

## O. Henry Middle School Site Summary

|  |   |
|--|---|
| <b>Address</b>                               | 2610 W. 10 <sup>th</sup> Street<br>Austin, TX 78703 |
| <b>Number of Permanent Campus Facilities</b> | 1   |
| <b>Original Year of Construction</b>         | 1953  |
| <b>Total Campus Building Area (combined)</b> | 123,205 SF  |



### Introduction

The O. Henry Middle School campus is located at 2610 W. 10<sup>th</sup> Street in Austin, Texas. O. Henry Middle School was established in 1953, and consists of one permanent school building (BLDG-047A). This building includes the administration offices, classrooms, cafeteria, and gymnasiums with multiple courtyards. Various areas of the school were undergoing construction at the time of assessment. These areas included replacing the main gymnasium flooring, replacing the roof and air conditioning units above the 300-wing, renovation of the courtyards, the kitchen, and the administration office. Facility staff reported that the air conditioning units adjacent to the small gymnasium will be repaired this summer.

| <b>Meeting Log</b> |                               | <b>Revision Log</b> |             |   |
|--------------------|-------------------------------|---------------------|-------------|---|
| <b>Date</b>        | <b>Meeting</b>                | <b>Revision</b>     | <b>Date</b> | <b>Summary of Content</b>   |
| 6/28/16            | Interview                     | 00                  | 9/9/16      | Draft Issue   |
| 7/12/16 to 7/13/16 | Assessment                    | 01                  | 12/22/16    | Added comments from PM Andrew Miller as indicated on email dated 10/31/16. See pages 25-26. |
| 9/29/16            | Cluster Meeting<br>(Attended) |                     |             |   |
| 10/11/16           | Follow-Up                     |                     |             |   |

## Main School Building – BLDG-047A

|                          |   |  |
|--------------------------|---|--|
| Building Purpose         | Administration, Classrooms, Gymnasium, and Cafeteria      |  |
| Building Area            | 123,205 SF  |  |
| Inspection Date          | July 12-13, 2016  |  |
| Inspection Conditions    | July 12 - 101°F - Sunny<br>July 13 - 101°F - Partly 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   | <p>The exterior walls of O. Henry Middle School are faced with brick in a running bond with accents of soldier coursing. The double-height portion of the building is clad with flat metal wall panels.</p> <p>The exterior walls were observed to be in average condition with a few areas of damaged materials and discoloration. A portion of the exterior wall was damaged, exposing the waterproofing membrane beneath the surface on the north east side. A few broken corners of brick were observed throughout the building. The foundation wall near the exterior doors of corridor 3 was deformed. There was also a long hairline crack in the foundation wall running the length of the 700-wing. Spray painting on walls was observed outside the 600-wing. Discoloration was observed at the weep holes beneath windows on the north side of the 500-wing. It was reported that the administration offices, which was constructed at a different time than the rest of the facility, may have a foundation problem due to settling at a different rate than the main facility. Roaches and rats were reported throughout the facility, and an excessive quantity of roaches were observed during the assessment.</p> | Average                 |
|                 | Exterior Windows | The majority of the exterior windows are a system of aluminum-framed, double-pane windows oriented in horizontal bands. There are also some fixed translucent kalwall windows in aluminum frames.   | Average                 |

| System         | Subsystem      | Condition and Deficiency Overview  | System Condition Rating |
|----------------|----------------|--|-------------------------|
|                |                | <p>The window frames were in average condition, but no water damage was observed. It was reported that the windows along the south east side of the cafeteria and COR7 facing the courtyard suffer water intrusion during rain events. Many of the window frames were dirty. Condensation and fog were observed in some of the double pane windows, especially in the 100-wing in the south side classrooms. Many cracked or broken window panes were observed throughout the school. The construction manager on site reported that repairs to all broken panes are planned. An operable window in room 102 would not shut. It was reported that there are also window operations issues in the 100-wing facing the street, 500-wing facing the courtyard, and 600-wing facing the north side of the facility. The lintels outside the male locker room were rusting.</p>   |                         |
|                | Exterior Doors | <p>There is one main public entryway located at the northeast side of the building. These doors are glazed metal doors inserted into a metal storefront system. The remaining exterior doors are constructed similarly. There are a total of three metal overhead doors in the building, one interior to the kitchen, and two exterior doors.</p> <p>The exterior doors were observed to be in average condition. It was reported that the three exterior doors on the north side of the facility and adjacent to the main gymnasium and custodial office stick at times. Sticking was not observed during the assessment. In the 400-wing, a door had fabric stuffed between the door and the threshold. The exterior doors adjacent to room 601 were in poor condition as follows: the frame for the door glazing was damaged; the frame of one leaf had been replaced with a strip of wood; a centimeter-wide gap was observed between the doors when closed; the frame and glazing were scratched; and the single-pane glazing was fogged. Other doors throughout the school were scratched or slightly dented. The overhead rolling doors appeared to be in good operating condition, though the frame and lintel of the overhead rolling door is rusting on the north end of the 600-wing.</p> | Average                 |
| <b>Roofing</b> |                | <p>The majority of the roof is covered in a modified bitumen membrane. Above the classroom wings, the roof slopes to the interior and drains through interior roof drains. The roof area over the 300-wing was under construction for the installation of new RTUs (rooftop units) at the time of assessment and could not be assessed. The roof covering over the cafeteria, gymnasium, administration offices, 600-wing, COR7 and COR10 is built-up roofing system with granular topping.</p>  | Poor                    |

| System                       | Subsystem            | Condition and Deficiency Overview   | System Condition Rating |
|------------------------------|----------------------|---|-------------------------|
|                              |                      | The roof conditions ranged from good to failing. The modified bitumen roof was very aged, showing much of the black beneath the cracking top layer. Many areas of the roof were discolored, possibly from standing water, and the area around a couple of roof drains appeared to be improperly sloped. Many bubbles and folds were observed on the roof, which appeared to have resulted in gapping at sheet overlaps. The coatings at the top of the ridges were deteriorated. Rust stains on the edge fascia were also observed. The built-up roof was aged. Much of the tar beneath the granular topping was exposed. Roof leaks were reported over the administration offices, and the roof was extremely worn in many areas. Above the administration offices, the membrane was worn through such that the roofing insulation was clearly visible in many spots. Displaced gravel was observed in other areas as well. The built-up roof over the cafeteria was constructed in 2004 and appeared in good condition. |                         |
| <b>Interior Construction</b> | Interior Walls       | <p>The interior walls are constructed of CMU (concrete masonry units) with ceramic-glazed blocks as a low wainscot. The shower room walls are constructed of ceramic-faced masonry units. There are isolated areas of metal stud and gypsum board walls.</p> <p>The interior walls were in good condition with a few isolated areas needing repair. In the 100-wing classrooms, a mildew odor was observed. In the 700-wing, a fist-sized hole at the base of the drywall partition was observed. Two corners in the shower room walls were severely damaged with cracked and missing ceramic wall tile, exposing the structure below. A steel column imbedded into the load-bearing walls was observed to be rusting.</p>  | Good                    |
|                              | Interior Doors       | <p>The interior doors are a mixture of metal doors with or without narrow lites and wooden doors with or without door lites. The doors in the music wing are 48" wide, while the rest are 34" wide. There are also many wider metal doors accessing mechanical and electrical equipment rooms that are installed on 8" curbs. The hardware ranges from lever pulls to knob pulls.</p> <p>Most of the doors were in good condition with very little wear and tear. However, the music hall doors were scratched, and the wooden door frames in the kitchen were very worn and damaged. The wooden door leading to the small gymnasium was damaged and was missing strips of wood veneer finish.</p>  | Good                    |
|                              | Interior Specialties | <p>The lockers in the school are recessed metal lockers, lining the majority of corridors. The lockers in the locker rooms are prefinished metal, both fixed and rolling.</p> <p>The lockers in the corridors were in average condition.</p>  | Average                 |

| System                   | Subsystem               | Condition and Deficiency Overview  | System Condition Rating |
|--------------------------|-------------------------|--|-------------------------|
|                          |                         | About 10% of the corridor lockers were screwed shut and inoperable. Some of the surface paint was scratched. The locker room lockers were in good condition.   |                         |
| <b>Stairs</b>            | Exterior Stairs         | <p>There are various exterior stairs and ramps providing access to side entrances. They are constructed of concrete with metal handrails.</p> <p>The stairs were in average condition with a few areas in need of repair. One concrete corner of a stair tread and riser had spalling concrete, and hairline cracks were observed at the perimeter concrete foundation of the stairway.</p>  | Average                 |
|                          | Interior Stairs         | <p>There is a series of ramps throughout the building and a set of wooden stairs backstage. The ramps are finished in vinyl composition tile with painted metal handrails.</p> <p>Both the ramps and the stage stairs were observed to be in good condition with little sign of wear. However, the paint on the metal handrails of the ramps was peeling.</p>  | Good                    |
| <b>Interior Finishes</b> | Interior Wall Finishes  | <p>The wall finishes are a mixture of painted CMU and painted gypsum board. There are wall-mounted acoustical panels in the music hall. The shower rooms near the small gymnasium are constructed of ceramic-faced masonry units.</p> <p>The interior wall finishes were observed to be in average condition. The finishes in the 500-wing appeared to be older than those of the 100- and 400-wing as they showed more signs of wear. A few spots of dented gypsum board were observed, as were a few areas of peeled paint. The acoustical panels appeared to be in excellent condition. The wooden frame around the lunch line kitchen window was scratched. The wall finishes in the showers adjacent to the small gymnasium were in poor condition as they were stained and exhibited organic growth.</p> | Average                 |
|                          | Interior Floor Finishes | <p>The interior floor finishes include vinyl composition tile (VCT) with either rubber base or ceramic-faced masonry base. The restroom floors are ceramic tile with a tile base. The library is finished in carpet. The kitchen and large gymnasium wing are currently under construction, so the floors were not assessed. The small gymnasium has wood flooring with metal wall base. The locker rooms have concrete floors with epoxy coating. The shower rooms have ceramic tile flooring.</p>  | Average                 |

