

## Kealing Middle School Site Summary

<b>Address</b>	1607 Pennsylvania Avenue Austin, TX 78702
<b>Number of Permanent Campus Facilities</b>	3
<b>Original Year of Construction</b>	1986
<b>Total Campus Building Area (combined)</b>	192,768 SF



### Introduction

The Kealing Middle School campus is located at 1607 Pennsylvania Avenue in Austin, Texas. Kealing Middle School was rebuilt in 1986 on a site that was once occupied by many other schools. It consists of an Administration and Classroom Building (BLDG-044A); a Cafeteria, Gymnasium, and Auditorium Building (BLDG-044B); and a general Classroom Building (BLDG-044C). BLDG-044C was built in 2007. The main building is connected to BLDG-044C through internal hallways; the connection to BLDG-044B is a covered walkway across a courtyard.

Meeting Log		Revision Log		
Date	Meeting	Revision	Date	Summary of Content
7/11/16	Interview	00	9/16/16	Draft Issue
7/13/16 and 7/14/16	Assessment	01	12/19/16	<a href="#">Added comments from CM Florence Rice as indicated on email dated 10/28/16. See pages 11-12.</a>
10/25/16	Cluster Meeting (Not Attended)			

## Administration and Classroom Building – BLDG-044A

Building Purpose	Administration Offices and Classrooms
Building Area	101,579 SF
Inspection Date	July 13-14, 2016
Inspection Conditions	98°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
<b>Exterior</b>	Exterior Walls	The exterior of the building consists of a 100% brick façade. The exterior of the building appeared to be in good condition. The vertical expansion joints were deteriorating. The lintels above the exit overhangs were rusting.	Good
	Exterior Windows	The windows are aluminum metal framed inset into the brick façade. The exterior windows appeared to be in good condition. Clearstory window film over the staircase is bubbling as are the greenhouse windows.	Good
	Exterior Doors	There are double exterior metal doors throughout the campus. The exterior doors appeared to be in average condition. They are heavily used but open and close well. They are faded from the sun, and have chipped paint in some areas. Staff reported that the kitchen door at the loading dock was not locking properly.	Average
<b>Roofing</b>	The roof has a new single-ply roof that was recovered in recent years; it is still under warranty. The built-up roof connecting the building to the cafeteria area is a covered walkway for the courtyard area. The main roof was in good condition. The covered walkway roof appeared to be in good condition. There was no evidence of pests at the time of this assessment.		Good
<b>Interior Construction</b>	Interior Walls	The interior walls are painted gypsum board in all of the offices and classrooms (30%), CMU (concrete masonry unit) in the exterior classroom walls and corridors (60%), and ceramic tile in the restrooms and locker	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		room areas (10%). The interior walls appeared to be in good condition.	
	Interior Doors	The interior doors are wood with a lite in metal frames (90%) and metal in metal frames with a lite (10%). The interior doors appeared to be in good condition. Staff reported that the interior doors were beyond their useful life; however, there was no observation of this.	Good
	Interior Specialties	The lockers are in air conditioned corridors. The lockers appeared to be in good condition.	Good
<b>Stairs</b>	Exterior Stairs	Subsystem not present.	N/A
	Interior Stairs	The interior stairs are located in the center of the building near the main entrance and at both ends of the building. The stairs at either end are typical metal construction with concrete treads, metal handrails, and rubber coverings. The staircase in the center has rubber covering the treads and risers, and a solid glass block wall under the stair railing.  The stairs appeared to be in average condition. The rubber is mismatched and coming loose in some areas.	Average
<b>Interior Finishes</b>	Interior Wall Finishes	The interior walls are painted gypsum board and CMU. They are located in administration areas and classrooms. The restroom walls are ceramic tile and CMU at the top three feet.  The interior wall finishes appeared to be in good condition.	Good
	Interior Floor Finishes	The floor finishes are VCT (vinyl composition tile) (90%), ceramic tile in the restrooms (5%), and concrete in the electrical/mechanical rooms, shop, and greenhouse (5%).  The interior floor finishes appeared to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceilings are acoustical tile (85%), gypsum board ceilings in the restrooms (10%), and concrete waffle pan ceiling over the two-story staircase area in the center of the building (5%).  The interior ceiling finishes appeared to be in good condition. Some occasional stains were observed on the tiles (room 120).	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
<b>Conveying</b>	<p>A Dover two-stop elevator with a capacity of 2,100 pounds is located near the west side of corridor 3. The entrance to the mechanical equipment is accessed through the entrance for AHU (air handling unit) 11.</p> <p>The conveying system appeared to be in good condition. The elevator operated to the second story and back to the first. The facility reported a leak associated with the hydraulic system; however, a leak was not observed.</p>		Good
<b>Plumbing</b>	Plumbing Fixtures	<p>The facility contains multiple plumbing applications that service two levels, consisting of public restrooms, staff restrooms, janitorial closets with service sinks, and classrooms with laboratory sinks. These restrooms typically have porcelain, vitreous china, or stainless steel hand sinks mounted in particleboard laminated, counter-top wash stands with manual faucets or metering faucets; vitreous china (possibly porcelain), floor-mount/wall toilets with manual flushing valves; and vitreous china, wall-hung urinals in the men's restrooms with manual flushing valves. There are wall-mounted service sinks in the janitorial closets. The culinary classrooms likely have plumbing fixtures, but these classrooms are being renovated and could not be assessed.</p> <p>The Staff reported that the majority of the plumbing fixtures were old, had various dates of installation and various brand types. Additionally, the Staff reported that there were outdated porcelain drinking fountains located in COR9, outside the BIGGYM, and in the hallway adjacent to the SMGYM. The restroom plumbing fixtures were observed to be in average condition. All of the fixtures observed were very aged, some dating back to when the school was originally constructed. Although the fixtures observed were still operational, many were running inefficiently, such as flushing slowly or draining water slowly. Additionally, there was a non-functional hand sink (missing manual actuator) in the male restroom on the first floor east side next to corridor five (BRR100E). Lastly, a deteriorating sink wall splash guard was observed in female restroom on the first floor west side next to corridor four (GRR100W).</p>	Average
