment was observed to be in good condition.</p> <p>Panel HA, located in the first floor electrical room, is missing a breaker cover. This panel contains covers that can be inserted to fill the void of an uninstalled breaker.</p>	Good
	Lighting	<p>The exterior of the building is outfitted with what appears to be HID fixtures. It should be noted that facility staff reported exterior lights on the 400-wing do</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>not function properly, and poor lighting exists around the portable buildings.</p> <p>The lighting was observed to be in good condition.</p> <p>The interior lighting consisted of fluorescent troffer fixtures with occasional screw type fixtures in closets.</p> <p>The interior lighting was observed in good condition.</p> <p>There are exit signs at every exit; however, various signs were not illuminated.</p>	
	Communications & Security	<p>A Gemini security system is currently installed with a keypad at the east entrance. Motion detectors are installed in interior areas, and security cameras are installed through out the interior of the building and strategically on exterior corners. There were no damaged security panels or cameras observed.</p> <p>A communication closet exists on the second story in tech room 421, housing network switches, hubs, and routers, in a rack-style configuration. The facility appears to have wireless routers installed in classroom ceilings.</p> <p>The equipment was observed in good condition.</p> <p>An older weather station is installed on the southeast corner but does not appear operational.</p>	Good

Exterior System Deficiency Examples

Exterior Doors



Interior Construction Deficiency Examples

Interior Walls



Interior Finishes Deficiency Examples

Interior Ceiling Finishes



Mechanical/HVAC System Deficiency Examples



Electrical System Deficiency Examples

Electrical Distribution



Communications & Security



Storage Building– BLDG-052C

Building Purpose	Storage
Building Area	367 SF
Inspection Date	July 6,7,8, 2016
Inspection Conditions	97°F - Hot and 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 storage building was built in 1987 and has a brick façade. It appeared in good condition.	Good
	Exterior Windows	System not present.	N/A
	Exterior Doors	The doors are metal in a metal frame. They appear to be in average condition with some fading from the sun.	Average
Roofing	The roof is a high sloping standing seam metal roof. It appeared to be in good condition.		good
Interior Construction	Interior Walls	The interior walls are entirely CMU. They appeared to be in good condition.	Good
	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 Finishes	Interior Wall Finishes	The walls are painted CMU. They appeared to be in good condition.	Good
	Interior Floor Finishes	The floor finish is a concrete slab. It appeared to be in good condition.	Good
	Interior Ceiling Finishes	System not present	N/A
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	System not present.	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Domestic Water Distribution	System not present.	N/A
	Other Plumbing	System not present.	N/A
Mechanical/ HVAC	System not present.		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; however, it is serviced by portable fire extinguishers that are stationed through out the building. All portable fire extinguishers observed were not inspected within the last year.	N/A
Electrical	Electrical Distribution	The storage building did not appear to contain transformers or panelboards. The electrical branch wiring was observed in good condition.	Good
	Lighting	Fluorescent fixtures exist in the storage rooms. There does not appear to be exterior lighting attached to the building. The lighting was observed in good condition.	Good
	Communications & Security	The only security to the building is keyed locks on the door. Communications do not exist.	N/A

Greenhouse Building– BLDG-052D

Building Purpose	Greenhouse
Building Area	896 SF
Inspection Date	July 6,7,8,,2016
Inspection Conditions	97°F - Hot and 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 greenhouse building was built in 1979 and consists of plastic corrugated siding in a non-air conditioned space. It appeared to be in good condition.	Good
	Exterior Windows	The “window” is a roll up vinyl flap. It appeared to be in good condition.	Good
	Exterior Doors	The door is an aluminum screen door. It appeared to be in good condition.	Good
Roofing	The roof is made of the same material as the siding, which is corrugated plastic. It has a tarp covering the roof for sunscreen purposes. It appeared to be in good condition.		Good
Interior Construction	Interior Walls	System not present	N/A
	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 Finishes	Interior Wall Finishes	System not present.	N/A
	Interior Floor Finishes	The floor is a concrete slab. It appeared to be in average condition.	Average
	Interior Ceiling Finishes	System not present.	N/A
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	System not present.	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Domestic Water Distribution	System not present.	N/A
	Other Plumbing	System not present.	N/A
Mechanical/ HVAC	System not present.		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; however, it is serviced by portable fire extinguishers that are stationed through out the building. All portable fire extinguishers observed were not inspected within the last year.	N/A
Electrical	Electrical Distribution	The above-ground service to the greenhouse appears to be a 240VAC feed to a weatherhead routed to an interior junction box via rigid metal conduit. The panelboard was inaccessible. However, the panelboard feeds lighting, an exhaust fan, a heater, and receptacles. Additionally, south of the greenhouse are elevated solar panels with a Fronius photovoltaic system No major deficiencies were observed of the photovoltaic system. The electrical equipment was observed in good condition.	Good
	Lighting	Fluorescent hanging fixtures exists in the greenhouse structure. The lighting was observed in good condition.	Good
	Communications & Security	System not present.	N/A

Electrical System Deficiency Examples

Electrical Distribution



Murchison Middle 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. No recommendations needed.