| System | Subsystem                 | Condition and Deficiency Overview  | System Condition Rating |
|--------|---------------------------|--|-------------------------|
|        |                           | <p>The floor finishes were observed to be in average condition. The flooring in the administration offices was being repaired at the time of the assessment possibly due to the foundation issue reported. Much of the floor was dirty, especially at the wall base edges and in corners. Many of the floor tiles were dented or cracked. A few areas were missing rubber base. The classroom floors in the 100-wing were scratched.</p> <p>A large puddle of water was observed in the corridor between rooms 206 and 208 due to a major ceiling leak. Some floor tiles under the puddle were beginning to fade.</p> <p>In the 400-wing, there was cracked VCT that has been sealed with wax. The restrooms floors appeared to be in good condition with only a few spots of missing ceramic tile wall base. The floor finishes in the 500-wing exhibited more evidence of damage than those of the 100- and 400-wing. Areas of VCT were broken, and some had rust-colored stains where metal cabinetry once sat. Cracks and floor level problems were reported, and a slightly sunken area of the floor and tile was observed at the double doors leading to the 700-wing. The 600- and 700-wing corridors are bracketed with floor cracks at the corridor transition points. A few stains were observed on the library carpet. The metal wall base in the small gymnasium is discolored with wood varnish. The ceramic flooring in the shower rooms were stained from mineral deposits and organic growth. It was reported that the kitchen floors have cracks, which cause the facility to receive penalties. No cracks were observed in the material, but the floor was observed to be covered with debris.</p> |                         |
|        | Interior Ceiling Finishes | <p>The majority of the ceilings are ACT (acoustic ceiling tile) and the restroom ceilings are painted drywall. The 600-wing ceiling has exposed structure and fibrous ceiling panels. The library ceiling is comprised of ACT and gypsum board. The administration offices and cafeteria have ACT. The kitchen ceiling is in the process of being replaced. The main gymnasium is in the process of abatement and is closed, but the ceiling in the small gymnasium and adjacent corridors is wood wool panels. The locker and shower rooms have painted gypsum board ceilings. The exterior walkways are finished with painted gypsum board.</p> <p>The ceilings were in average condition with some areas</p>  | Average                 |

| System           | Subsystem           | Condition and Deficiency Overview  | System Condition Rating |
|------------------|---------------------|--|-------------------------|
|                  |                     | <p>of heavy damage and some areas in good condition. Water-saturated ceiling tile material was scattered on the floor beneath actively dripping ductwork in the corridor between rooms 206 and 208. Some of the ceiling tiles near the exterior doors had pock marks from sharp objects thrown into the material. The ceiling panels on the 600-wing were heavily damaged; almost all of the panels were discolored and torn. The library and cafeteria ceilings were in excellent condition. The ACTs in the administration offices were significantly damaged. Water spots were observed in many private offices. The finish on the header leading to backstage was chipped. Damage was observed around every ceiling tee in the small gymnasium wing corridors. The small gymnasium's lights were shut off for construction during assessment, so the condition of the high ceiling could not be properly assessed. The exterior walkway canopy was in good condition, only showing hairline cracks in the material.</p>  |                         |
| <b>Conveying</b> | System not present. |  | N/A                     |
| <b>Plumbing</b>  | Plumbing Fixtures   | <p>The building has public male and female restrooms as well as separate staff restrooms located near the administration areas. In general, the hand sinks, urinals, and toilets are manually operated vitreous china. Urinals in the male restrooms are wall-hung. Service sinks are located in the janitorial closets. Toilets in the male and female restrooms are floor-mounted.</p> <p>The plumbing fixtures were observed to be in poor condition. Various faucets throughout the building will not shut off automatically as intended. The overall condition of the showers in the female locker room appears to be very poor.</p> <p>One of the faucets in the male locker room was missing a nozzle and was corroded, although still functional. One urinal in the male locker room leaked when it was flushed. Some of the shower heads were missing in the male locker room.</p> <p>One toilet in the female locker room did not flush properly. Showers were extremely dirty and showed excessive wear and tear. Some shower heads continued to leak when turned off and one shower did not have any water flow.</p> <p>A faucet in room 607 was observed to be extremely rusty, but functional.</p> | Poor                    |

| System                 | Subsystem   | Condition and Deficiency Overview  | System Condition Rating |         |
|------------------------|---|--|-------------------------|---------|
|                        |   | <p>Various faucets in the 500-wing did not have any water flow. One faucet leaked out of the side of the head when the valve was fully open. Only one faucet had sufficient water flow in rooms 403 and 405.</p> <p>One faucet in GRR300 did not have water flow. The faucet in BRR500 did not shut off automatically and continued to run. One faucet in GRR200 leaked constantly, while the other was not functional.</p>                            |                         |         |
|                        | Domestic Water Distribution   | <p>There are two gas water heaters located in the kitchen area that service the plumbing fixtures in the building. Most bathroom sinks do not have hot water.</p> <p>The two water heaters in this building were in poor condition and past their typical design service life. The water heaters looked aged and out of date. The distribution piping is also in poor condition. Many of the pipes showed signs of corrosion and poor maintenance.</p> | Poor                    |         |
|                        | Other Plumbing  | <p>Roof drains with metal grate covers are situated at different locations throughout the building. They are in average condition.</p> <p>Roof drains appeared to be corroded and aged, but functional.</p>  | Average                 |         |
| <b>Mechanical/HVAC</b> | <p>The HVAC (heating, ventilating, and air conditioning) system is mainly composed of indoor AHUs (air handling units), packaged units, heat recovery units, a water tower, an air-cooled chiller, and split systems with air-cooled condenser units.</p> <p>The HVAC system was observed to be in an average condition. There were several units on the roof and throughout the building that looked to be aged and corroded. The system was observed to be in average condition because although the majority of the units and distribution piping were old, they were still functional. Insulation and sheet metal coating were completely missing for one section of the loop water return line located at A-36 above a classroom. This pipe is completely exposed to the environment. The large AC unit located at A-40 appeared to be aged and was in bad condition. The units on the roof were observed to be in worse condition overall than the units within the building.</p> <p>There were heat recovery units and air handlers on the roof that appeared to be abandoned or in need of replacement above the 200-, 400-, 500-, 600-, and 700-wings as well as between the cafeteria and gymnasium.</p> <p>There was a large amount of water leakage in the 200-wing across from room 209. The AHUs in the northwest mezzanine were under repair. The boilers in the southwest mezzanine appeared to be near their typical design service life. Insulation at the chilled water pump was torn.</p> <p>Many of the exhaust fans on the roof have damaged hoods. Several hoods on the roof were observed to have hail damage and bent supports.</p> <p>Several condenser units located at A-14 and A-20 above the administration offices</p> |  |                         | Average |

| System                 | Subsystem                       | Condition and Deficiency Overview   | System Condition Rating |
|------------------------|---------------------------------|---|-------------------------|
|                        |                                 | were damaged on their exterior frames. Water was condensing on many of the refrigerant lines. Water leakage was coming from RTU-1 at A-24 above the cafeteria.  |                         |
| <b>Fire Protection</b> | Fire Alarm                      | <p>The building has a fire alarm system that consists of alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is an addressable system, with a Silent Knight 5820XL fire alarm control panel.</p> <p>The fire alarm system was observed to be in good condition.</p>  | Good                    |
|                        | Fire Protection/<br>Suppression | <p>The building is protected by portable fire extinguishers placed throughout the facility. The kitchen hoods were in good condition.</p> <p>All observed portable fire extinguishers were in good condition and had inspection tags dated within the last year.</p>  | Average                 |
| <b>Electrical</b>      | Electrical Distribution         | <p>The electrical service enters the building at the 208/120-volt 3000-amp main switchboard located in Electrical Room #3 via underground service from a pad-mounted utility company transformer. The main switchboard feeds all 208/120-volt equipment throughout the campus. The building does not have a lightning protection system. There is no main breaker for the main switchboard, so incoming power cannot be de-energized.</p> <p>The electrical distribution equipment was in poor condition. Electrical distribution system upgrades took place in 1985, 1999, and 2006; however, approximately 60% of the panels and switchgear appeared to be from the original construction and are still active. A majority of the original construction panels appeared to have corrosion. There were also screws missing from the housing enclosure of some of the units. Two panelboards were missing breaker covers, and the bussing was exposed behind the breaker board. This condition could be considered a life safety hazard, and breaker covers should be installed immediately. Facility staff specifically reported that two panels in the kitchen, a panel in the small gymnasium, panels in the 100- and 300-wings, and panels in the coaches' offices are outdated. However, there is no panel in Corr 300; it is actually in Corr 500. Furthermore, no panels were observed in the female coach's office.</p> | Poor                    |