	Domestic Water Distribution	<p>The plumbing fixtures in this facility are not serviced by any heat generating systems from the main mechanical room. Some faculty sinks have individual tankless instantaneous water heaters under their sinks, but no other type of domestic water distribution equipment.</p> <p>The plumbing distribution piping assessed for the</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>plumbing fixtures was observed to be in good condition. The Staff reported that the facility only had hot water in the kitchen and locker rooms showers, however, no additional concerns were identified in regards to the facilities hot water service. The Staff also reported that there was a lack of isolation valves for the restroom plumbing fixtures.</p>	
	Other Plumbing	<p>The roof had two types of drainage systems, external and internal. The internal system is equipped with low point drains that have dome type roof covers constructed of carbon steel.</p> <p>The other plumbing systems were observed to be in good condition during the assessment.</p> <p>The Staff reported that there were drainage issues in the courtyard area between Building B and Building A and adjacent to the MAINMECH room. The Staff also stated that during high intensity rain events, the drains were easily overwhelmed and flooding in this area occurred.</p>	Good
<b>Mechanical/ HVAC</b>		<p>This building has 12 HVAC (heating, ventilating, and air conditioning) systems. The major mechanical equipment consists of indoor modular AHUs, large roof top-mounted split system AC (air conditioning) units, and roof top-mounted EFs (exhaust fans). Many of the indoor modular AHUs are supported by the two 300-TON centrifugal water chiller systems that are individually serviced by two one cell external cooling towers rated at 235-TON each and four horizontal gas-fired boilers with a rated output capacity ranging from 339 MBH to 1,760 MBH.</p> <p>Three split system AC units are on the roof and one large EF. The refrigeration capacities of the RTUs (roof top units) range from 5- to 24-TON and the EFs ranges from 200 to 1000 CFM (cubic feet per minute). The remainder of the HVAC units consist of indoor modular AHUs, ranging in capacity from an estimated 5,000 to 15,000 CFM. These AHUs are located on the first and second floor throughout the building and are multi-zone AHUs that have been equipped with electronic damper actuators.</p> <p>The Staff reported that the AHU's in this facility were reaching the end of their useful life span. The Staff also reported that AHU-12 &amp; AHU-13 on the first floor of the west side of the facility had no mechanical closets and were difficult to access for maintenance staff. Additionally, the Staff stated there was a health and safety concern because there was condensation on piping (exposed to classrooms below) and no ladder to access. The Staff went on to report that these units were suspended above the floor and attached to the ceiling. The Staff also stated that the hot water coils were breaking down frequently and were installed in approximately half of the facility. The Staff also stated that the cooling tower system was estimated to be 100 tons short of the needed size and capacity. The Staff believed that this existing condition required the chillers to run 24 hours per</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>day when the temperature was above 95 degrees. Lastly, It was reported by the Staff that there was a problem with temperature regulation in Room 104.</p> <p>The HVAC equipment was observed to be in average condition. Many of the deficiencies recorded were corrosion on the supply or return piping and external shell of equipment. Other HVAC deficiencies observed include extreme aging of the equipment, damaged insulation, air leaks from the AHU housing, and leaks from the supply/return hot and cold water lines. Also, all of the HVAC assets were observed to be using R-22 refrigerant, which is being phased out. Additionally, AHUs 12 and 13 on the west side in classrooms 109B and 108, respectively, were both considered to be health and safety issues for the maintenance staff, due to the equipment being suspended from the ceiling and lack of accessibility. Also, the enclosure of the cooling tower was rusted and was missing the birdcage that protects the cooling tower's honeycomb fill. Lastly, the roof top supply air fan, SF-04, located in area four, was extremely aged and had excessive wear and tear to the expansion joint material.</p>	
<b>Fire Protection</b>	Fire Alarm	<p>The building contains a fire alarm system by Silent Knight consisting of an IntelliKnight electronic main panel, detectors, pull stations, and horn/strobe combination units.</p> <p>The equipment appeared to be in good condition and did not show any system faults. The exterior strobe/horn units in the courtyard showed small signs of weathering.</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 throughout the building.</p> <p>All portable fire extinguishers observed were inspected within the last year and appeared to be in good condition.</p>	N/A
<b>Electrical</b>	Electrical Distribution	<p>The main service transformer, disconnect switches, and capacitor cabinet are located south of the complex centered between the three buildings. West of the courtyard south entrance is the outdoor backup generator manufactured by Cummins. A main electrical room exists east of the main mechanical room entrance. A 480VAC, 1600A switchboard along with additional transformers and panelboards supply power throughout the building. Panelboards are located at each floor on each wing supplying power to classrooms and offices. A bank of solar panels was located on the south wall, near the roof of this building. It is believed to supply power to a greenhouse.</p> <p>The equipment appeared to be in good condition. In the main mechanical room, electrical pull and junction</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>boxes do not have the covers installed. There are conduits unsupported and abandoned cables hanging from junction boxes and conduit.</p>	
	Lighting	<p>The exterior of the building is outfitted with what appears to be HID (high-intensity discharge) fixtures. Compact fluorescent fixtures exist at various entrances to the building and are mounted directly over the doorway. The interior lighting is mainly fluorescent with the occasional incandescent fixture in closets. There are exit signs at every exit.</p> <p>The exterior lighting was observed to be in good condition. Various exit signs were not illuminated. The facility requested the exterior lighting at the loading dock be upgraded as it malfunctions regularly.</p>	Good
	Communications & Security	<p>A Gemini security system is currently installed. Motion detectors are installed in interior areas and security cameras are installed throughout the interior of the building and strategically on exterior corners. The facility appears to have wireless routers installed in the ceiling throughout the building.</p> <p>The system appeared to be in good condition. No damaged security panels or cameras were observed. The facility reported limited camera coverage at the main entrance facing Pennsylvania Avenue.</p>	Good