Roofing

1. Repair or replace roof membranes at areas of leaks to provide a watertight environment.

Interior Construction

1. No recommendations needed.

Fire Protection

1. Perform inspection of all portable fire extinguishers through out the building

Electrical

1. Verify all EXIT signs are in operable condition.

Main School Building Recommendations

Exterior

1. Investigate the west side's drainage, especially at the west entrance under the covered walkway. Staff comments that water builds up and runs into the school under the doors. Staff has placed sandbags to hold back the water. [Re-route storm water away from the building to prevent foundation issues due to expansive subsoil \(requested by Principal Rebekah Van Ryn\).](#)
2. Investigate 3-ft ledge of the courtyard. This is a life safety issue and the recommendation is to replace the railing with a code- the second floor courtyard atrium metal railing balusters. They are at least 10 to 12 inches on center, allowing students to slide through or climb over them and stand on the overhanging compliant railing. Until that is accomplished, a horizontal metal bar or plate could be welded to the existing balusters at mid height. [Replace the railing anchors and rebar due to corrosion and separation from concrete base of the ledge \(requested by Principal Rebekah Van Ryn\).](#)
3. Repair missing bricks at the corner under the soffit at the southeast cafeteria, which is allowing pests/water to enter the building ([PM Craig Estes has reported this was corrected during the cafeteria addition project](#)).
4. Cap the parapet wall at the main entry's covered walkway (A-25) with a metal cap to protect the brick from deterioration. [Re-design the roof at this walkway, and then repair the brick façade to prevent further deterioration \(requested by Principal Rebekah Van Ryn\).](#)
5. Repair the cracked brick wall in the northeast corner of the small gymnasium.
6. Clean the outside of the exterior staircase. [Repair chipped or cracked concrete and install new non-slip tread strips \(requested by Principal Rebekah Van Ryn\).](#)

Roofing

1. Replace roof sections experiencing extreme deterioration.
2. Investigate standing seam metal roofs possible leaks over classrooms.
3. Investigate skylights that were reported by staff to leak.

Interior Construction

1. Replace all windows with double-pane energy-efficient windows.
2. Replace the outdated ceiling grid and tiles on the second floor of the main classroom building.
3. Investigate water infiltration into entry by the band from the courtyard (requested by Principal Rebekah Van Ryn).

Interior Finishes

1. Repaint corridors on the second floor and other areas that need touch up.
2. Replace the second floor ceiling grid and ceiling tiles.
3. Repaint the lockers that are faded from the elements. Remove lockers (requested by Principal Rebekah Van Ryn).
4. Replace the VCT in the second floor halls and classrooms. Update student restrooms at the west end of the building near the theater and on the second floor at the east end of the courtyard atrium. Replace tile, mirrors, shelving, and paint walls.
5. Replace courtyard finish. Investigate vapor barrier under slab in the courtyard (requested by Principal Rebekah Van Ryn).
6. Replace traction topcoat on the courtyard concrete floor (requested by Teacher James Wood).

Plumbing

1. Replace service closets that contain old janitorial sinks with more ergonomically efficient floor-style sinks/mop basins.
2. Continue preventive maintenance on aged plumbing fixtures through out the facility and replace as necessary (requested by Principal Rebekah Van Ryn).
3. Assess the existing natural gas line on the north side of the band room feeding the RTUs. The line is extremely corroded and could possibly leak in the near future.
4. Replace the commercial kitchen's hot water feed piping service from the two vertical water heaters. Also consider replacing one of the commercial kitchen's water heaters due to age and excessive corrosion.
5. Consider replacing or refurbishing plumbing fixtures in the male/female locker room showers.
6. Investigate solutions to reduce sewage smells (requested by Principal Rebekah Van Ryn).

Mechanical/HVAC

1. Replace equipment that uses R-22 refrigerant. The refrigerant is being phased out of manufacturing and construction use in the near future and thus will make equipment using it obsolete.
2. Install an HVAC system in communications room 101. This communications room has excessive heat due to lack of ventilation.
3. Install an HVAC system in all courtyard restrooms. The restrooms have no conditioned air supply at this time.