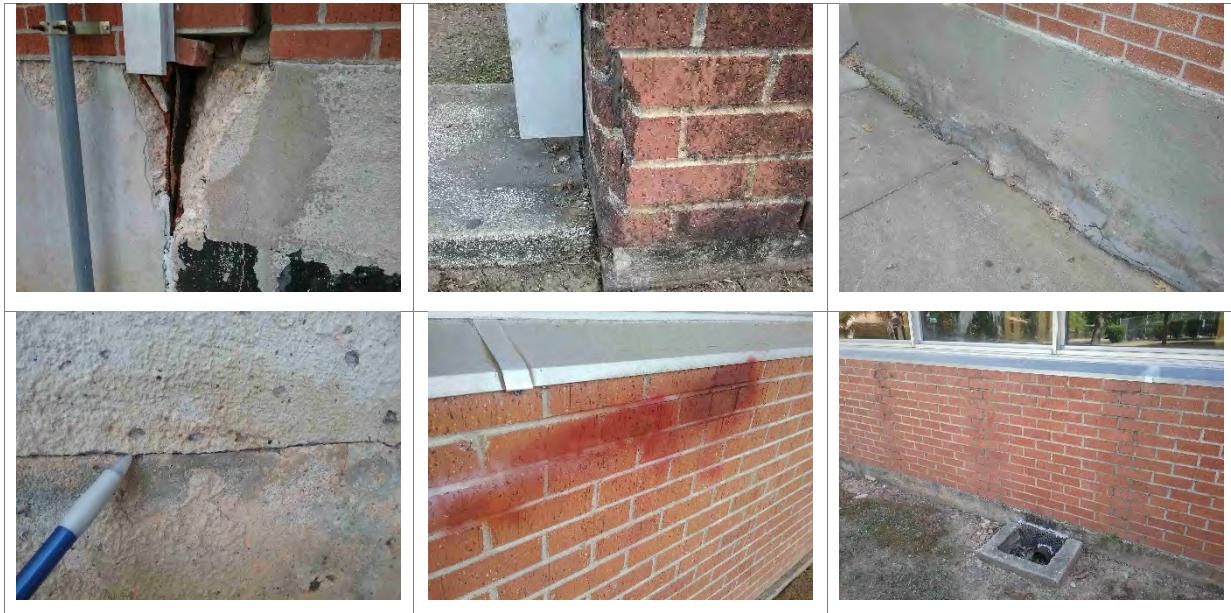
| System | Subsystem | Condition and Deficiency Overview   | System Condition Rating |
|--------|-----------|---|-------------------------|
|        |           | <p>Most of the disconnect switches on the roof appeared to be severely corroded. There were also some conduits that appeared to have severe corrosion, and one conduit appeared to be cut off and had exposed conductors (life safety concern).</p>   |                         |
|        | Lighting  | <p>The 100-wing consists of surface-mounted 2x4 fluorescent fixtures in the corridor areas and surface-mounted 1x4 fluorescents in restrooms. Classrooms have 1x4 pendant fixtures, which appear to have been installed recently. This wing does not have occupancy sensors in classrooms and in the corridor areas. Emergency lighting in this wing is accomplished by battery packs in designated corridor fixtures.</p> <p>There are steel exit signs throughout the campus.</p> <p>The 200-wing has 2x4 fluorescent recessed fixtures in the corridor areas and in classrooms. Most areas do not have occupancy sensors in this wing, with the exception of some rooms. Emergency lighting is accomplished with battery packs in designated corridor fixtures.</p> <p>The 300-wing consists of surface-mounted 2x4 fluorescents in corridor areas and surface-mounted 1x4 fluorescents in the restrooms. Classrooms have 1x4 pendant parabolics, similar to the 100-wing. This wing has no occupancy sensors in classrooms or in the corridors. There was active construction in this wing at the time of the assessment for the removal of existing heat pumps in the classrooms and replacing with new RTU. It was reported that the existing lighting and all other electrical systems in this wing are remaining as is.</p> <p>The 400-wing lighting and lighting controls are similar to those in the 200-wing. The 500-wing lighting and lighting controls are similar to those in the 100-wing. COR 7 and COR 8 lighting and lighting controls are similar to those in the 200-wing.</p> <p>The 600-wing has surface-mounted 1x4 fluorescent wraparound fixtures in the choir rooms and recessed 2x4 lensed fixtures in general in the remaining areas of the wing. Some of the classrooms have the newer pendant fluorescent fixtures, similar to the 100-, 300-, and 500-wings. Restrooms have surface-mounted fluorescent wraparound fixtures and no occupancy sensors. Classrooms and corridors do not have occupancy sensors. There are also some dimmable incandescent downlights in the choir rooms. It was</p> | Average                 |

| System | Subsystem | Condition and Deficiency Overview  | System Condition Rating |
|--------|-----------|--|-------------------------|
|        |           | <p>reported that rooms 607 and 609 have outdated lighting; however, the lighting was being upgraded in these rooms at the time of the assessment.</p> <p>COR 10 lighting and lighting controls are similar to those in the 200-wing.</p> <p>The 700-wing has mostly 2x4 fluorescent recessed fixtures. There are high ceilings in these classrooms, as this is the choir wing. There are fluorescent 2x4 fixtures in the offices, instrument storage rooms, and practice rooms. Classrooms do not have occupancy sensors; however, some of the teacher's offices in this wing do.</p> <p>Library lighting consists of 2x4 recessed fluorescent fixtures in the library administration areas and indirect fluorescent pendant fixtures in the main reading areas. There are no occupancy sensors in the main reading areas; however, there are occupancy sensors in some of the library administration spaces. Emergency lighting is accomplished by integral battery packs in the 2x4 fixtures.</p> <p>School front office administration areas and the kitchen and cafeteria areas consist mostly of 2x4 fluorescent fixtures. Some rooms have occupancy sensors, and some rooms do not. The stage lighting is very dated, and all stage dimming is accomplished manually via a rotary dimmer bank located on stage.</p> <p>It was reported that lighting in the big and small gymnasiums is outdated and difficult to access for light bulb changes. However, lighting in these spaces consists of fluorescent strip lights with wire guard, installed as high as possible. The lighting in these spaces appears to be recently installed and in good condition, contrary to the interview notes. The issue of access to change light bulbs is still valid, because the fixtures are installed close to the structure and cannot be accessed by a ladder. Lighting in the locker rooms is surface-mounted lensed fluorescent fixtures. The coach's office areas have 2x4 fluorescent recessed fixtures. There are occupancy sensors in the gymnasium areas; however, there are no occupancy sensors in the coaches' office areas or the locker rooms.</p> <p>It was reported that the crawlspace at the facility has no lighting.</p> <p>Exterior lighting in general is HID (high-intensity</p> |                         |

| System | Subsystem                 | Condition and Deficiency Overview  | System Condition Rating |
|--------|---------------------------|--|-------------------------|
|        |                           | <p>discharge), mostly building-mounted fixtures. The east side parking lot (teacher and visitor parking) has three twin-headed pole-mounted light fixtures. The west side parking lot (school administration parking) has one twin-headed pole-mounted area light fixture. There are some LED (light-emitting diode) building-mounted light fixtures as well. Football/track field and tennis courts do not have any lighting.</p> <p>The interior lighting for the building was observed to be in average condition. Interior lighting fixtures were mostly functional, but approximately 15% appeared to have broken lenses and inconsistent color temperatures; approximately 5% were non-functional. The exterior lighting for the building was observed to be in poor condition. Majority of the exterior lighting fixtures appeared to be functional but have exceeded their typical design life. It was specifically reported that lighting along the north sides of the 600-wing, 400-wing and 200-wing, interior courtyard adjacent to room 701, and area adjacent to kitchen loading is too dim. Observed deficiencies included broken lenses, inconsistent color temperatures, non-functional fixtures, and fixtures that were reported to be too dim (possibly due to excessive voltage drop at the fixture or aged ballasts). Several exit signs appeared to be non-functional at the time of this assessment. Exterior lighting appeared to be photocell on/off; however, some fixtures were observed to be 'ON' during the daytime when there was plenty of sunshine. The facility appeared to lack general exterior lighting at the south, west and north sides of the school.</p> |                         |
|        | Communications & Security | Wi-Fi routers, security cameras, and card access at certain entrance doors are present at the facility. Communications, security, and public address systems, in general, appeared to be good condition.   | Good                    |