**Exterior System Deficiency Examples**

Exterior Walls



Exterior Windows



Exterior Doors



**Stairs Deficiency Examples**

Interior Stairs



**Interior Finishes Deficiency Examples**

Interior Ceiling Finishes



**Plumbing System Deficiency Examples**

Plumbing Fixtures



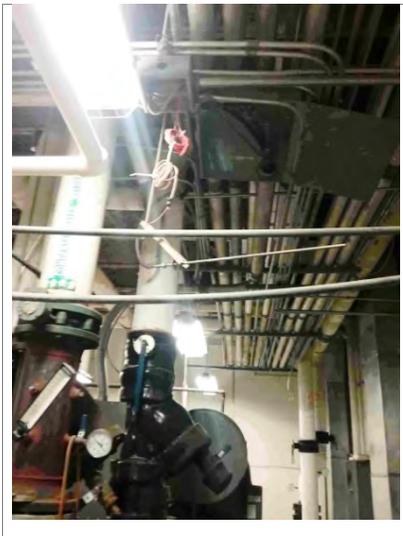
**Mechanical/HVAC System Deficiency Examples**





**Electrical System Deficiency Examples**

Electrical Distribution



## Cafeteria, Gymnasium, and Auditorium Building – BLDG-044B

Building Purpose	Cafeteria, Gymnasium, and Auditorium
Building Area	56,365 SF
Inspection Date	July 13-14, 2016
Inspection Conditions	98°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
<b>Exterior</b>	Exterior Walls	The exterior walls are <b>glazed brick</b> . The exterior walls appeared to be in good condition.	Good
	Exterior Windows	Windows are aluminum metal framed and appear to be single framed. The exterior windows appeared to be in average condition. The cafeteria windows were <b>acrylic</b> . The lintels over the windows were rusted.	Average
	Exterior Doors	The exterior doors are double metal doors. The exterior doors appeared to be in average condition. The doors were observed to be faded from sun exposure. Some thresholds were damaged.	Average
<b>Roofing</b>	This building roof has a new single ply roof that has been recovered in recent years (5 years as reported by staff). The roof, gutters, and downspouts appeared to be in good condition.		Good
<b>Interior Construction</b>	Interior Walls	The interior walls are painted CMU in the gymnasiums, corridors, cafeteria, kitchen, auditorium, and band halls (85%). The band halls have acoustical fiber panels attached to the walls. The walls are ceramic tile in the restrooms and locker rooms (10%) and gypsum board in offices and the theater lobby (5%). The interior walls appeared to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	90% of the interior doors are wood with a lite in metal frames. 10% are metal doors to mechanical/electrical rooms.  The interior doors appeared to be in good condition. The door from the male locker room to corridor does not fully close.	Good
	Interior Specialties	There are lockers located in the locker rooms and corridor.  The lockers appear to be in good condition.	Good
<b>Stairs</b>	Exterior Stairs	Subsystem not present.	N/A
	Interior Stairs	There are two sets of stairs from both ends of the stage to the dressing rooms, and a set of stairs at the rear of the theater for the projection booth. They are metal construction with concrete treads. One additional staircase leads from the corridor to a mechanical room in a penthouse area. This system is also metal construction with concrete treads.  The interior stairs appeared to be in good condition.	Good
<b>Interior Finishes</b>	Interior Wall Finishes	Wall finishes are painted CMU and painted gypsum board. There is ceramic tile in the restrooms and locker rooms.  The interior wall finishes appeared to be in good condition.	Good
	Interior Floor Finishes	The interior floor finishes are VCT in the corridors, band rooms, cafeteria, and kitchen quarry tile (45%), wood in the two gymnasiums and two stages (30%) ceramic tile in the restrooms and male and female locker rooms (20%), and carpet in the auditorium lobby and aisles (5%).  The interior floor finishes appeared to be in good condition. Fading and cracking of VCT near exterior door entrances was observed.	Good
	Interior Ceiling Finishes	Interior ceilings are acoustical tile and metal grid (55%), Tectum acoustic fiber panels in the gymnasiums (30%), gypsum board in the restrooms and locker rooms (10%), and decorative metal slat at the entrance of the auditorium area (5%).  The interior ceiling finishes appeared to be in good condition.	Good
<b>Conveying</b>	System not present.		N/A
<b>Plumbing</b>	Plumbing Fixtures	The facility contains multiple plumbing applications that service one level, consisting of public restrooms, staff	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>restrooms, male/female privacy multi-stall column type locker room showers, janitorial closets with service sinks, and a commercial kitchen. These restrooms typically have porcelain, vitreous china, or stainless steel hand sinks mounted in particleboard laminated counter-top wash stands with manual faucets or metering faucets; vitreous china (possibly porcelain), floor-mount/wall toilets with manual flushing valves; and vitreous china, wall-hung urinals in the men's restrooms with manual flushing valves. There are wall-mounted service sinks in the janitorial closets.</p> <p>The restroom plumbing fixtures were observed to be in average condition. All of the fixtures observed were very aged, some dating back to when the school was originally constructed. Although the fixtures observed were still operational, many were running inefficiently, such as flushing slowly or draining water slowly. Additionally, in the male/female locker rooms there were non-functional showers observed. In the male locker room, there was a leaking shower head observed and both the male and female locker rooms had showers with missing manual actuators. Lastly, there were aged or broken water fountains outside of large gymnasium and auditorium.</p>	
	Domestic Water Distribution	<p>The plumbing systems observed in this facility are not serviced by any heat generating systems from the main mechanical room except for the commercial kitchen and locker room showers. GWH (gas water heater)-1 located near the commercial kitchen was manufactured in 1998.</p> <p>The plumbing distribution piping assessed for the plumbing fixtures was observed to be in good condition. The only notable deficiency is the corrosion on the hot water and cold water supply lines for GWH.</p>	Good
	Other Plumbing	<p>The roof had two types of drainage systems, external and internal. The internal system is equipped with low point drains that have dome type roof covers constructed of carbon steel.</p> <p>The other plumbing systems were observed to be in good condition during the assessment.</p>	Good
<b>Mechanical/ HVAC</b>	This building has 11 HVAC systems. The major mechanical equipment consists of indoor modular AHUs, large roof top-mounted split system AC units, and roof top-mounted EFs. Many of the indoor modular AHUs are supported by the two 300-TON centrifugal water chiller systems that are individually serviced by two one cell		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>external cooling towers rated at 235-TON each and four horizontal gas-fired boilers with a rated output capacity ranging from 339 MBH to 1,760 MBH.</p> <p>One split system AC unit is on the roof. The refrigeration capacity of the RTU ranges from 14- to 24-TON. The remainder of the HVAC units consist of indoor modular AHUs, ranging in capacity from an estimated 3,000 to 18,410 CFM. These AHUs are located on the first and mezzanine level floor throughout the building and are multi-zone AHUs equipped with electronic damper actuators.</p> <p>The HVAC equipment was observed to be in average condition. Many of the deficiencies recorded were corrosion on the supply or return piping and external shell of equipment. Other HVAC deficiencies observed include extremely outdated equipment, damaged insulation, air leaks from the AHU housing, and leaks from the supply/return hot and cold water lines. Also, all of the HVAC assets were observed to be using R-22 refrigerant, which is being phased out.</p>	
<b>Fire Protection</b>	Fire Alarm	<p>The building contains a fire alarm system by Silent Knight consisting of an IntelliKnight electronic main panel, detectors, pull stations, and horn/strobe combination units.</p> <p>The equipment appeared to be in good condition and did not show any system faults.</p>	Good
	Fire Protection/Suppression	<p>The building is not equipped with a fire sprinkler/suppression system, except for a portion of the theater. The suppression system in the theater appears to be fed from a nearby fire cabinet that houses a four-inch riser pipe/valve assembly. The remainder of the building is protected by portable fire extinguishers that are stationed throughout the building.</p> <p>The theater suppression system and all portable fire extinguishers were observed to be in good condition and inspected within the last year.</p>	Good
<b>Electrical</b>	Electrical Distribution	<p>Numerous transformers and subpanels exist in electrical rooms throughout the building, distributing power throughout the building.</p> <p>The equipment appeared to be in good condition. One of the 45 kVA transformers located in the loading dock electrical room appeared to have considerable corrosion on the enclosure.</p>	Good
	Lighting	<p>The exterior of the building is outfitted with what appears to be HID fixtures. Compact fluorescent fixtures exist at various entrances to the building and are mounted directly over the doorway. The interior lighting is mainly fluorescent with the occasional incandescent fixture in closets. The gym lights appear to be a halogen style flood fixture. The theater has specific lighting related to theater performances, including a variety of</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>colors in spot and flood style fixtures. There are exit signs at every exit.</p> <p>The exterior lighting appeared to be in average to good condition. The facility reported that the light fixture over the loading dock frequently malfunctions. Various exit signs were not illuminated.</p>	
	<p>Communications &amp; Security</p>	<p>A Gemini security system is currently installed. Motion detectors are installed in interior areas and security cameras are installed throughout the interior of the building and strategically on exterior corners. There are intercom speakers mounted on the exterior corners of the building. The facility appears to have wireless routers installed in the ceiling throughout the building. A network rack consisting of routers and switches is located in the backstage area of the theater. The main distribution frame room is locked, but is assumed to house acceptable main data center equipment.</p> <p>The system was observed to be in good condition.</p>	<p>Good</p>