Electrical

1. Address panels that have breakers missing, and install a spare breaker or cover to fill voids.
2. Consider replacing panels and transformers that are nearing the end of their life expectancy.
3. Assess interior and exterior lighting and add fixtures in locations of poor illumination.
4. Assess the tripping circuits and determine the load demands. Add new receptacles or distribution panels where deemed necessary.
5. Facility staff should assess the frequency of the lift service calls versus the amount of use the conveying equipment experiences prior to any upgrades. Repair or replace based on assessment.

Classroom Building Recommendations

Interior Finishes

1. Touch up paint as needed.

Mechanical/HVAC

1. Begin to forecast and plan either conversion or replacement of equipment that uses R-22 refrigerant. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment using it obsolete.
2. Investigate Room 422's unit ventilator drain pipe for a leak; this unit is possibly leaking down to the classroom below.

Electrical

1. Address panels that have breakers missing, and install a spare breaker or cover to fill voids.
2. Assess exterior lighting to determine additional illumination requirements. Add fixtures where necessary to accommodate demand.

Murchison Middle School Site Summary

Site/Civil Assessment

Address	3700 N Hills Drive, Austin, TX 78724
Number of Permanent Campus Facilities	2
Original Year of Construction	1967
Total Campus Area	24 Acres
Data Collection Method	Desktop, Site Visit
Site Visit/Assessor	01/12/2017 / J. Bernard



Introduction

The Murchison MS campus is located at 3700 N. Hills Drive in Austin, Texas. Murchison MS was established in 1967, and consists of the main building, theater, custodial storage and a greenhouse.

Revision Log

Revision	Date	Summary of Content
00	8/26/16	Draft Issue
01	1/26/17	Added comments from Teacher James Wood as indicated on email dated 10/31/16. See pages 5 and 17.
02	3/10/17	2 nd Draft Issue

Development Information

Watershed	Shoal Creek
Total Impervious Cover	26 %
Allowable Impervious Cover	100 %
Barton Spring Recharge Zone	No

Data from "AISD District Wide Impervious Cover Simplified 12-1-16" spreadsheet, Prepared by Faye Kazi/Civillitude, on

Parking and Drives

Parking and Drives	Configuration	Size (SF)
Visitor Parking	10 CB 2 HC	1,900
Staff Parking	110 CB 9 HC	33,500
Student Parking	No	
Parent Drop Off	Yes	8,000
Service / Mechanical Yard	No	
Bus Drop-Off Area	No	