### Exterior System Deficiency Examples

#### Exterior Walls



#### Exterior Windows



**Exterior Doors****Roofing Deficiency Examples**

### Interior Construction Deficiency Examples

#### Interior Walls



#### Interior Doors



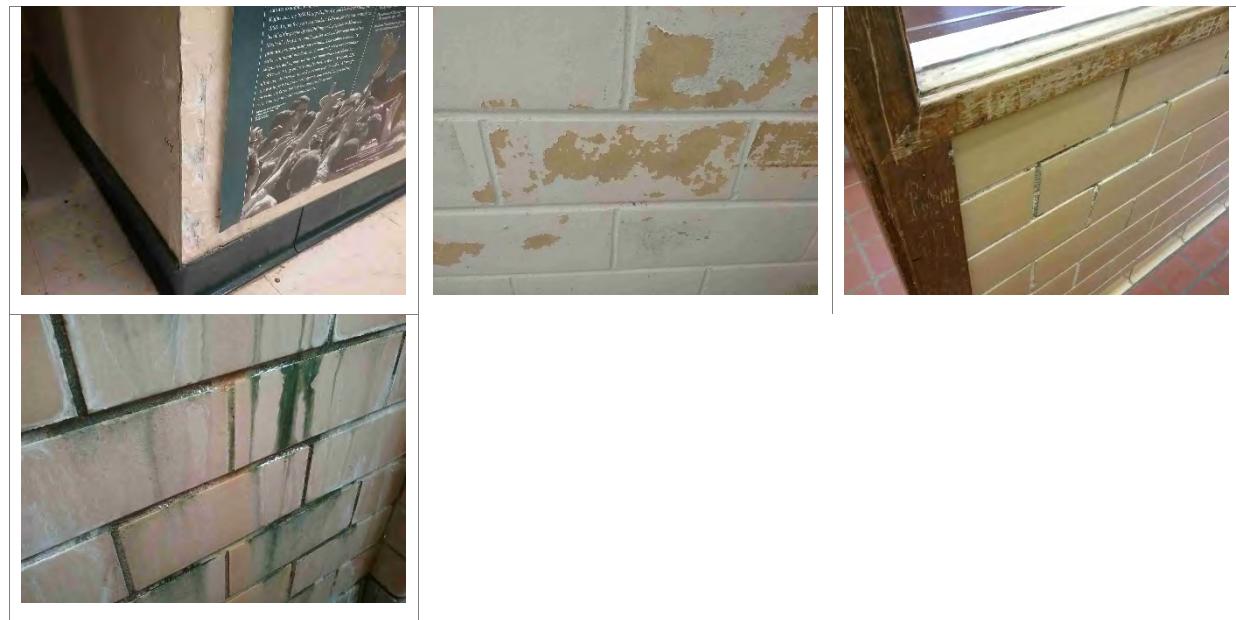
#### Interior Specialties

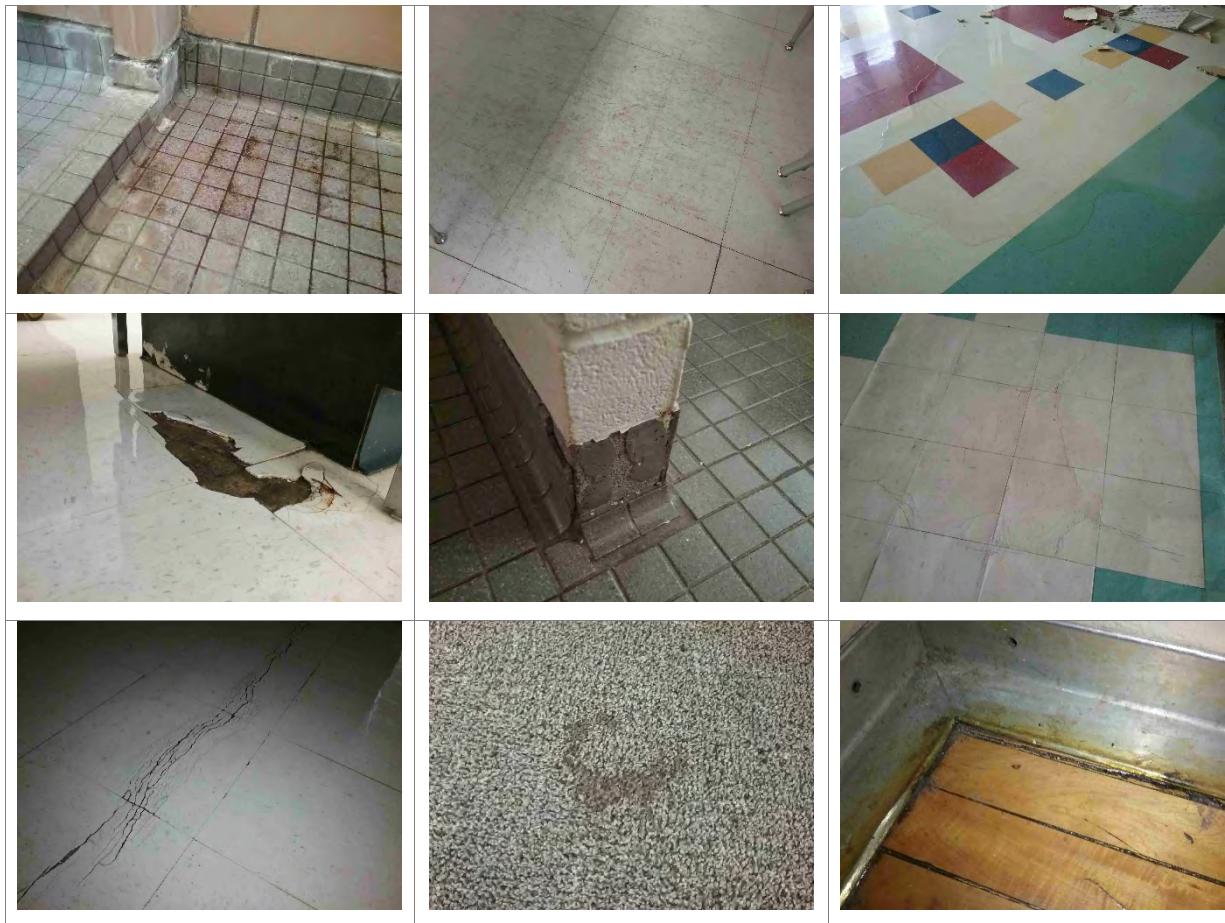


### Stairs Deficiency Examples

#### Exterior Stairs



**Interior Stairs****Interior Finishes Deficiency Examples****Interior Wall Finishes****Interior Floor Finishes**



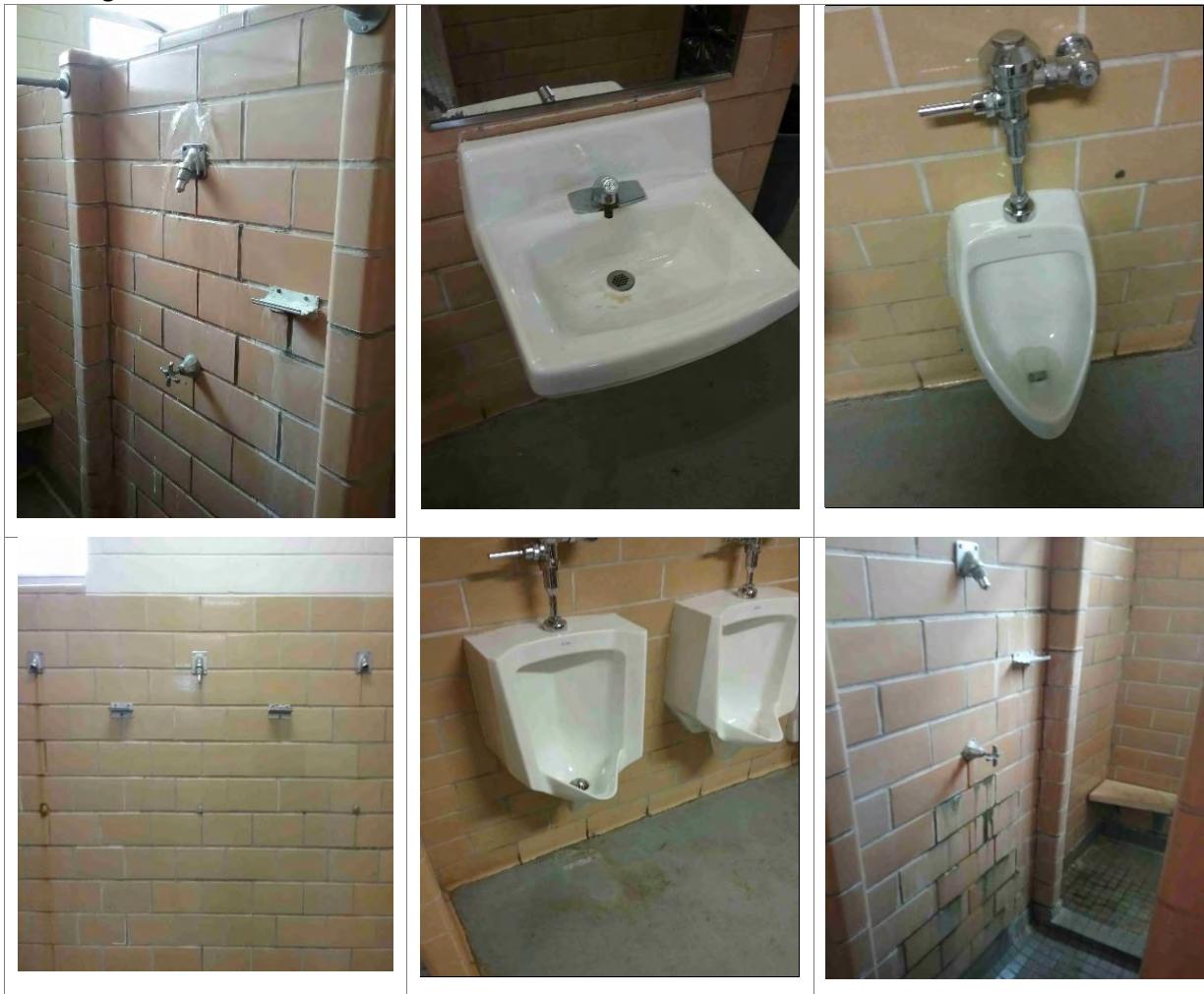
Interior Ceiling Finishes





### Plumbing System Deficiency Examples

#### Plumbing Fixtures





Domestic Water Distribution



Other Plumbing

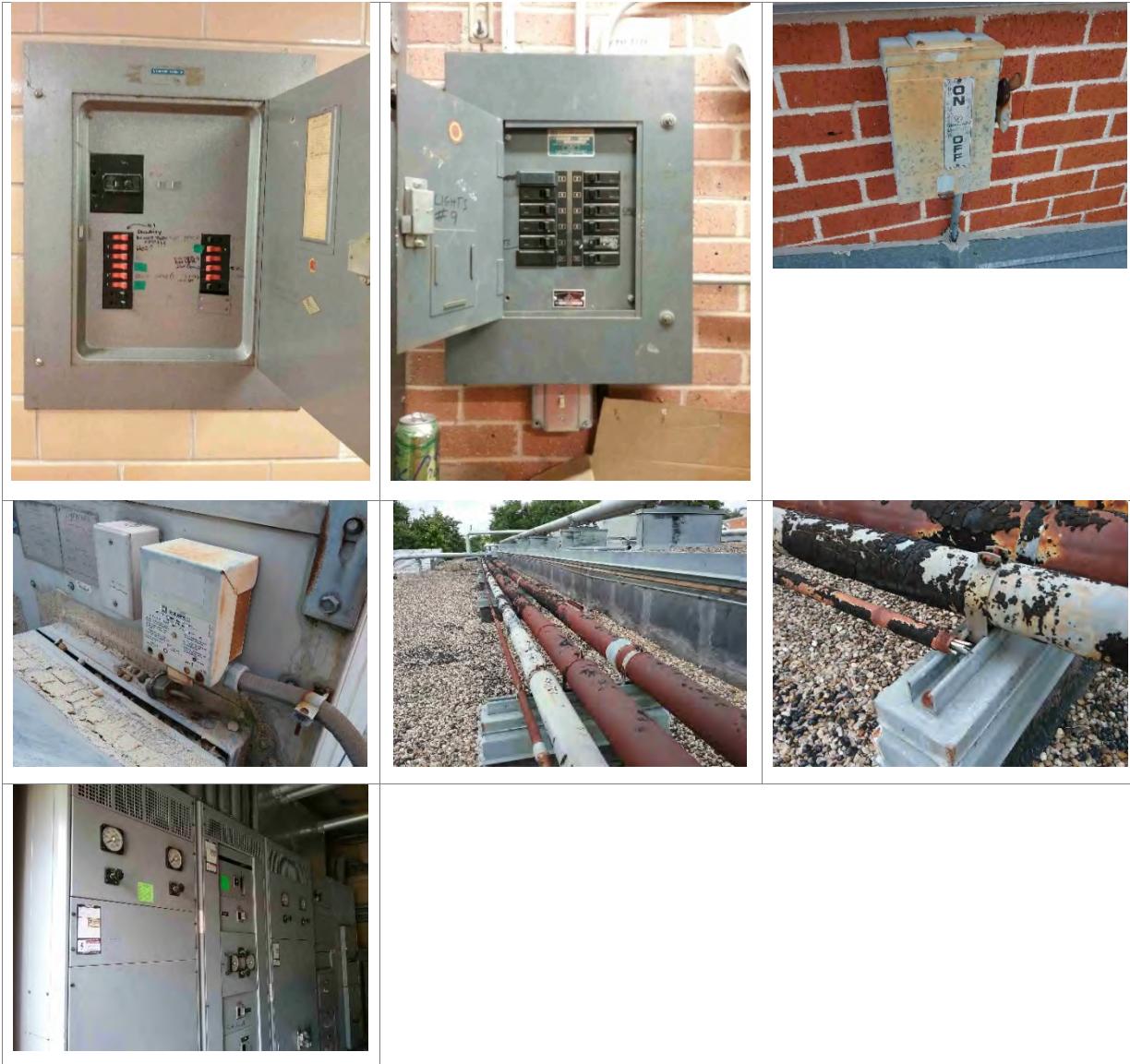


**Mechanical/HVAC System Deficiency Examples**

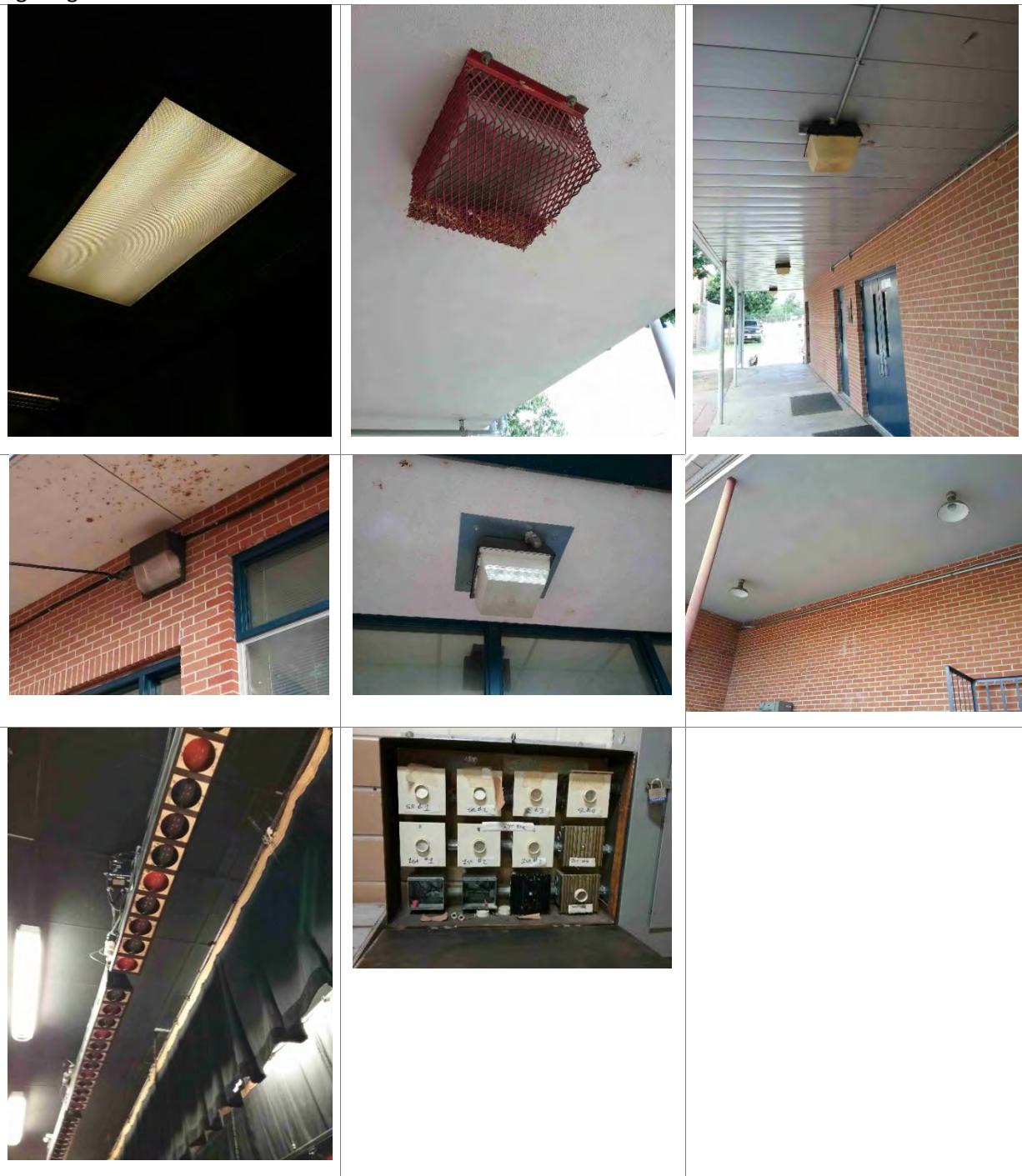
## Electrical System Deficiency Examples

### Electrical Distribution





## Lighting



## O. Henry Middle School Campus Summary of Recommendations

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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**

#### **Plumbing**

1. Continue preventive maintenance on aged plumbing fixtures and plan for replacement in the future as fixtures continue to age in the facilities.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Plan to replace water heaters as the typical design service life is 10 to 15 years.
4. Clean and repair female and male locker room showers.
5. Repair toilet in female locker room.
6. Replace water heaters located in the kitchen area.
7. Repair urinal and sink in male locker room.
8. Re-insulate hot water heater distribution piping.

#### **Mechanical/HVAC**

1. Repair leakage from RTU-1 located at A-24 above the cafeteria or plan to replace the unit altogether.
2. Clean out all roof drains. Remove debris and flush out drainage piping.
3. Resolve all corrosion issues that were observed to improve efficiency and prevent equipment malfunction.
4. Plan to replace HRU-6 located at A-02.
5. Repair or replace any damaged or missing piping insulation as needed in all areas of the building.
6. Replace units serving the kitchen, MDF, administration, wings 200, 400, 500, 600, and 700, and the gymnasium per the interview notes.

#### **Fire Protection**

1. Continue annual inspections of the portable fire extinguishers.

#### **Electrical**

1. Immediately provide missing circuit breaker cover plates for all electrical equipment that were noted, as these instances should be considered life safety hazards.
2. Repair or replace all electrical equipment affected by corrosion or rust. If the corrosion/rust is beyond the enclosure, then replacement is suggested.
3. Remove any floor receptacles as they are being phased out of use district-wide.
4. Replace all outdated lighting fixtures with LED lighting fixtures with dimming capabilities.
5. Replace all existing exit signs with LED fixtures, and add more exit signs where required for all buildings.