**Exterior System Deficiency Examples**

Exterior Windows



Exterior Doors



**Interior Construction Deficiency Examples**

Interior Doors



**Interior Finishes Deficiency Examples**

Interior Floor Finishes



**Plumbing System Deficiency Examples**

**Plumbing Fixtures**



**Domestic Water Distribution**



**Mechanical/HVAC System Deficiency Examples**



## Electrical System Deficiency Examples

### Electrical Distribution



## Classroom Building – BLDG-044C

Building Purpose	Classrooms
Building Area	34,823 SF
Inspection Date	July 13-14, 2016
Inspection Conditions	98°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
<b>Exterior</b>	Exterior Walls	The storage building has a brick façade. The exterior walls were observed to be in excellent condition.	Good
	Exterior Windows	The exterior windows are aluminum metal framed. The exterior windows were observed to be in excellent condition.	Good
	Exterior Doors	The exterior doors are metal in a metal frame. The exterior doors were observed to be in excellent condition.	Good
<b>Roofing</b>	The roof is single ply membrane. The roof appeared to be in excellent condition.		Good
<b>Interior Construction</b>	Interior Walls	The interior walls are 50% CMU, 40% gypsum board, and 10% ceramic tile. The interior walls were observed to be in good condition.	Good
	Interior Doors	The interior doors are wooden with a lite in a metal frame. The interior doors were observed to be in good condition.	Good
	Interior Specialties	The building contains lockers. The lockers appeared to be in good condition.	Good
<b>Stairs</b>	Exterior Stairs	The building has concrete stairs starting at grade and landing at side entrance. The exterior stairs have normal wear and appear to be in good condition.	Good
	Interior Stairs	The stairs consist of a metal frame with concrete treads and rubber coverings and are located at both ends of	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>the building.</p> <p>The interior stairs appeared to be in good condition.</p>	
<b>Interior Finishes</b>	Interior Wall Finishes	<p>The wall finishes are painted CMU, painted gypsum board, and ceramic tile.</p> <p>The interior wall finishes appeared to be in good condition.</p>	Good
	Interior Floor Finishes	<p>The floor finishes consist of 85% vinyl tile floors and 15% ceramic tile in the restrooms.</p> <p>The interior floor finishes appeared to be in excellent condition.</p>	Good
	Interior Ceiling Finishes	<p>The ceiling finishes consist of 90% acoustical tile and grid and 10% gypsum board.</p> <p>The interior ceiling finishes appeared to be in good condition.</p>	Good
<b>Conveying</b>		<p>A Dover two stop elevator with a capacity of 2,500 pounds is located near the north side of corridor 13. The entrance to the mechanical equipment is accessed through the entrance west of corridor 12.</p> <p>The conveying system appeared to be in good condition.</p>	Good
<b>Plumbing</b>	Plumbing Fixtures	<p>The facility contains multiple plumbing applications that service two levels, consisting of public restrooms, staff restrooms, and janitorial closets with service sinks. These restrooms typically have vitreous china wall-mounted sinks with manual faucets or metering faucets; vitreous china, floor-mount/wall toilets with manual flushing valves; and vitreous china, wall-hung urinals in the men's restrooms with automatic sensor flushing valves. There are wall-mounted service sinks in the janitorial closets.</p> <p>The restroom plumbing fixtures were observed to be in good condition.</p>	Good
	Domestic Water Distribution	<p>The plumbing fixtures in this facility are not serviced by any heat generating systems from the main mechanical room.</p> <p>All domestic water distribution piping observed was in good condition.</p>	Good
	Other Plumbing	<p>The roof had two types of drainage systems, external and internal. The internal system is equipped with low point drains that have dome type roof covers constructed of carbon steel.</p> <p>The other plumbing systems were observed to be in good condition during the assessment.</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
<b>Mechanical/ HVAC</b>	<p>This building has four HVAC systems. The major mechanical equipment consists of large roof top-mounted packaged AHUs. The large RTUs are multi-zone service units and service the first and second floor of this building. One split system AC unit is on the roof and three large package AHUs with refrigeration capacities ranging from 2- to 50-TON.</p> <p>The HVAC system was in average condition. The equipment appeared to be functioning well, but all assets assessed use R-22 refrigerant, which is being phased out.</p>		Average
<b>Fire Protection</b>	Fire Alarm	<p>The building contains a fire alarm system by Silent Knight consisting of detectors, pull stations, and horn/strobe combination units.</p> <p>The equipment appeared to be in good condition and did not show any system faults. The main alarm panel and electronic unit was not located.</p>	Good
	Fire Protection/ Suppression	<p>The building is equipped with a fire sprinkler/suppression system. The suppression system was located on both floor levels and appears to be serviced by a fire riser pipe or pump that feeds automatic sprinkler units.</p> <p>The system was observed to be inspected within the last year and appeared to be in good condition.</p>	Good
<b>Electrical</b>	Electrical Distribution	<p>The transformers and panelboards are located in electrical room 409 west of the elevator.</p> <p>The electrical distribution equipment was observed to be in good condition.</p>	Good
	Lighting	<p>The exterior of the building is outfitted with what appears to be HID fixtures. Compact fluorescent fixtures exist at various entrances to the building and are mounted directly over the doorway. The interior lighting is mainly fluorescent with the occasional incandescent fixture in closets. There are exit signs at every exit.</p> <p>The exterior lighting appeared to be in good condition. The exit signs were operational.</p>	Good
	Communications & Security	<p>A Gemini security system is currently installed. Motion detectors are installed in interior areas and security cameras are installed throughout the interior of the building and strategically on exterior corners. The facility appears to have wireless routers installed in the ceiling throughout the building. A network rack consisting of routers and switches is located in the intermediate distribution frame room 504 and was not accessible.</p> <p>The system appeared to be in good condition. No damaged security panels or cameras were observed.</p>	Good

**Mechanical/HVAC System Deficiency Examples**



## **Kealing 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. Repaint all lintels over the exterior windows and doors if rusted and peeling.
2. Check and repair, if necessary, vertical expansion joints in the brick façade.

#### Mechanical/HVAC

1. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
2. Replace equipment that uses R-22 refrigerant.

#### Electrical

1. Verify all exit signs are in operable condition.

### **Administration and Classroom Building Recommendations**

#### Exterior

1. Touch-up paint on exterior doors and frames.
2. Repair the clearstory and green house windows sun film.

#### Stairs

1. Replace center stair rubber covering with new covering.

#### Interior Finishes

1. Replace ceiling tiles as needed especially in room 120.

#### Plumbing

1. Repair or replace the non-functional hand sink in the male restroom on the first floor as needed.
2. Repair or replace deteriorating splash guard in female restroom on the first floor.
3. Continue preventive maintenance on aged plumbing fixtures and/or begin planning for replacement of the fixtures in the future as they continue to age.
4. Further investigate the drain issues in the courtyard area between Building B and Building A and adjacent to the MAINMECH room. Determine if the drains are sized properly and if the area is graded properly to promote drainage.