HC – Accessible Parking, CB – Combined Parking

System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline. Refer to the AISD_FCA_Murchison_MS_Site_Civil_Exhibit for additional information.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Site Improvements	Roadways	R1: The parent drop off roadway is located on the south side of the school. The roadway is crowned asphalt with concrete curb and gutters. The drainage runoff draining toward the school does not appear to have sufficient flow to easily run out of roadway. There are 2 ADA ramps that potentially pond when it rains. There is about a 1" settlement of asphalt in front of the lip of gutter at the front of the school which has the potential to cause drainage to pond and is a tripping hazard. There is some minor cracking and wear on the pavement. The concrete apron at the driveway entrance at North Hills Drive is damaged. It was observed that during drop off in the morning, the school buses were parking on North Hills	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>Drive and dropping students off onto the sidewalk. Students then had to cross the parent drop off drive thru area to get to the school.</p> <p>Roadway Deficiencies:</p> <ul style="list-style-type: none"> • Crowned roadway potentially ponds at student loading/unloading area • 1" settlement between pavement and gutter on school side causing additional ponding and trip hazard. • Student drop off occurs on side street and students have to cross thru parent drop off to get to school. • Concrete apron at entrance cracking. 	
	Parking Lots	<p>P1: This is an Administration and Faculty parking lot containing 3 separate parking areas and is located on the southwest corner of the building. This area is also used as a parent drop off location in the morning. The parking is asphalt with curb and gutter. The 3 parking areas have surface cracking as well as alligator cracking along with patched asphalt. The majority of parking is in average condition; however, there is a portion between the parking areas that is in really poor condition. It contains a wide area of alligator cracking, as well as a large pothole in the driving area with significant alligator cracking on surface. Vegetation is also growing through the pavement. Ponding occurs in parking spots just to the south of the secondary campus building due to insufficient drainage / clogged drainage that is not regularly maintained.</p> <p>The concrete aprons leading into and out of the parking lot have cracks. During a walk thru with maintenance, it was noted that on several occasions, parents and other traffic use the Exit only portion of the parking to enter the parking lot. This is a one way exit, but there were no visible signs to identify one way traffic other than what was painted on the asphalt, but this wasn't highly visible to all traffic. The paint has worn.</p> <p>No parking lot lighting or any lighting on the facility for this parking area was observed. There is a damaged sign going into the back parking lot. There are 2 trash containers that are not on a concrete pad.</p> <p>P2: Parking area 2 is a concreted area for maintenance and loading/unloading area, as well as a second area that is asphalt for Special Education parking. This is located on the southeast corner of the school. The one way entrance and exit area is along Hart lane. The majority of the concrete pavement is in average condition with some minor cracking. However, there is some significant cracking running perpendicular to the school that needs to be replaced. The asphalt parking area shows signs of surface raveling, as well as cracking. The overall area is average and could benefit from sealcoating. The handicap parking stalls also need repainted to clearly identify. Staff on site expressed concern over lack of lighting in the parking area.</p> <p>P3: A second faculty and staff parking lot contains 2 separate parking areas with a drive connecting them, and is located on the north-east corner of the building.</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>This is an asphalt parking lot with concrete curb & gutter. The concrete apron leading in from Far West Blvd contains several cracks. The sign coming into the parking lot is damaged. The asphalt parking area on the east end shows signs of raveling along with some cracking. There are 3 potholes in the area and some previously patched potholes, as well as other large patches. The handicapped parking stalls / access ramps on the east end appear to have drainage issues as there is sediment wash in this area. Drainage appears to be an issue.</p> <p>The drive connecting the parking areas has some cracking, raveling, and shows signs of flushing. There is also a pedestrian crossing from the school to the ball fields that was built after the roadway was constructed. This crossing has drainage built into the gutters. On one side, there are 2 - 2" PVC pipes for drainage (currently clogged, needs maintenance), and on the other side there is an opening for drainage which is covered with a steel plate. The plate is not secured to the concrete and can easily be moved. There is a safety concern that if the plate is moved an opening occurs in walkway. The paint has worn off the walkway.</p> <p>The back parking lot has cracking as well as a large pothole. There are large patches in the pavement.</p> <p>There are concerns from the school that there is not sufficient barricading of vehicular traffic from going into the pedestrian walkway area on north side of school near tennis courts. There have been reports of vehicles driving into the area.</p> <p>Parking Lot Deficiencies:</p> <ul style="list-style-type: none"> • Damaged signs • Concrete apron cracking • Re-paint needed • Lack of lighting • P1: Surface cracks, alligator cracking, large pothole, patches • P1: No signage for one-way/ entrance/ exit locations • P1: Areas of ponding in parking stalls to due to poor / clogged drainage • P2: Surface cracks, raveling asphalt pavement • P3: Surface cracks, potholes, raveling / flushing pavement • P3: Drainage issues • P3: Pedestrian crossing to ball field drainage issues • P3: Insufficient protection to keep vehicles from entering pedestrian walkway 	
	Pedestrian Paving	<p>The pedestrian paving at the school is concrete. The majority of the sidewalk is in average to poor condition. There are several areas around the school where there is significant cracking, causing tripping hazards. There are also locations where the sidewalks are cracked and areas are lifting or sinking, causing rainwater to flood back into the school. The school currently places sand bags in front of several doors to minimize flooding impacts. The sidewalk adjacent to the tennis court has poor drainage causing the water to pond and pool over sidewalk</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>into tennis court. The sidewalk in-front of the school along the student drop off area is sinking causing a trip hazard with the curb as well it contains cracking. There are drainage crossings in the sidewalk that are covered with a steel plate. A few plates are not anchored down properly causing trip hazards. There is a wood crossing in the portable area.</p> <p>Teacher James Wood reported that the traction topcoat on the courtyard concrete floor needs to be replaced.</p> <p>Pedestrian Paving Deficiencies:</p> <ul style="list-style-type: none"> • Significant cracking causing trip hazards • Areas sinking / cracking causing flooding back into school • Ponding on sidewalk at tennis court • Sidewalk at front drop off is settling, causing trip hazard between sidewalk and curb. • Drainage steel plates not secured properly • Wood crossing 	