6. Provide additional cameras where required for all buildings, particularly in the corridors, the cafeteria, and at all building entry access points. Repair card access readers at the dockside kitchen entry, east end of COR 8, and courtyard entry to ELEC 3. Provide additional card access points as required by the school
7. Provide egress lighting where required for all buildings.
8. Provide lighting in the crawlspace.

### **Main School Building Recommendations**

#### **Exterior**

1. Repair or patch areas of broken concrete and brick. Investigate for damage caused by waterproofing exposure.

2. Investigate cause of deformed foundation wall and determine structural integrity.
3. Remove spray paint and clean discolored walls.
4. Clean all window frames and panes.
5. Replace window panes with condensation and ensure proper seal.
6. Replace broken or cracked window panes.
7. **Repair windows that do not close or leak.**
8. Investigate rusting lintels for structural integrity. Replace if necessary. Repaint as required.
9. Investigate the operation of the three exterior doors on the north side of the facility and adjacent to the main gymnasium and custodial office. Repair or replace if necessary.
10. Install weatherstrip under door in 400-wing where fabric is currently present.
11. Replace exterior door system adjacent to room 601.
12. Repaint all scratched doors.
13. **Research structure at administration office to determine cause of floor movement (requested by Andrew Miller AISD Construction Management).**

#### Roofing

1. Repair roofing above administration offices. Inquire about roofing warranty immediately.
2. Further investigate all roof areas observed with discoloration to reslope to proper drainage points. Include areas around roof drains.
3. Refinish areas of roof with folded, bubbled, or gapping membrane.
4. Regravel built-up roof to cover areas of displaced gravel.

#### Interior Construction

1. Conduct air quality testing of classrooms with mildew odor.
2. Repair all broken walls in shower rooms to match existing.
3. Patch holes in drywall.
4. Investigate rusting column for structural integrity and determine if water intrusion has occurred.
5. Repair and refinish damaged doors and walls.
6. Replace inoperable academic lockers and apply fresh paint coat to remaining.

#### Stairs

1. Patch hairline cracks in exterior walls and concrete stairs.
2. Repaint worn ramp handrails.

#### Interior Finishes

1. Apply perimeter treatment to the building to prevent further pest intrusion.
2. Replace wooden frame around lunch line kitchen window. Ensure the glazing is laminated glass, not acrylic.
3. Clean shower walls to remove organic growth and staining. Monitor for future damage.
4. Clean floors throughout the building, especially near the wall base and corners. Remove stains and wax to remove scratches.
5. Replace floor tiles damaged by pooled water.
6. Replace all broken and cracked floor tiles.
7. Repair all damaged ceilings and investigate areas of water damage further.
8. Patch hairline cracks in exterior walkway eave.
9. Clean or replace carpet.