#### Mechanical/HVAC

1. Repair or replace any damaged or missing piping insulation as needed at all facilities.
2. Repair any observed leaks to prevent water damage to the asset, its piping, support beams, or any other sub-assets. Once leaks are addressed in all facilities, repair or replace any water-damaged components as needed.
3. Begin planning for replacing aged roof top and indoor AHUs.
4. Replace classroom units that are considered life safety issues because they are suspended above the floor with limited access.
5. Further investigate whether or not the cooling tower system is undersized.
6. Further investigate the reason for having temperature regulation issues in classroom 104.

## **Cafeteria, Gymnasium, and Auditorium Recommendations**

### Exterior

1. Replace fogged single pane windows in cafeteria.
2. Repair rusted lintels over windows.

### Interior Construction

1. Refinish and touch up interior doors.

### Interior Finishes

1. Replace cracked and faded floor tile.

### Plumbing

1. Continue preventive maintenance on aged plumbing fixtures and/or begin planning for replacement of the fixtures in the future as they continue to age.
2. Repair male and female shower handles and any shower heads that are leaking.
3. Repair or replace corroded distribution hot water supply lines for the commercial kitchen hot water heater.

### Mechanical/HVAC

1. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Repair any observed leaks to prevent water damage to the asset, its piping, support beams, or any other sub-assets. Once leaks are addressed in all facilities, repair or replace any water-damaged components as needed.
4. Replace aged roof top and indoor AHUs.

### Electrical

1. Replace loading dock lighting and corrosion on electrical equipment enclosures.
2. Perform a security assessment to determine additional surveillance cameras.
3. Recoat electrical equipment observed to have excessive corrosion.

## CRAWL SPACE – Kealing MS – Administration and Classroom Building (BLDG-044A)

Building Purpose	Administration Offices and Classrooms
Inspection Date	August 9, 2016 (Morning)
Inspection Conditions	90°F - Sunny and dry

Revision Log		
Revision	Date	Summary of Content
00	8/8/16	Draft Issue
01	12/19/16	<a href="#">Added comments from CM Florence Rice as indicated on email dated 10/28/16. See page 2.</a>

### Crawl Space 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
<b>Soil, Drainage, Ventilation &amp; Access</b>	Soil Below Building, Site Drainage in Crawl Space	Soil below building was mostly dry except along the south perimeter wall the soil was saturated. The source of water could not be determined. Some shrinkage cracks were observed in the dry crawl space soil. Water was observed dripping from a chilled water return pipe and a puddle had formed in the soil below; it was not clear if puddle was due to a leaking pipe or condensation. Condensation was observed on pipes, which indicates ventilation may be inadequate. No evidence of a drainage system was observed. Grading below the building was generally flat.  Soil/Drainage deficiencies: <ul style="list-style-type: none"> <li>• Soil near south perimeter wall is saturated</li> <li>• Soil below pipe is wet</li> </ul>	Average
	Soil Retainers	N/A – No soil retainers or carton forms were present in the crawl space area observed.	N/A
	Areaways/Ventilation	The building did not have areaways. A fan ventilation system was observed in the crawl space, but it was not turned on or was not working. Areaway/ventilation deficiencies: <ul style="list-style-type: none"> <li>• Mechanical ventilation not working or not turned on</li> </ul>	Poor

	Access Hatches	Access to the crawl space was through a door in the main mechanical room. It was reported by AISD Construction Management staff that a new floor hatch was added during the Summer of 2016. No deficiencies were observed.	Good
<b>Exposed Structure</b>	Exposed Columns & Tops of Foundations	Exposed columns were located underneath interior grade beams throughout the crawl space. Columns were square in shape and some minor honeycombing at the corners was observed. Tops of spread footings were below grade and could not be observed.  Column/Foundation deficiencies: <ul style="list-style-type: none"> <li>• Minor honeycombing in columns</li> </ul>	Good
	Exposed Faces of Perimeter Walls / Grade Beams	Perimeter walls on a continuous strip footing enclosed the crawl space area. No deficiencies were observed in the walls. Footings were below grade and could not be observed.	Good
	Exposed Portions of Suspended Floor Beams Above	Exterior and interior suspended floor beams were observed. No deficiencies were observed.	Good
	Underside of Suspended Floor Slabs Above	A cast-in-place pan joist slab system was observed under the classrooms and administration offices. Some minor honeycombing was observed but no major deficiencies were noted.  Slab deficiencies: <ul style="list-style-type: none"> <li>• Minor honeycombing in pan joint webs</li> </ul>	Good
<b>Pipes, Ducts, Equipment &amp; Fireproofing</b>	Suspended Pipes & Hangers	Suspended pipes (PVC and cast iron) under the building were observed. Some hangers were rusted. At one location a PVC pipe turned down and went into the ground. A puddle had formed in the soil below a chilled water return pipe but it was not clear whether water was from a pipe leak or condensation.  Pipe deficiencies: <ul style="list-style-type: none"> <li>• Rusted hangers</li> <li>• Water accumulated below chilled water return pipe may indicate a pipe leak</li> </ul>	Good
	Exposed Ductwork	N/A – No exposed mechanical ductwork was present in the crawl space area observed.	N/A
	MEP Equipment	N/A – No MEP equipment was present in the crawl space area observed.	N/A
	Spray Fireproofing/ Insulation	N/A – No spray fireproofing or insulation was present in the crawl space area observed.	N/A

### Crawl Space Deficiency Examples

#### Soil, Drainage, Ventilation & Access



Wet soil along south perimeter wall



Ventilation fan turned off/not working



Ponding water from condensation dripping from pipe above

#### Exposed Structure



Minor honeycombing/spalling at corners of column



Minor honeycombing on pan joint web

#### Pipes, Ducts, Equipment & Fireproofing



Rusted hangers for suspended pipes



PVC pipe and old cast iron pipe into ground

## CRAWL SPACE – Kealing MS – Gymnasium and Auditorium Building (BLDG-044B)

Building Purpose	Gymnasium, Cafeteria, Auditorium, Band Hall and Choir
Inspection Date	August 9, 2016 (Morning)
Inspection Conditions	90°F - Sunny and dry

### Crawl Space 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
<b>Soil, Drainage, Ventilation &amp; Access</b>	Soil Below Building, Site Drainage in Crawl Space	Soil below building was dry. A concrete pit was observed in the crawl space; the pit did not appear in use but could have been used to hold a sump at one time or could have been part of an abandoned drainage system (we were unable to determine from the existing plans the intended use for the pit). No other evidence of a drainage system was observed. Grading below the building was generally flat.  Soil/Drainage deficiencies: <ul style="list-style-type: none"> <li>• None observed</li> </ul>	Good
	Soil Retainers	N/A – No soil retainers or carton forms were visible in the crawl space area observed.	N/A
	Areaways/Ventilation	Building B did not have areaways.  A working fan ventilation system was observed in the crawl space. No deficiencies were observed.	Good
	Access Hatches	Access was through a door across the hall from the Orchestra Room, and down steep steps. No deficiencies were observed.	Good
<b>Exposed Structure</b>	Exposed Columns & Tops of Foundations	Foundations were below ground and could not be observed. Exposed columns were located underneath interior grade beams throughout the crawl space. Columns looked good; no deficiencies were observed.	Good
	Exposed Faces of Perimeter Walls / Grade Beams	Perimeter walls on continuous strip footings surrounded the crawl space. No wall deficiencies were observed.	Good