	Site Development	<p>The perimeter of the schools fields is enclosed with chain-link fencing. There are several locations where the chain-link fencing is broken, where the fencing isn't tied to the post, the lower tension wire isn't weaved into the fencing, fence posts are broken, and concrete is exposed from erosion. Locks are missing on fenced off locations, still allowing students access. There are areas of concrete and trash piles. Various locations on top of hill where old steel fence posts are cut and still exposed causing safety hazard. Staff on site and parents expressed concern over lack of lighting on the north side between the school and the baseball fields. The rock filter damn at the top of the hill in the southwest corner has damaged fence and the rocks are spread all over. The crawlspace in the maintenance parking has erosion around its edge. Piping inside the crawl space was observed to be supported by a placed brick. On the north side, the round brick wall has a hole in the bottom and erosion and mold on the side. There is a dumpster in P3, however, it is not on a concrete pad, nor is it easily accessible to a truck because it is behind parking stalls and in a corner.</p> <p>Site Development Deficiencies:</p> <ul style="list-style-type: none"> • Perimeter fencing needs repair (broken posts, holes in fence, fence not tied to posts, bottom tension wire not secured in fence, erosion at post base) • Missing locks to fenced in locations • Concrete and trash piles • Steel fence posts exposed • Lack of lighting on the north side • Rock filter damn in the southwest corner: fencing is damaged and rocks spread all over • Crawlspace erosion and pipe adjustment 	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<ul style="list-style-type: none"> • Hole in brick wall, erosion and mold on north side • Dumpsters are not on concrete pad and not easily accessible 	
	Site Drainage	<p>In general, drainage on the facility needs maintained and evaluated. The school has flooding issues in several areas of buildings when it rains. The school employs sand bags to try and minimize the water flow indoors. Main area of school flooding occurs on the west end of the school between the school and secondary building. Lack of complete enclosed drainage system combined with broken sidewalks and poor grading lead to the flooding on the southwest end of the main building. Some downspouts tie into a drain pipe that flows up hill and will not drain the area, and when it does drain, the outfall is onto the sidewalk. There is additional ponding at north east end of secondary building at the HC ramps / roadway area.</p> <p>There is potential ponding at the main entrance as sand bags were on site but no verbal confirmation.</p> <p>Not all of the gutter downspouts tie to the underground drainage systems around the school. Several areas have broken / no splash pads causing additional erosion and poor drainage. There also appear to be several original downspouts coming out of the wall and pouring onto the ground causing erosion.</p> <p>The overall flow of the property drainage comes from the hill on the west end of the property, flows around and through the track and field to a pond east of the track. The pond then flows to a second pond thru an 18" pipe (approx.) which needs cleaned for smoother flow. This drains to another pond then off the property to an enclosed storm sewer system. Condensate pipes on the north and the northwest sides don't tie to an underground drainage system.</p> <p>Site Drainage Deficiencies:</p> <ul style="list-style-type: none"> • Site has several locations that flood into the school • General grading needed to minimize erosion around the school • There are several downspouts that don't tie to an underground drainage system, causing erosion / flooding issues • Drainage on west end of property appears inefficient for need. Get drainage evaluation • Condensate pipes do not tie into underground drainage. 	Poor
	Courtyards	<p>There are 2 courtyards in the interior of school. The courtyards are primarily brick /paver covered areas. The bricks are beginning to heave or sink. The tree roots are causing buckling, and drainage issues around the inlets. The inlets are full of debris and have visible standing water in them, appear to be clogged somewhere. Teachers expressed concern with the area being hazardous to everyone. On the east end of the interior courtyard, there is a flooding issue along the sidewalk behind the landscape rock wall. There is nowhere for the water to run off, causing leakage into the school underneath the school wall. Maintenance also expressed concerns about downspout drainage coming into an inlet, using to small of a rock for dissipation, these rocks are getting washed</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>into the inlets causing blockage issues.</p> <p>There were concerns from maintenance and teachers about the quality of the flooring that wasn't brick pavers, (this being a painted surface to reduce slipping) that is being ruined by gum removal methods, there are also concerns with this surface still causing a slip hazard when humidity is high. There were also concerns expressed about the railing on the 2nd floor protecting the courtyard not being sufficient enough to keep small kids from slipping thru the posts and falling thru to the courtyard area.</p> <p>Courtyard Deficiencies:</p> <ul style="list-style-type: none"> • Bricks heaving or sinking • Inlets clogged • Pavers are a trip hazard • Dissipater rocks to small • Landscape and sidewalk lack of drainage cause ponding and flooding into school • Painted flooring is slippery • Railing on 2nd floor not sufficient enough to keep kids from falling 	
	Landscaping	<p>There is decent vegetation on site, however there are some areas that need regraded / filled to eradicate erosion causing landscape to not grow. There are several areas needing sod / mulch to replace the eroded areas. Regrade some areas away from building and/or adjust grading around concrete pads and sidewalk. Deer protection around trees needs adjustment. There are areas where erosion has caused underground drainage to be exposed.</p> <p>Landscaping Deficiencies:</p> <ul style="list-style-type: none"> • Erosion causing landscape not to grow • Sod / mulch areas where erosion has occurred • Regrade areas of erosion away from building • Adjust tree deer protection • Exposed underground drainage 	Average
Site Utilities	Water Supply	<p>There is an automated irrigation system on site. There is water supply and shutoff valve to the greenhouses which appear to operate with a timer. There are several damaged / broken irrigation tubes / pipes around vegetation.</p> <p>Water Supply Deficiencies:</p> <ul style="list-style-type: none"> • Damaged/ Broken Irrigation spouts and pipes 	Average
	Sanitary Sewer	<p>There is a grease trap testing box onsite. There was a large manhole with surrounding concrete broken on east end of property. There are several manholes and utility access boxes with broken or missing covers</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>Sanitary Sewer Deficiencies:</p> <ul style="list-style-type: none"> • Inlet & concrete on east end of property damaged • Manholes and utility access boxes with broken / missing covers 	
	Storm Sewer	<p>There is little storm sewer on site. Where it was visible, there were signs of clogging requiring general maintenance. Overall drainage needs to be added to an enclosed underground storm sewer, this includes all downspouts not tying into underground drainage.</p> <p>Storm Sewer Deficiencies:</p> <ul style="list-style-type: none"> • Visible clogging requiring maintenance • Several downspouts and other drainage components do not tie to an underground system. 	Average
	Detention Pond	<p>There are 2 detention ponds on site. The first is a smaller pond on the southwest side of the school. There is a large concrete end treatment that is covered with a large piece of steel with a hole cut out on bottom (needs maintained as we had to dig to find outfall). There is erosion from an adjacent parking lot that needs addressed, drainage into pond may also not be complete as there appears to be a curb cut required to drain portion of parking lot. The perimeter fence gate is missing a lock.</p> <p>The second pond is on the northwest side of the property. This pond takes on all the water from the hill as well as the track and field. The pipe that catches water from inside the track and dumps into pond appears insufficient in size. The inlet grate cover on the pipe is damaged; there is also erosion in the area. The area also needs regraded at the outfall into the pond as runoff sediment has covered the outfall. This flows into a lower pond thru an 18" pipe that also needs routine cleaning. This then flows off site to a city system.</p> <p>Detention Pond Deficiencies:</p> <ul style="list-style-type: none"> • Concrete end treatment and metal grate needs to be cleaned for water flow • Erosion along edge of pond • Lack of curb cut to allow parking draining into pond • Insufficient pipe size under track. • Inlet grate broken, erosion in area • Regrade around pipes • Clean around pipes 	Average
	Other Site Mechanical Utilities	<p>There are 2 trash dumpsters at P2 that do not have concrete pads. There were no other site mechanical utility deficiencies observed.</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Other Site Mechanical Utility Deficiencies: <ul style="list-style-type: none"> Trash dumpsters missing concrete pads 	