#### Plumbing

1. Replace waste lines where floor sinks and three compartment sinks utilize common lines.

#### Mechanical/HVAC

1. Replace two pumps at cooling tower.

#### Electrical

1. Replace panelboard 'F' that is in COR 100 and panelboards 'H1' and 'H2' in COR 500.
2. Replace panelboard 'LP1A' that is located in the male coach's office.
3. Replace panelboard located in the small gymnasium.
4. Replace two-section panelboard 'B' located in the kitchen.
5. Replace all original construction panels and switchgear throughout the facility.
6. Replace stage lighting and stage dimming control system.
7. Replace existing 3000A MLO (main lugs only) main switchboard with a new 3000A MCB (main circuit breaker) switchboard.
8. Change lighting in both gyms to LED.

**CRAWL SPACE – O’Henry MS – Main School Building (BLDG-047A)**

|                       |  |
|-----------------------|--|
| Building Purpose      | Administrative, Classrooms, Gym, and Cafeteria |
| Inspection Date       | September 14, 2016, Morning                    |
| Inspection Conditions | 81° - Sunny & Dry                              |

**Crawl Space System Deficiency Overview**

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: Crawl space ventilation fans were placed in the access areaways around the small gym. The crawl space in this area of the building was inaccessible. Access into the 500 classroom wing crawl space was restricted by a locked side hatch with no matching key. See attached plan for additional information.

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 | <p>The soil under the building was generally damp. Damp soil was observed in isolated areas, often around the perimeter edges of the crawl space. The southernmost classroom wing had damp to saturated soil throughout its crawl space. At the same wing, a depressed area near the entrance is muddy, possibly due to leaking pipes and/or old water equipment. The soil in this wing sloped down towards the south access hatch. No drainage system was observed in the crawl space areas nor was any detailed in the plans.</p> <p>Soil/Drainage deficiencies:</p> <ul style="list-style-type: none"><li>• Damp, sometimes saturated soil</li><li>• Water infiltration from around outside perimeter of building (poor site drainage)</li><li>• Possibly leaking pipes or water equipment</li></ul> | Average                 |
|   | Soil Retainers                                    | N/A – No soil retainers were observed in the crawl space nor were any detailed in the structural plans  | N/A                     |
|   | Areaways/Ventilation                              | Ventilation was provided by side vents and areaways. Many tubes leading from the crawl space to the areaway have mechanical fans to improve ventilation. A few areaways were clogged with leaves. Elsewhere, several vents are unclogged but have very dirty inside screens that are impeding ventilation. Sweating pipes were observed indicating poor ventilation. Some vents observed north of the 500 classroom wing were partially buried and are a possible source of water infiltration into the crawl space. Areaways were generally in good condition. Curbs around areaways appear high enough  | Average                 |

|                          |  |  |         |
|--------------------------|--|--|---------|
|                          |  | <p>to prevent water infiltration.</p> <p>Areaway/ventilation deficiencies:</p> <ul style="list-style-type: none"> <li>● Clogged areaways</li> <li>● Condensation on pipes</li> <li>● Partially buried vents</li> <li>● Dirty vent screens</li> </ul>   |         |
|                          | Access Hatches                                 | <p>Access to the crawl spaces was through areaways and one side hatch, all located around the perimeter of the building. Many access areaways were blocked by tubes with mechanical fans. Some access areaways did not have working locks.</p> <p>Access hatch deficiencies:</p> <ul style="list-style-type: none"> <li>● No working locks</li> <li>● Blocked access areaways due to tubes with mechanical fans</li> </ul>   | Average |
| <b>Exposed Structure</b> | Exposed Columns & Tops of Foundations          | Observed columns were generally in good condition. No deficiencies were observed.  | Good    |
|                          | Exposed Faces of Perimeter Walls / Beams       | <p>Perimeter grade beams observed did not have any significant defects.</p> <p>Perimeter wall/beam deficiencies:</p> <ul style="list-style-type: none"> <li>● Honeycombing</li> </ul>  | Good    |
|                          | Exposed Portions of Interior Floor Beams Above | <p>Suspended interior floor beams are supported by the perimeter beams and interior columns. Observed floor beams had only minor surface defects.</p> <p>Beam deficiencies:</p> <ul style="list-style-type: none"> <li>● Honeycombing, minor spalling</li> </ul>   | Good    |
|                          | Underside of Suspended Floor Slabs Above       | <p>The floor slab in the admin area consists of a flat slab supported by interior beams. The slab in this area was mostly covered by rigid insulation but uncovered areas appeared in good condition. The slab in the original wings has a corrugated underside which also appeared in good condition other than minor surface defects. A severe spall is located around an old pipe penetration in the slab at one location observed.</p> <p>Slab deficiencies:</p> <ul style="list-style-type: none"> <li>● Significant spall at one location</li> <li>● Honeycombing</li> </ul> | Good    |

|   |                               |  |         |
|---|-------------------------------|--|---------|
| <b>Pipes, Ducts, Equipment &amp; Fireproofing</b> | Suspended Pipes & Hangers     | <p>The crawl space under the admin area has no suspended pipes. The cast iron suspended pipes and hangers under the classroom wings are moderately rusted.</p> <p>Pipe deficiencies:</p> <ul style="list-style-type: none"> <li>Moderate rusting on pipes and hangers</li> </ul>   | Average |
|   | Exposed Ductwork              | N/A – No exposed ductwork was present in the crawl space areas observed.   | N/A     |
|   | MEP Equipment                 | N/A – there was some abandoned MEP equipment left in the crawl space but no MEP equipment was in use in the crawl space areas observed.  | N/A     |
|   | Spray Fireproofing/Insulation | <p>Rigid insulation board is attached to the underside of the flat slabs in the admin area and the 400 classroom wing. A few panels have fallen down below the admin area, but a significant portion of the slab insulation has fallen off below the classroom wing.</p> <p>Insulation deficiencies:</p> <ul style="list-style-type: none"> <li>Detached rigid insulation board</li> </ul> | Average |

### Crawl Space Deficiency Examples

#### Soil, Drainage, Ventilation & Access



Pipe with fan leading to areaway



Unlocked access door



Saturated soil

|  |  |   |
|--|--|---|
| A photograph showing a metal grating over a concrete structure, with a significant amount of fallen leaves and debris trapped underneath, indicating a clogged area. | A photograph of a blue pipe with orange insulation, showing condensation droplets forming on the pipe surface. | A photograph of a rectangular opening in a concrete wall, with some green plants growing around it, labeled as a buried vent. |
| A photograph showing a cluttered area with various pieces of old, rusted mechanical equipment and debris.  |  |   |

#### Exposed Structure

|  |  |  |
|--|--|--|
| A photograph of a metal beam with significant honeycombing and deterioration visible on its underside. | A photograph of a concrete slab showing extensive honeycombing and spalling. | A photograph of a concrete surface with large, jagged pieces of concrete missing, exposing the underlying structure. |
| Honeycombing on interior beam  | Honeycombing on slab   | Spall under deck   |

## Pipes, Ducts, Equipment &amp; Fireproofing



Fallen rigid insulation



Rusted cast iron pipe



Rusted hangers

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## O'Henry MS – Campus Summary of Crawl Space Recommendations

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

### **Main School Building Recommendations**

#### **Soil, Drainage, Ventilation & Access**

1. Improve site drainage around outside perimeter of building to prevent water infiltration into the crawl space.
2. Re-grade around outside perimeter of building as necessary to uncover buried vents.
3. Investigate cause of muddy area near southern wing crawl space.
4. Clean out areaways and vents to improve ventilation.
5. Investigate need for additional ventilation.
6. Place locks on exterior access hatches and access areaways.

#### **Pipes, Ducts, Equipment & Fireproofing**

1. Repair any leaking pipes
2. Replace or clean significantly corroded pipes and hangers and protect from further corrosion.
3. Replace/reattach fallen rigid insulation.