	Exposed Portions of Suspended Floor Beams Above	Exterior and interior suspended floor beams were observed. Beam deficiencies. <ul style="list-style-type: none"> <li>Minor honeycombing on interior beam</li> </ul>	Good
	Underside of Suspended Floor Slabs Above	Slab over the crawl space consisted of a cast-in-place pan joist system. Slab deficiencies. <ul style="list-style-type: none"> <li>Minor spalling on pan joist webs</li> </ul>	Good
<b>Pipes, Ducts, Equipment &amp; Fireproofing</b>	Suspended Pipes & Hangers	Suspended pipes (PVC and cast iron) under the building were observed. Pipe deficiencies: <ul style="list-style-type: none"> <li>Rusted hangers</li> <li>Minor rust on pipes</li> <li>One broken hanger with pipe dropped to ground</li> </ul>	Average
	Exposed Ductwork	N/A – No exposed ductwork was present in the crawl space area observed.	N/A
	MEP Equipment	N/A – No MEP equipment was present in the crawl space area observed.	N/A
	Spray Fireproofing/ Insulation	N/A – No spray fireproofing or insulation was present in the crawl space area observed.	N/A

**Crawl Space Deficiency Examples**

Soil, Drainage, Ventilation & Access



Square hole observed in soil

Exposed Structure



Minor spalling on webs of pan joists

Pipes, Ducts, Equipment & Fireproofing



Rusted hangers for suspended pipes



Pipe lying on ground due to broken pipe hanger, pipe is rusted

## CRAWL SPACE – Kealing MS – Classroom Building, BLDG-044C

---

Building Purpose	Gymnasium, Cafeteria, Theater, Band Hall, and Choir
Inspection Date	August 9, 2016 (Morning)
Inspection Conditions	90°F - Sunny and dry

### **Crawl Space System Deficiency Overview**

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: Based on the existing available plans, the Classroom Building Addition built in 2006 has a concrete foundation with suspended floor framing and precast hollow-core floor panels over a crawl space. Access points for the crawl space were not discernible on the existing plans, and per the facility interview notes the crawl space access point was not readily known. We spoke with a custodian at the site and he was also unable to direct us to the access point. As such, the crawl space under Building-044C could not be observed.

## Kealing MS – Campus Summary of Crawl Space 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.

### **Administration and Classroom Building, BLDG-044A Recommendations**

#### Soil, Drainage, Ventilation & Access

1. Investigate water infiltration along south wall and remedy.
2. Determine whether ventilation fans are functional; turn fans on if operational or repair/replace if not.
3. Investigate pipe causing puddle; if leaking repair as needed.

#### Pipes, Ducts, Equipment & Fireproofing

1. Replace rusted pipe hangers as needed.

### **Gymnasium and Auditorium Building, BLDG-044B Recommendations**

#### Pipes, Ducts, Equipment & Fireproofing

1. Replace rusted pipe hangers as needed and repair/re-suspend pipe on ground.
2. Replace rusted pipe hangers as needed.

### **Classroom Building, BLDG-044C Recommendations**

Crawl space was not accessible.

APPROXIMATE LIMITS OF CRAWLSPACE OBSERVED DURING SITE VISIT

APPROXIMATE LIMITS OF CRAWLSPACE PER AVAILABLE PLANS AND SITE OBSERVATIONS

Deficiencies found in this location:

- 1) Saturated soil near south perimeter wall
- 2) Water dripping from pipe and puddle below (cause unknown)
- 3) Mechanical ventilation is inoperable or turned off
- 4) Minor honeycombing on columns and pan joist webs
- 5) Rusted pipe hangers

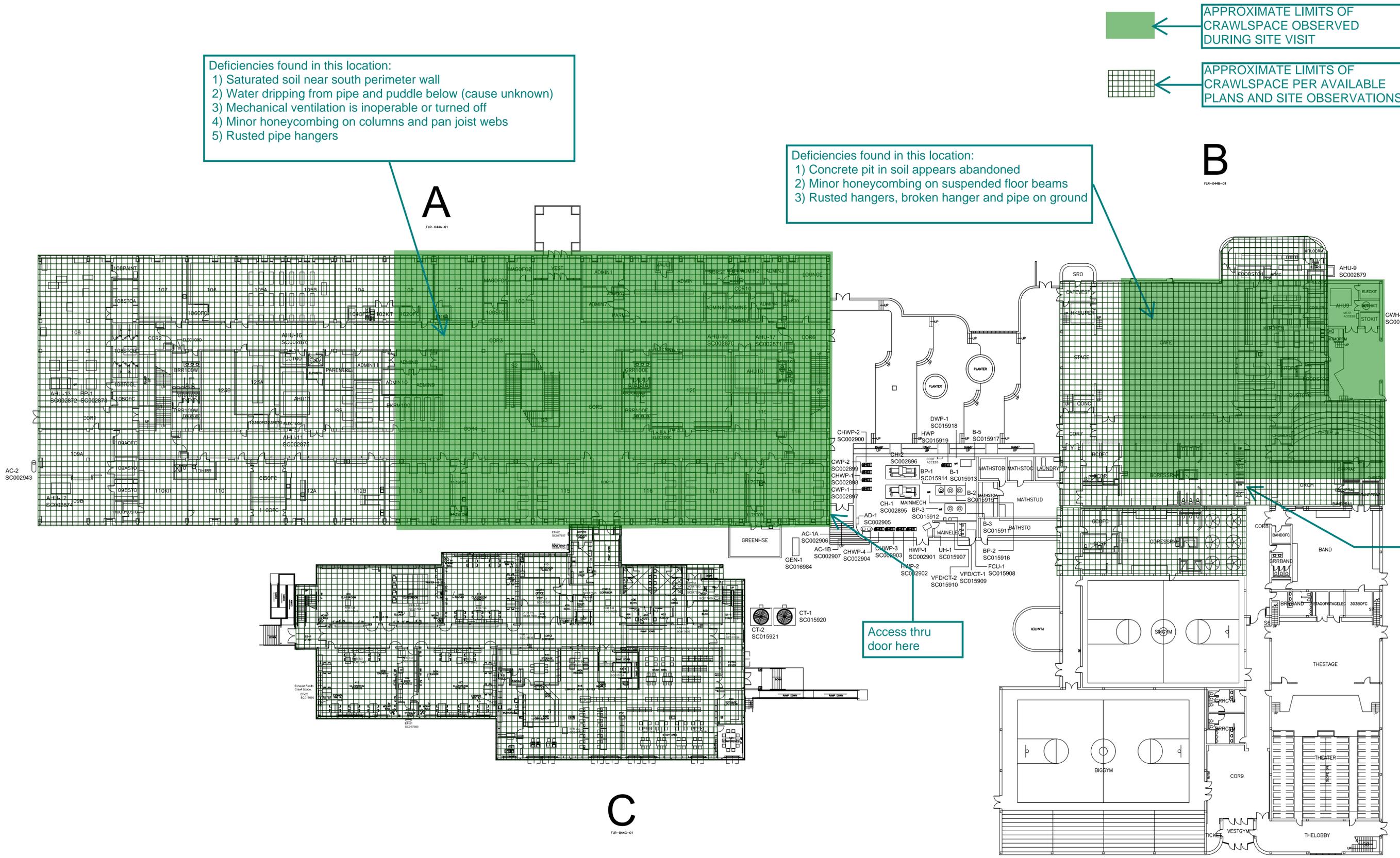
Deficiencies found in this location:

- 1) Concrete pit in soil appears abandoned
- 2) Minor honeycombing on suspended floor beams
- 3) Rusted hangers, broken hanger and pipe on ground

A  
FLR-044-01

B  
FLR-048-01

C  
FLR-044C-01



Access thru door here

Access thru door here



KEALING MIDDLE SCHOOL

1607 Pennsylvania Ave. Austin, Texas

FLOOR PLAN 1ST FLOOR

APPROVALS		
DRAWN	CHECKED	APPROVED
J.R.		
10/17/13		
DWG: 044-FLR-01		SHEET
DRAWING SCALE		
1/32" = 1'-0"		1 OF 2

# Kealing MS Site Summary

## Site/Civil Assessment

Address	1607 Pennsylvania Ave. Austin, TX 78702
Number of Permanent Campus Facilities	3
Original Year of Construction	1986
Total Campus Area	20 acres
Data Collection Method	Site Visit
Site Visit/Assessor	1/12/2017 / C. Smith



### Introduction

The Kealing MS campus is located at 1607 Pennsylvania Ave. in Austin, Texas. Kealing MS was established in 1986, and consists of three buildings. The main building contains the administrative offices, and classrooms. The second building contains the cafeteria and the gym, and the third building contains classrooms.

### Development Information

Watershed	Boggy Creek
Total Impervious Cover	61 %
Allowable Impervious Cover	65 %
Barton Spring Recharge Zone	No

Data from "AISD District Wide Impervious Cover Simplified 12-1-16" spreadsheet, Prepared by Faye Kazi/Civiltude, on December 1, 2016.

## Parking and Drives

Parking and Drives	Configuration	Size (SF)
Visitor Parking	7 CB 2 HC	2,300
Staff Parking	143 CB 4 HC	69,000
Student Parking	No	-
Parent Drop Off	No	-
Service / Mechanical Yard	Yes	5,000
Bus Drop-Off Area	Yes	5,000



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\_Kealing\_MS\_Site\_Civil\_Exhibit for additional information.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Site Improvements	Roadways	<p>The bus lane is located on Pennsylvania Ave. in front of the building and is considered a city street. When not in use, it is used as handicap parking. The parent pickup area is located on the east side of the school on Salina St. The driveway located on the west side of the school has alligator cracking with patches in various places. The driveway leading from the west parking lot to the back of school has longitudinal cracking.</p> <p>Roadway Deficiencies:</p> <ul style="list-style-type: none"> <li>Longitudinal cracking and alligator cracking in driveways</li> <li>Streets being used as bus and parent drop-off/pick-up areas causing traffic issues.</li> </ul>	Average
	Parking Lots	<p>The visitor parking lot is located on the north side of the school. The lot has minimal cracking and sealcoat is fading.</p> <p>The west side staff parking lot has debris buildup along the west side. Lot has block cracking and moderate raveling throughout. Most parking stops are either broken or missing.</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>The south staff parking lot in the rear has a small area with alligator cracking in the middle. Otherwise this lot is in good condition.</p> <p>The southeast parking lot has minor cracking and raveling on west side.</p> <p>Parking Lot Deficiencies:</p> <ul style="list-style-type: none"> <li>• Debris buildup in staff parking</li> <li>• Cracks and surface raveling</li> </ul>	
	Pedestrian Paving	<p>Walkway leading to west staff parking lot has a patch that is sunken 1"-2" below walkway (tripping hazard). Bricks have been removed from walkway on northeast side of school. Two dumpsters are also obstructing walk paths to access this area from front of school.</p> <p>Pedestrian Paving Deficiencies:</p> <ul style="list-style-type: none"> <li>• Walkway patch sinking,</li> </ul>	Poor
	Site Development	<p>Retaining walls in front of school are not high enough to keep gravel from washing onto sidewalks and visitor parking lot. Dumpsters are obstructing walk paths.</p> <p>Site Development Deficiencies:</p> <ul style="list-style-type: none"> <li>• Dumpster location</li> <li>• Gravel spilling onto sidewalks and parking lot</li> </ul>	Average
	Site Drainage	<p>No downspouts observed on exterior of school. Downspouts in courtyard go into underground drainage system. Various areas are showing signs of water pooling against school. Areas between building A and C are showing signs of erosion. Ground is graded to flow towards building C.</p> <p>Site Drainage Deficiencies:</p> <ul style="list-style-type: none"> <li>• Poor drainage in between buildings A &amp; C</li> </ul>	Average,
	Courtyards	<p>The interior courtyard consists of 5 concrete levels. The concrete showed minimal signs of aging with a few small cracks. Each level has 2-3 drains. Each level appears to drain well with some drains covered with debris. Sand bags are piled against the southeast corner of courtyard. Principal noted that under intense rains this area will fill causing the school to flood. Some drain grates had small openings to allow water to flow through.</p> <p>Courtyard Deficiencies:</p> <ul style="list-style-type: none"> <li>• Flooding on southeast corner</li> <li>• Drain openings</li> </ul>	Average
	Landscaping	<p>The front of school is lined with various trees and bushes. The west side of the school has a garden with various cinder block planters. There is a large hole</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		from where a tree was removed near the staff parking lot.  Landscaping Deficiencies: <ul style="list-style-type: none"> <li>Hole from tree removal</li> </ul>	
Site Utilities	Water Supply	Garden on west side has no irrigation system. Area being watered by makeshift system fed from faucet.  Water Supply Deficiencies: <ul style="list-style-type: none"> <li>Garden irrigation system</li> </ul>	Average
	Sanitary Sewer	No grease sampling enclosure observed	Average
	Storm Sewer	There is an underground drainage system that collects storm water via area inlets or curb inlets.	Average
	Detention Pond	There is a rectangular detention pond on the south east side of the campus. The drain box has a warped grate and the east side of pond is eroding away.  Detention Pond Deficiencies: <ul style="list-style-type: none"> <li>Warped grate</li> <li>Erosion on east side</li> </ul>	Average
	Other Site Mechanical Utilities	Exterior lighting is mounted on the exterior of the building. Both staff parking lots have light posts in the center.	Good

### Site Improvement Deficiency Examples

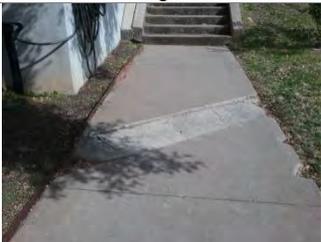
#### Roadways

		
Alligator cracking in driveway 1	Longitudinal cracking in driveway 2	Cracking along pavement seam