Site Improvement Deficiency Examples

Roadways

		
Pothole with alligator cracking in drive	Roadway patches in pavement	Cracking and surface wear

Parking Lots

		
Pot hole and surface wear	Cracking in maintenance / loading dock	Signs of ponding / sediment in wheel chair ramp area

Pedestrian Paving

		
<p>Sidewalk cracking & poor drainage</p>	<p>Sidewalk sinking below curb</p>	<p>Sidewalks cracking / sinking</p>

Site Development

		
<p>Broken barrier rail along driveway</p>	<p>Hole in fencing</p>	<p>Areas of trash on site, mold</p>

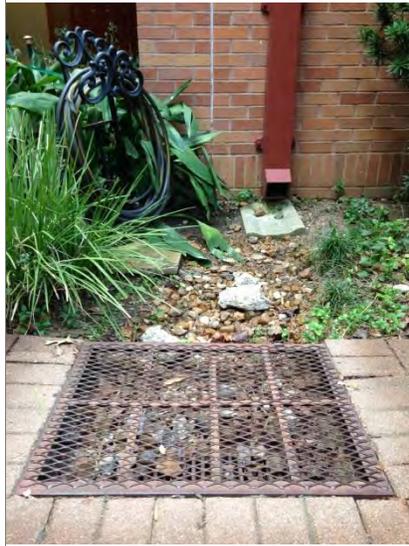
Landscaping

		
<p>Area at front with no landscaping</p>	<p>Damaged planter fencing</p>	<p>Broken irrigation spout</p>

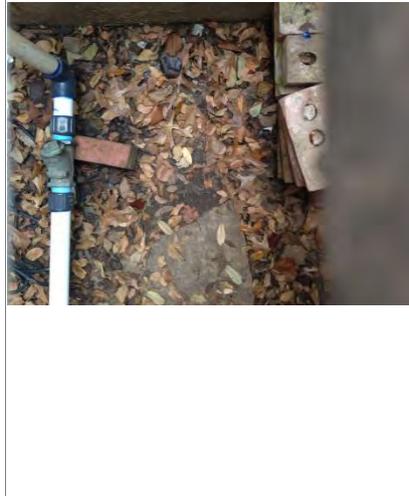
Drainage

		
<p>Sand bags to prevent flooding</p>	<p>Gutter drains do not tie to underground</p>	<p>Condensate pipes do not tie to underground</p>

Courtyards

		
<p>Maintenance needed for dissipation rocks</p>	<p>Heaving/ distorted brick pavers</p>	<p>Water leakage into school from courtyard</p>

Site Utilities

		
<p>Unsecured piping in crawl space</p>	<p>Uncovered utilities</p>	<p>Lack of grading around utilities</p>

Play Fields

Areas presented in table are approximate.