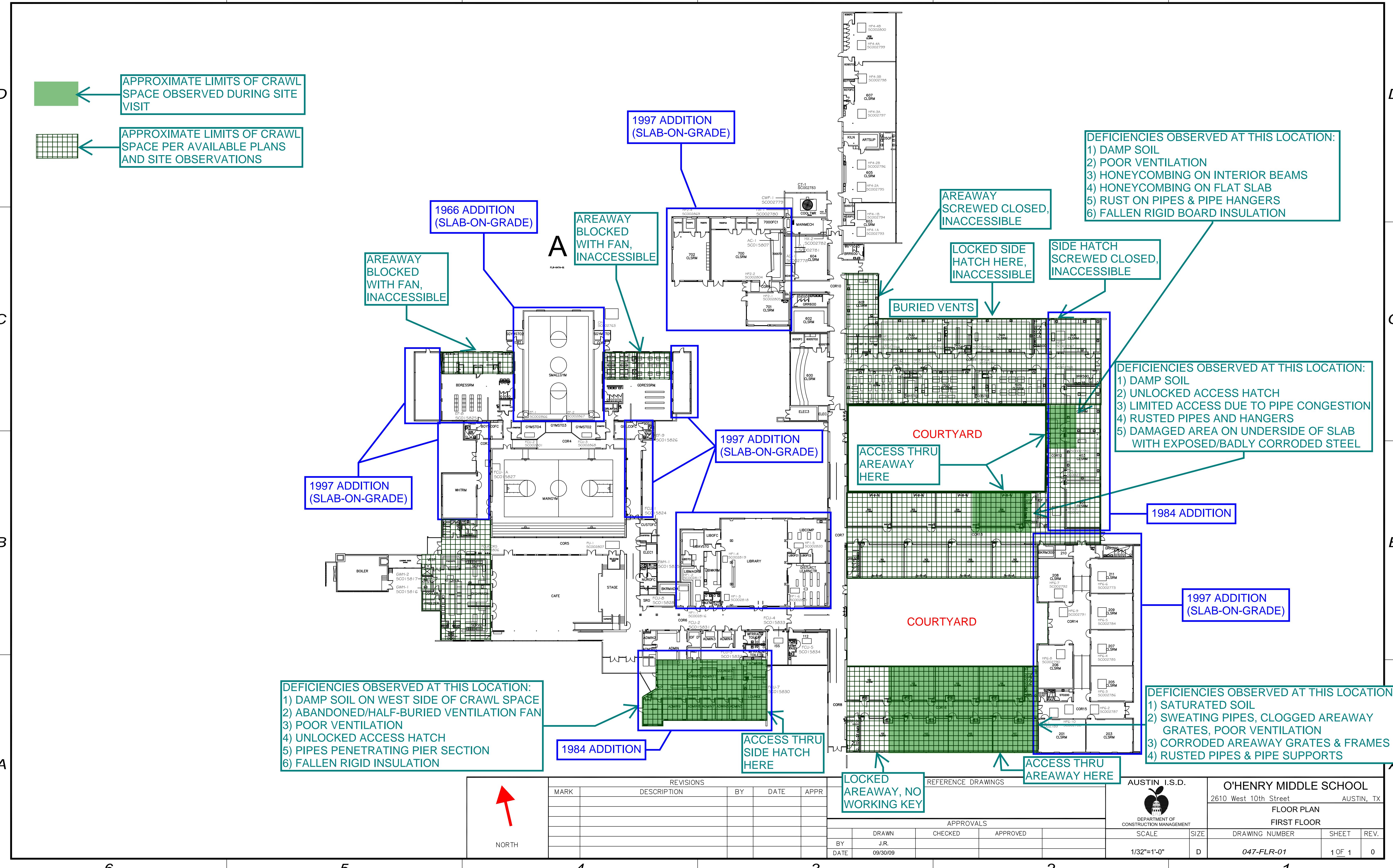
6

4

5

2

1



# O. Henry Middle School Site Summary

## Site/Civil Assessment

|                                       |                        |
|---------------------------------------|------------------------|
| Address                               | 2610 West 10th St      |
| Number of Permanent Campus Facilities | 1                      |
| Original Year of Construction         | 1953                   |
| Total Campus Area                     | 14 Acres               |
| Data Collection Method                | Desktop, Site Visit    |
| Site Visit/Assessor                   | 1/20/2017 / J. Jenkins |



### Introduction

O. Henry Middle School was established in 1953, and consists of one permanent school building. The Main School Building (BLG-047A) includes the administration offices, classrooms, cafeteria and gymnasiums with multiple courtyards.

| Revision Log |          |   |
|--------------|----------|---|
| Revision     | Date     | Summary of Content  |
| 00           | 9/27/16  | Draft Issue   |
| 01           | 12/22/16 | Added comments from PM Andrew Miller as indicated on email dated 10/31/16. See page 14. |
| 02           | 3/10/17  | 2nd Draft Issue   |

## Development Information

|                             |                           |
|-----------------------------|---------------------------|
| Watershed                   | Ladybird Lake and Johnson |
| Total Impervious Cover      | 40%                       |
| Allowable Impervious Cover  | 94%                       |
| Barton Spring Recharge Zone | No                        |

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

## Parking and Drives

| Parking and Drives                   | Configuration       | Size (SF) |   |
|--------------------------------------|---------------------|-----------|---|
| P1, Northwest Staff/Handicap Parking | 2 HC                | 6,700     |  |
| P2, Southwest Staff Parking          | -                   | 6,500     |   |
| P3, Southeast General Parking        | 2 HC                | 39,100    |   |
| P4, Northeast Staff Parking          | -                   | 4,500     |   |
| R1, Northwest Playfield Access Road  | 1 CB                | 6,750     |   |
| Student Parking                      | No                  | N/A       |   |
| Parent Drop Off                      | Yes – on Exposition | -         |   |
| Bus Drop-Off Area                    | Yes – on Exposition | -         |   |
| Loading Dock                         | Yes                 | 1,400     |   |

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\_O'Henry\_MS\_Site\_Civil\_Exhibit for additional information.

| System            | Subsystem  | Condition and Deficiency Overview   | System Condition Rating   |
|-------------------|--|---|---|
| Site Improvements | Roadways<br>R1 (Northwest)   | <p>There is one main roadway enclosed within the perimeters of the school. Roadway (R1) is located north-west of the school, along Exposition Blvd. R1 is used mainly for playfield access.</p> <p>Roadway Deficiencies:</p> <ul style="list-style-type: none"><li>- Longitudinal cracks observed along the entrance</li><li>- Alligator cracks consistent along the border edges of the roadway</li><li>- Slight raveling throughout roadway surface</li><li>- Low spots noticed at the North edge of the roadway. Ponding and poor drainage observed.</li><li>- Utility patch encountered at north edge of road</li></ul>   | Good  |
|                   | Parking Lots<br>P1 (Northwest)<br>P2 (Southwest)<br>P3 (Southeast)<br>P4 (Northeast) | <p>The school has four main parking lots. Parking lot one (P1) located northwest, of the school, is used for staff and handicap parking. Parking lot two (P2) located southwest, is used for staff parking only. Parking Lot three (P3) located southeast, facilitates general parking as well as handicap parking. Parking lot four (P4) located northeast, is used for staff parking only.</p> <p>Moderate Raveling, longitudinal and alligator cracks were observed in the P1 asphalt pavement.</p> <p>Patch at the entry of P2 has alligator cracks, raveling, and is sinking. Longitudinal, Transverse, and, alligator cracks observed throughout P2.</p> <p>Throughout P3 continuous raveling, rutting, potholes, longitudinal and alligator cracks were noted. Also, as shown in Exhibit, several sections of the asphalt displayed perpendicular and parallel pattern approximate 1-1/4" holes. At the South corner of P3, abandoned excess material was observed. At the Southeast (SE) entry way of P3 evidence of a pesthole was found. Flushing was also observed along the driveway, and broken pavement in need of repair was recorded. At the Northeast (NE) corner of the lot, both the concrete and asphalt pavement were broken and noticeably fractured, also block cracks were found.</p> | P1<br>Average<br><br>P2<br>Average<br><br>P3<br>Fail<br><br>P4<br>Average<br><br>Overall:<br>Poor |

| System | Subsystem         | Condition and Deficiency Overview   | System Condition Rating |
|--------|-------------------|---|-------------------------|
|        |                   | <p>Moderate alligator cracks and raveling were observed at P4.</p> <p>Asphalt Pavement marking and striping is faded on all lots.</p> <p>Parking Lot Deficiencies:</p> <ul style="list-style-type: none"> <li>- Moderate Raveling</li> <li>- Alligator cracks</li> <li>- Longitudinal cracks</li> <li>- Transverse cracks</li> <li>- Sunken Patch</li> <li>- Potholes</li> <li>- Perpendicular and parallel pattern holes approximate 1-1/4" holes</li> <li>- Abandoned excess material</li> <li>- Pesthole</li> <li>- Flushing</li> <li>- Broken Pavement</li> <li>- Block Cracks</li> </ul> |                         |
|        | Pedestrian Paving | <p>At the front left corner of the school entrance the sidewalk was reported broken. Also west of P3, the nearest sidewalk displayed several breaks throughout. North from the south corner of P3 wooden sidewalk sections were recorded.</p> <p>Pedestrian Paving Deficiencies:</p> <ul style="list-style-type: none"> <li>- Sidewalk is broken</li> <li>- Wooden sidewalk sections</li> </ul>   | Poor                    |
|        | Site Development  | <p>SW of the school there are areas of materials that must be removed once construction is completed. Piping in sidewalk needs to be covered and flush with grade, to avoid any possible injuries. Bike racks throughout school were in good condition. Fence at furthest north corner, is broken in need of repair.</p> <p>Site Development Deficiencies:</p> <ul style="list-style-type: none"> <li>- Areas of material need to be removed and/or covered</li> <li>- Pipes in sidewalk not flush with top</li> <li>- The fence is broken and in need of repair</li> </ul>                   | Average                 |
|        | Site Drainage     | Erosion was observed against walls and under gutters throughout the facility. Several pest holes and incorrectly  | Poor                    |

| System | Subsystem  | Condition and Deficiency Overview  | System Condition Rating  |
|--------|------------|--|--|
|        |            | <p>placed backsplashes were recorded. Poor grading was evident in courtyards, and on the east end of the school. Gutters are suggested in areas where runoff from roof has created swales. It was reported that drainage is poor in courtyard 2 and 3. Flooding was observed in the open ground area located NE of the Gym. Several downspouts were found clogged on the main wall that leads towards the gym.</p> <p><b>Site Drainage Deficiencies:</b></p> <ul style="list-style-type: none"><li>- Evidence of pest holes</li><li>- Regrading is needed to slope away from buildings in courtyards, and east outside end of the school</li><li>- Erosion up against the building noticed throughout</li><li>- Gutters are needed</li><li>- There is erosion under the gutters</li><li>- Backsplash placed incorrectly</li><li>- Area of known flooding issues</li></ul>  |  |
|        | Courtyards | <p>There were several courtyards observed throughout the school. Courtyard 1 located south west and Courtyard 2 located NE were both locked. Courtyard 3 is located NW and Courtyard 4 is located NNW.</p> <p>Courtyard 1 is inaccessible to the public. The left entry corner of the courtyard has a leak in the gutter that has created mold against the wall. Adjacent to this corner is an inlet which is covered with debris and is unserviceable. Throughout the courtyard there is overgrown landscaping that needs trimming and incomplete work. Poor erosion control measures were observed.</p> <p>Courtyard 2 is also inaccessible to the public. It was observed that there was poor maintained landscaping. It was reported by faculty that this area is known for flooding.</p> <p>Courtyard 3 is an area of known flooding issues. It was reported that water commonly seeps into the library, as ponding a common problem in this area when it rains. Erosion was observed in this area which may be contributed due to an incomplete gutter and low spots.</p> <p>The general condition of Courtyard 4 was average. There was erosion observed against the building, material that needs to be removed, and an irrigation box missing a cover. A landing was observed to be missing in this area.</p> | <p>Courtyard 1<br/>Poor</p> <p>Courtyard 2<br/>Poor</p> <p>Courtyard 3<br/>Poor</p> <p>Courtyard 4<br/>Average</p> <p>Overall<br/>Poor</p> |