### Parking Lots

		
Dirt collecting at end of parking lot 1	Parking stops broken or missing	Minor raveling in back parking lot

### Pedestrian Paving

		
Sunken walkway patch	Dumpster obstructing walkway	Bricks removed from walkway

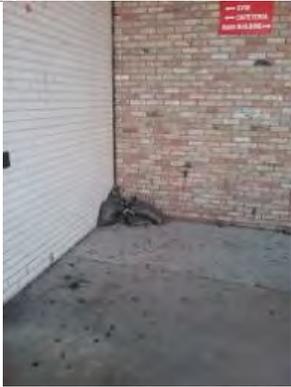
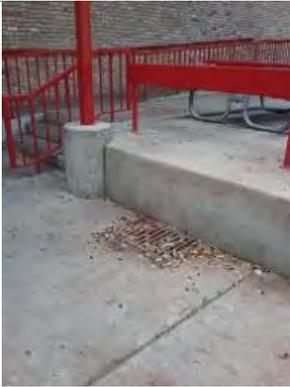
### Site Development

		
Dumpster without concrete pad	Gravel spilling onto walkway	Gravel spilling onto parking lot

### Site Drainage


Poor drainage between buildings

Courtyards

		
<p>Sandbags used during heavy rain storms</p>	<p>Inlets to be maintained</p>	<p>Maintain inlet, remove debris</p>

Landscaping

		
<p>Dirt and gravel in front of school</p>	<p>Garden</p>	<p>Hole from tree removal</p>

Site Utilities

		
<p>Garden irrigation</p>	<p>Warped grate on detention pond</p>	<p>Erosion of detention pond</p>

## Play Fields

Areas presented in table are approximate.

Playfields	Count	Size (SF)
Basketball Courts	-	-
Tennis Courts	3	20,000
Soccer/Multi-Purpose	1	30,000
Baseball Field	-	-
Bleacher Seating	-	-
Track	1	1000 LF
Green Space	-	-
Football Field	-	-
Playscapes	-	-



System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Playfields	Tennis Courts	Signs of water pooling in various spots and longitudinal cracking between courts.  Tennis Court Deficiencies: <ul style="list-style-type: none"> <li>• Longitudinal Cracking</li> <li>• Signs of water pooling</li> </ul>	Average
	Track	Track has many patches on all sides. Remaining track is showing large cracks and aging.  Track Deficiencies: <ul style="list-style-type: none"> <li>• Track has many patches</li> <li>• Large cracks</li> </ul>	Poor
	Soccer Field/ Football	Soccer field is worn down to dirt in the middle. Edges of playable field runs onto track. Field drains on the south side.  Soccer Field Deficiencies: <ul style="list-style-type: none"> <li>• No grass in the center</li> <li>• Field boundary runs onto track</li> </ul>	Poor
	Green Space	No observable greenspace associated with school. City park next to school with no clear boundary.	Average
	Playground Equipment	Playground equipment belongs to Kealing city park.	Average

## Playfield Deficiency Examples

### Tennis Courts



Longitudinal cracking

### Track



Soccer Field boundary extends onto track



Patches on track



Crack in track

### Soccer Field



Worn soccer field

## 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. Remove and patch cracked areas of asphalt pavement and apply crackseal.
2. Resurface asphalt roadways.

#### Parking Lots

1. Resurface asphalt parking lot west of school.
2. Repair and replace parking stops.
3. Add drain system to west parking lot.

#### Pedestrian Paving

1. Fix sunken patch, See Exhibit, Note 5.
2. Construct walkways on east side of school.

#### Site Development

1. Construct concrete approach pavement at dumpster on west side.
2. Raise containment walls in front of school to keep gravel off sidewalk.

#### Site Drainage

1. Regrade soil to allow proper drainage from space in between buildings A & C.
2. Construct downspouts that connect to underground drainage on exterior of building.

#### Courtyard

1. Regrade courtyard in southeast corner to allow proper drainage.
2. Replace drain grates that have small openings hindering drainage.
3. Unclog drains of debris.

#### Landscape

1. Fill in hole from tree removal on west side of school by staff parking lot.

#### Sanitary Sewer

1. Install the grease sampling enclosure.

#### Detention Pond

1. Fix grate that is warped.
2. Regrade and revegetate as needed to control erosion.

#### Tennis Courts

1. Replace center straps to nets.

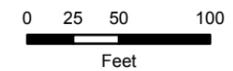
#### Track

1. Replace the track surface.
2. Extend track to allow room for soccer field.

Soccer/Football Field

1. Replace sod in center of field.

L:\AGE\Projects\INFRA\ISD\_Facilities\_Program\6.0-Reference\Map\GIS\Map\_Series\MiddleSchools\AISD\_FCA\_Kealing\_MS\_Site\_Civil.mxd



**Legend**

- ① Recommended Improvements
- Drainage Improvement
- Pavement Improvement
- Sidewalk Improvement

**NOTES:**

1. THERE IS RAVELING IN THIS AREA.
2. THERE ARE LONGITUDINAL CRACKS IN THIS AREA.
3. THERE IS ALLIGATOR CRACKING IN THIS AREA.
4. THERE IS A PATCH IN THIS AREA.
5. THE SIDEWALK IS BROKEN/HEAVING/SUNKEN IN.
6. THE SIDEWALK IS COVERED BY SEDIMENT.
7. BIKE RACK
8. THERE IS EVIDENCE OF PEST HOLES.
9. REGRADING IS NEEDED TO SLOPE AWAY FROM BUILDING.
10. THERE IS EROSION UP AGAINST THE BUILDING.
11. THIS AN AREA OF KNOWN FLOODING ISSUES. (OBSERVED OR REPORTED)
12. THE DRAINAGE IS NOT DRAINING AWAY FROM THE BUILDING/WALKING AREAS. SAND BAGS PILED IN CORNER.
13. THERE ARE LOW SPOTS THAT NEED TO BE FILLED IN.
14. THE AREA INLET NEEDS TO BE REGRADED TO MAINTAIN POSITIVE DRAINAGE.
15. THE DETENTION POND IS IN NEED OF A PERIMETER FENCE.
16. THERE IS NOT A CONCRETE PAD UNDER AND/OR IN FRONT OF THE DUMPSTERS.
17. THERE ARE CRACKS ON THE TENNIS COURTS.
18. THIS AREA NEEDS RESURFACING.
19. RESODDING IS NEEDED IN THIS AREA.
20. PARKING SPACE DIRECTLY IN FRONT OF DUMPSTER OBSTRUCTING ACCESS
21. BUS LANE IS USED AS HANDICAP PARKING OUTSIDE OF DROP OFF TIMES
22. MOON TOWER SUPPORT POLE
23. GRATES COVERED WITH DEBRIS
24. PARENT DROP OFF/PICK UP AREA CAUSING TRAFFIC ISSUES
25. CURB STOPS ARE MISSING
26. DETENTION POND IS ERODING AWAY
27. DRAIN GRATE IS WARPED
28. CURBS STOPS ARE BROKEN OR MISSING

Map Date: 2/21/2017



**Kealing MS**  
**1607 Pennsylvania Ave**

Imagery Source: Google/TNRIS 2016.