Playfields	Count	Size (SF)
Basketball Courts	-	-
Tennis Courts	2	12,000
Soccer/Multi-Purpose	1	53,000
Baseball Field	4	81,000
Bleacher Seating	-	-
Track	1	1,400 Ft
Green Space	1	335,000
Football Field	-	-
Playscapes	-	-



System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Playfields	Tennis Courts	<p>The tennis courts have some cracks in court surface, as well as some small holes in court. There are some broken fence posts on the east were they tie into the concrete footing. On the south side of the courts, there is ponding on courts from adjacent sidewalk and area not draining properly.</p> <p>Tennis Court Deficiencies:</p> <ul style="list-style-type: none"> • Surface cracks • Holes in surface • Broken fence posts • Court ponds from adjacent sidewalks lack of proper drainage. 	Poor
	Soccer/ Multi-Purpose	<p>Minor grass maintenance is needed for various areas of the field, especially behind the goal posts. Goal posts are in good condition themselves. The field drains to one area inlet which is damaged and needs to be replaced.</p> <p>Soccer/ Multi-Purpose Deficiencies:</p> <ul style="list-style-type: none"> • Minor grass maintenance. • Damaged area drain inlet 	Good

	Baseball / Softball fields	<p>The baseball fields in general need maintenance for weed control/growth into the infield's dirt surface, as well as grading and erosion issues around the fields. The score keeper boxes are weathered. Not all bleachers are on concrete pads, some concrete pads are broken. Brick / paver walkways are inconsistently located around perimeter. They need to be maintained or replaced. There is fence damage along portions of the fields, the back stop fencing needs replaced. The tower in center needs electrical conduit to cover exposed wiring.</p> <p>Baseball / Softball Field Deficiencies:</p> <ul style="list-style-type: none"> • General maintenance for weed control into infield. • Erosion around fields • Weathered score keeper boxes • Brick & paver walkways inconsistently located, need maintained or replaced. • Perimeter fence damaged in several locations • Central tower needs electrical conduit for exposed wiring 	Average
	Track	<p>The track has surface wear, some cracks, patches, edge curling and erosion occurring on track. The hill adjacent to the track has significant drainage erosion that goes across the track causing significant damage. An erosion control fence was placed above track to catch sediment, but over time, this fence has become mostly covered and is no longer protecting the track sufficiently. The area around the track does not appear to drain sufficiently. There is erosion on several areas around the track. The long jump tracks are worn with cracking and edge curling. The bleachers are not on concrete pads.</p> <p>Track Deficiencies:</p> <ul style="list-style-type: none"> • Surface wear, cracks, patches, edge curling • Adjacent hill erosion going onto track • Erosion fence containment at max • Erosion around the track • Lack of proper drainage around track • Bleachers not on concrete pads 	Poor

Playfield Deficiency Examples

Tennis Court

		
Cracks and hole in tennis court	Broken fence posts at concrete	Ponding on court

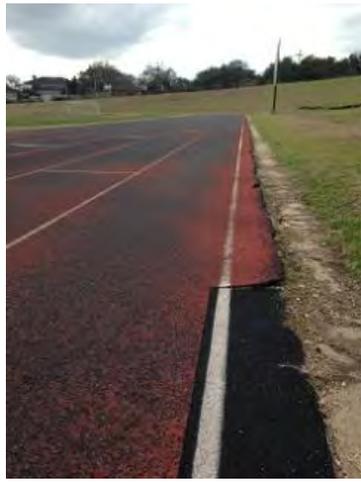
Soccer/ Multi-Purpose

	
Worn grass behind goal post	Damaged field drain inlet

Baseball / Softball fields

		
<p>Damaged fence/ lack of fence</p>	<p>Pavers around portions of the field</p>	<p>Exposed wiring on tower in center of fields</p>

Track

		
<p>Erosion occurring on hill coming onto track</p>	<p>Erosion control fence covered up</p>	<p>Edge cracks and curling / surface wear</p>

Summary of Recommendations

This document is based on information provided by staff during interview, site visit and additional desktop measurements using Google Earth. This document provides recommendations for corrective actions. The following recommendations provide a summary of the findings.