| System         | Subsystem      | Condition and Deficiency Overview  | System Condition Rating |
|----------------|----------------|--|-------------------------|
|                |                | <p>Courtyard Deficiencies:</p> <ul style="list-style-type: none"> <li>- Mold against wall due to gutter leak</li> <li>- Clogged area inlet</li> <li>- There is overgrown landscaping that needs trimming/pruning</li> <li>- Several manholes need to be cleaned out, inspected and re leveled</li> <li>- Pest holes encountered</li> <li>- Gutters are needed in this area</li> <li>- There are some low spots that need to be filled in</li> <li>- Erosion against building and under gutters</li> <li>- Courtyard 1, 2, and 3 are areas of known flooding issues</li> <li>- Incomplete concrete slab pad observed in Courtyard 1</li> <li>- Downspout needed</li> <li>- Broken Hose bib in Courtyard 2</li> <li>- Areas of materials need to be removed</li> <li>- Irrigation box missing cover</li> <li>- Landing needed</li> </ul> |                         |
|                | Landscaping    | <p>The overall landscaping encountered outside the school was good. Observed outside deficiencies regarded low spots, erosion, resodding, and irrigation boxes missing covers. The overall landscaping encountered in courtyards was poor as several areas have overgrown landscaping, and poor maintained landscaping contributing to erosion. It was observed that several areas have overgrown landscaping, low spots, erosion, irrigation boxes missing covers, and are in need of resodding.</p> <p>Landscaping Deficiencies:</p> <ul style="list-style-type: none"> <li>- Resodding is needed</li> <li>- There is overgrown landscaping that needs trimming/pruning</li> <li>- Irrigation boxes missing cover</li> <li>- Erosion in certain areas</li> <li>- Low spots that need to be filled in</li> </ul>                      | Average                 |
| Site Utilities | Water Supply   | <p>The school counts with adequate and safe water supply.</p> <p>Water Supply Deficiencies:</p> <ul style="list-style-type: none"> <li>- Broken hose bib observed in Courtyard 2.</li> </ul>   | Good                    |
|                | Sanitary Sewer | No Fiberglass Grease Sampling Enclosure was observed. Several observed manholes must be cleaned out,   | Poor                    |

| System | Subsystem                       | Condition and Deficiency Overview  | System Condition Rating |
|--------|---------------------------------|--|-------------------------|
|        |                                 | <p>inspected, and relevelled.</p> <p>Sanitary Sewer Deficiencies:</p> <ul style="list-style-type: none"> <li>- No Fiberglass Grease Sampling Enclosure</li> <li>- Several unmaintained manholes</li> <li>- The area around the manhole needs to be backfilled</li> </ul>   |                         |
|        | Storm Sewer                     | <p>All inlets encountered in courtyards and throughout the perimeters of the school are poorly maintained. Several inlets were observed clogged, and covered with debris.</p> <p>Storm Sewer Deficiencies:</p> <ul style="list-style-type: none"> <li>- Clogged Inlets</li> <li>- Covered with debris</li> <li>- Clogged Storm Sewer Pipes</li> <li>- Inlet on NW wall from Courtyard 4 is not low enough. Rocks have been added to adjacent sides of the inlet; so water drains between the rocks and not the inlet.</li> </ul> | Poor                    |
|        | Detention Pond                  | <p>The school has two detention ponds. One detention pond is located at the south side of the school and the other is located NE. Both detention ponds are in good condition.</p> <p>Detention Pond Deficiencies:</p> <ul style="list-style-type: none"> <li>- Debris observed at South Detention Pond.</li> </ul>   | Good                    |
|        | Other Site Mechanical Utilities | <p>There is no concrete pad under and/or in front of the dumpster. It was also reported that the school currently does not have adequate lighting in the loading dock area by the dumpsters. It was noticed that an electrical panel facing</p> <p>Other Utilities Deficiencies:</p> <ul style="list-style-type: none"> <li>- No concrete pad under and/or in-front of the dumpster</li> <li>- Inadequate lighting near loading dock</li> </ul>  | Fail                    |

## Site Improvement Deficiency Examples

### Roadways

|   |   |   |
|---|---|---|
|  |  |  |
| Longitudinal Cracks and Raveling  | Alligator Cracks  | Low Spots and Ponding   |

### Parking Lots

|   |   |   |
|---|---|---|
|  |  |  |
| Sunken Patch  | Perpendicular and parallel pattern holes  | Broken Pavement   |

### Pedestrian Paving

|   |   |   |
|---|---|---|
|  |  |  |
| Broken sidewalk (front left school entrance)  | Sidewalk West of P3   | Wooden sidewalk sections  |

### Site Development

|   |   |   |
|---|---|---|
|  |  |  |
| SW of school construction material  | Parking Lot 3 material to be removed  | Pipes to be covered   |

### Site Drainage

|  |  |  |
|--|--|--|
|  |  |  |
| Pest Hole Courtyard 1  | Regrading is needed to slope away from building                                    | Erosion against the building   |

### Courtyards

|   |  |   |
|---|--|---|
|  |  |  |
| Unserviceable Inlet   | Incomplete Concrete Slab   | Landing Needed  |

Landscaping

|   |  |   |
|---|--|---|
|  |  |  |
| Resodding Needed  | Overgrown Landscaping  | Low spots and ponding   |

Site Utilities

|  |   |
|--|---|
|  |  |
| No concrete pad under dumpster   | Reported Lighting Issues  |

## Play Fields

---

Areas presented in table are approximate.

| Playfields           | Count | Size (SF) |
|----------------------|-------|-----------|
| Basketball Courts    | NA    | NA        |
| Tennis Courts        | 2     | 11,000    |
| Soccer/Multi-Purpose | 1     | 64,500    |
| Baseball Field       | NA    | NA        |
| Bleacher Seating     | 5     | 2,000     |
| Track                | 1     | 1,150 LF  |
| Green Space          | 2     | 53,750    |
| Football Field       | -     | -         |
| Playscapes           | 1     | 2,300     |

| System     | Subsystem              | Condition and Deficiency Overview  | System Condition Rating |
|------------|------------------------|--|-------------------------|
| Playfields | Tennis Courts          | No issues observed in tennis court.  | Excellent               |
|            | Track                  | The track is in excellent condition. No issues observed.   | Excellent               |
|            | Soccer Field/ Football | The soccer field is in average condition. Low spots were observed and overall resodding is needed in this area.<br><br>Soccer/Football Field Deficiencies:<br>- Resodding Needed in this area<br>- Low spots need to be filled in  | Average                 |
|            | Green Space            | Green space is in average condition. Areas of debris and concrete shall be removed. Open inlets must be covered. Low areas must be resodded.<br><br>Green Space Deficiencies:<br>- Several areas of debris/concrete need to be removed<br>- Riprap at drainage outlets must be redone<br>- Open inlets must be covered<br>- General areas must be resodded<br>- Ponding observed in some areas | Average                 |
|            | Playground Equipment   | No playground equipment was observed.  | N/A                     |

## Playfield Deficiency Examples

### Soccer Field / Football

|   |  |   |
|---|--|---|
|  |  |  |
| Track and Low Spot  | Playfield with low spots and erosion   | Outlet in need of new riprap  |

|  |   |  |
|--|---|--|
|  |  |  |
| Open Inlet and Eroded Outlet   | Material to be removed  | Material to be removed or resodded   |

## 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 asphalt roadways.
2. Repair areas with longitudinal and alligator cracks.
3. Fill in low spots.

#### Parking Lots

1. Resurface asphalt parking lots.
2. Restripe pavement markings.
3. Remove abandoned excess material.
4. Cover all potholes and pest holes.
5. Repair sunken patch.
6. Perpendicular and parallel pattern holes must be resurfaced.

#### Pedestrian Paving

1. Replace pedestrian paving that are heaving and have cracks.
2. Replace wooden bridges that are deteriorated.

#### Site Development

1. Remove areas of material, located SE, once construction has completed.
2. Repair broken fence
3. Cover and flush piping on sidewalks.

#### Site Drainage

1. All inlets shall be unclogged and re-evaluated to determine if current watershed is adequate.
2. Cover all pest holes.
3. Reroute to slope away from buildings.
4. Add gutters.
5. Place backsplashes correctly.
6. Unclog downspouts.
7. Ensure all down spouts tie-into underdrain.

#### Courtyard

1. Remove mold and repair gutters with leaks
2. Unclog area inlets.
3. Trim overgrown landscaping.
4. Cleanout, inspect, and rellevel manholes.
5. Cover pest holes.
6. Add gutters and downspouts.
7. Fix broken gutters.
8. Fill in low spots.
9. Reroute away from buildings.

10. Complete concrete slab in CY1
11. Remove materials from incomplete concrete slab.
12. Replace broken hose bib.
13. Remove areas of leftover material.
14. Cover all irrigation boxes.
15. Add approach landing.

#### Landscape

1. Re-sod areas.
2. Trim overgrown landscaping.
3. Cover irrigation boxes.
4. Clean and restore eroded areas.
5. Fill in low spots and resod.

#### Sanitary Sewer

1. Install a Fiberglass Grease Sampling Enclosure.
2. [Replace sanitary waste piping in kitchen crawlspace.](#)
3. [Replace pipe sizing is too small and backs up into floor sinks.](#)

#### Storm Sewer

1. Remove trash, debris, and vegetation from existing drain basins.
2. Repair all manholes and inlets.
3. Connect downspouts with underground storm drain system.
4. Relevel inlet in CY4 to allow positive drainage flow into inlet.

#### Detention Pond

1. Free storm sewers and South detention pond of debris.

#### Other utility Mechanical

1. Construct concrete approach pavement at dumpsters.
2. Repair lighting near loading dock.
3. Verify 3' of clearance in front of electrical panel.

#### Tennis Courts & Track

1. Routine Maintenance.

#### Soccer/Football Field

1. Fill holes, and resod field.

#### Greenspace

1. Remove unnecessary debris and concrete pads.
2. Redo riprap at drainage outlets.
3. Cover all open inlets.
4. Resod and regrade.