Site/Civil Recommendations

Roadways

1. Resurface drive / parking at front entrance.
2. Apply sealcoat to asphalt roadway surfaces with raveling and alligator cracking.
3. Apply crack sealing to minor cracks on asphalt roadway surfaces.
4. Repair curb & gutter sections that have cracks.
5. Repaint pavement markings.
6. Replace damaged concrete apron at driveway entrances of school.
7. Add signs for 1 way traffic / Exit only from parking lot in southwest corner to North Hills Drive.

Parking Lots

1. Repave potholed area between parking lots on southwest lot.
2. Replace concrete in maintenance parking.
3. Apply sealcoat to asphalt roadway surfaces with raveling and alligator cracking.
4. Apply crack sealing to minor cracks on asphalt roadway surfaces.
5. Restripe / paint pavement markings.
6. Add lighting to areas needing additional light.
7. Construct a permanent barrier condition between parking and sidewalk on northwest parking area) additional bollards or steel tube piping rail).
8. Rebuild pedestrian crossing between school and baseball fields to have same drainage condition on both sides (using steel plate).
9. Repair / replace damaged signs.

Pedestrian Paving

1. Replace pedestrian paving areas that are heaving / sinking and have cracks.
2. Replace areas of paving to provide positive drainage away from school.
3. Replace wooden bridges with steel plating.
4. Secure steel plates to pavement.
5. [Replace traction topcoat on the courtyard concrete floor \(requested by Teacher James Wood\).](#)

Site Development

1. Place concrete pads under and in front of dumpsters.
2. Replace chain link fencing where broken.
3. Add ties for chain link fencing to tie to the posts.
4. Fix tension wire through bottom of fencing (approx. 500 LF).
5. Replace broken fence posts.
6. Remove concrete and trash piles on site.
7. Remove old steel fence posts and concrete that is still exposed.
8. Add locks to fenced in areas.
9. Add lighting to the north side.
10. Fix the rock filter damn in southwest corner.

11. Fix the pipe inside crawlspace.
12. Fix the hole in the brick wall, remove mold.

Site Drainage

1. Evaluate overall site drainage.
2. Regrade areas of school where ponding floods into school.
3. Add / modify flume at main entrance.
4. Add underground drainage to tie all downspouts into storm sewer system.
5. Add backfill / grading around school to eradicate erosion and provide positive drainage.
6. Replace erosion control fence near track.
7. Evaluate the drainage around the track. Per the evaluation, place new drainage ditches, inlets to underground drainage system, flumes, etc at bottom of hill / around track to catch drainage before washing over track.
8. Add bigger drainage system to move water from interior of track to ponds.
9. Connect condensate pipes to underground system.

Courtyard

1. Remove and replace brick pavers on a regraded stable surface.
2. Clear out inlets and check for clogging in the pipes.
3. Fix landscaping to prevent ponding on west end of courtyard.
4. Add new railing to 2nd level of courtyard to prevent kids from crawling thru rails.
5. Apply new non-slip surface to courtyard floor.
6. Add bigger dissipater rocks.

Landscape

1. Regrade/ add backfill in areas of erosion
2. Replace / add sod / mulch in areas of need.
3. Adjust tree deer protection
4. Fix exposed and broken irrigation piping.

Site Utilities, Water/Sanitary

1. Repair concrete around manhole
2. Add lids to utility boxes with missing or broken lids

Storm Sewer

1. Remove trash, debris, and vegetation from existing drain basins.
2. Connect downspouts with underground storm drain system.

Detention Pond

1. Fix drainage inlet grade on inside of track to the pond
2. Add fill material for erosion along edge of pond
3. Provide curb cut for parking drainage into pond
4. Evaluate pipe size under track into pond.
5. Regrade and maintain around pipes and ponds for drainage to flow

Other utility Mechanical

1. Provide concrete pads for dumpsters

Tennis Courts

1. Resurface the tennis court.
2. Repair perimeter fencing and posts.

3. Fix drainage issue on south end.

Soccer/ Multi-Purpose Field

1. Maintain minor grass improvement areas
2. Replace area inlet grate

Baseball / softball Fields

1. Clear weeds and maintain infield area.
2. Regrade around fields to control erosion.
3. General maintenance of score keeper boxes.
4. Replace / add new bricks and pavers for consistent walking surface along perimeter.
5. Fix perimeter fencing that is damaged.
6. Add protective fencing along back stops to keep foul balls from going onto Far West Blvd.
7. Add electrical conduit to tower in center of fields.

Track

1. Repair / replace track.
2. Replace erosion control fencing.
3. Evaluate and adjust drainage flow from hill to tie to ditch, flume, inlets / underground system, etc?
4. Replace track on long jumps.
5. Bleachers need concrete pads.

