

Baranoff Elementary School Site Summary

Address	12009 Buckingham Gate Road Austin, TX 78748
Number of Permanent Campus Facilities	2
Original Year of Construction	1999
Total Campus Building Area (combined)	80,088 SF



Introduction

The Baranoff Elementary School campus is located at 12009 Buckingham Gate Road, Austin, TX 78748. Baranoff Elementary School was established in 1999, and consists of the primary school along with one additional campus building. These permanent campus buildings include the Main School Building (BLDG-182A) which houses the classrooms, cafeteria, and gymnasium. The second building (BLDG-182B) supports classroom activities. The buildings are connected to one another by exterior covered concrete sidewalks.

Meeting Log		Revision Log		
Date	Meeting	Revision	Date	Summary of Content
7/19/16	Interview	00	8/19/16	Draft Issue
7/19/16	Assessment	01	1/10/17	Added comments from Architect Julie Vetter as indicated on email dated 10/31/16. See pages 6 and 16-17.
9/14/16	Cluster Meeting (Not Attended)			
10/24/16	Follow-Up			

Main School Building – BLDG-182A

Building Purpose	Administration, Classrooms, Cafeteria, and Gymnasium
Building Area	69,091.49 SF
Inspection Date	July 19, 2016
Inspection Conditions	97°F - Partly cloudy, sunny
Facility Condition Index	



Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	<p>The exterior of the building consists of a split-face metal siding and concrete masonry unit (CMU) rough-surfaced block façade with metal-covered concrete walkways.</p> <p>The exterior walls were in average condition, with several areas displaying step cracking with movement as well as stress cracking along the perimeter of the CMU rough-surface block portion of façade with evident drainage deficiencies in the form of washed-out areas that have impacted the structure. It was also reported that during large rain events, water enters through the walls near the double doors in the main corridor between the kindergarten and 4th grade wings, as well as the north-facing classrooms. Rooms 105, 106, and 302 were identified as having this condition occur more than once in the past. Some organic impact was observed on exterior façade surfaces in isolated areas along the rough-surfaced block perimeter where drainage from gutters and covered walkways has had reported deficiencies. On the metal aspect of façade, some conjoining areas revealed separation conditions that may create the potential for water intrusion and vermin access.</p>	Average
	Exterior Windows	<p>The exterior windows consist of single-pane glazing units with aluminum metal frames.</p> <p>These windows were functional and working as intended. Facility staff indicated that windows along the perimeter of this structure had active wasp nests. Staff</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		onsite dispatched a work order to rectify this condition. The windows on this facility were reported in average condition.	
	Exterior Doors	The exterior doors are hollow metal with a metal door frame type used for entrance and egress of this facility. All doors within this facility were in working order with no visual signs of malfunction or degradation. It was reported that these doors are all original to this facility, and periodically, the exit doors from C8 corridor do not close properly without using a forceful hand. Observation of this condition revealed minor occurrences.	Average
Roofing	<p>The roof material covering the building consists of built-up asphalt roll roofing with a granular surface original to this structure. It was reported that a reoccurring leak was detected over and in room # 53 (art room).</p> <p>The roof surfaces were in average condition with no visual evidence of holes or breaks on seams of this application. The exception was isolated areas where evident ponding had occurred and left evaporated residual evidence. Industry trends dictate, "the average life expectancy for this type of roof varies between 5 and 15 years." The roof must be evaluated further for integrity since it has exceeded its anticipated life expectancy and was perceived as extremely worn. The corrugated metal roofing over the walkways appeared to be in good condition with no signs of major degradation, but the proper angle for discharges should be evaluated further.</p>		Average
Interior Construction	Interior Walls	<p>The interior partitions are original to the building and are predominantly constructed of CMU that are painted, with half of the wall consisting of gypsum board panels also with a painted finish. The administration offices and the library have painted gypsum board finishes.</p> <p>The interior partitions were in average condition with instances of minor cracking and chipping throughout most wall surfaces in various areas of this structure. It was reported that during heavy rain events, water leaked into rooms 307 and 308. Several walls were cracked and displaying structural stress with movement.</p>	Average
	Interior Doors	<p>The portions of the building original to construction consist of wood doors and metal framed jams.</p> <p>The interior doors and frames were in average condition, given the age of the system and typical signs of wear and tear were observed. The overhead doors in the kitchen appeared to be in good operational condition. The door to the assistant principal's office would not open.</p>	Average
	Interior Specialties	System not present.	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	<p>The facility's wall finishes were in average condition. Some walls had been recently painted with some painting going on at the time of this assessment. Some interior finish sections appeared to be original construction. No reconfiguration of spaces has occurred at this facility.</p> <p>The interior wall finishes are in average condition due to building age, and showing signs of wear and tear. Building staff reported some chipping and cracking of older surfaces but nothing extensive.</p>	Average
	Interior Floor Finishes	<p>Vinyl floor tile is found throughout the building and is original to this facility. Ceramic tile floor is present in the kitchen and was in working condition with evident signs of age. The administration offices and library are finished with carpet displaying normal wear and tear.</p> <p>The flooring appeared to be in average condition as cracking was observed throughout the vinyl flooring system. Building staff indicated where the concrete floor was settling in certain areas; mitigating solutions had been applied to support accessible passage when moving wheeled apparatus between ramped corridors C6 toward C5 corridor. In room 53 (art room), a large crack was discovered just below a section of trim that seemed minor until it was probed with a 12-inch screwdriver to determine the depth. The depth could not be determined but was perceived as substantial.</p>	Average
	Interior Ceiling Finishes	The interior ceiling consisted of standard 2x4 acoustical fiberglass ceiling panels observed as average throughout the entire facility. There were visual signs of panels that had been replaced. Staff reported as not being extensive in nature during the interview process but reported there were obvious panels that had staining present.	Average
Conveying	System not present.		NA
Plumbing	Plumbing Fixtures	The building has public restrooms for men, women, and students, and separate staff restrooms located throughout the facility. These restrooms have traditional sinks and counters with manual faucets, along with floor and wall mounted toilets with manual flushing mechanisms, to include wall-hung urinals in the male restrooms with manual flushing mechanisms. There are	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>service sinks found in the janitor closets, and water fountains located within the facility, typically near or between male and female restrooms. The restroom plumbing fixtures were in working condition as the fixtures were typically aged but still operational.</p> <p>The building includes other specialty locations with plumbing fixtures located in classrooms, a kitchen for the school cafeteria, nurse's offices, and teacher's lounges, all of which were observed to be functioning as intended.</p>	
	Domestic Water Distribution	<p>Specific plumbing fixtures are serviced with hot water from gas or electric water heaters that were located proportionally within the building. Cold water only is distributed in all children's facilities and was in average working order.</p> <p>The water heaters near the kitchen spaces were in good condition with no identified or reported deficiencies. These water heaters (40- and 50-gallon electric water heaters) appeared to be original to the system. This system has surpassed its typical service life, and it is recommended that a professional mechanical/plumbing expert further evaluate these water heaters. The plumbing distribution equipment was in average condition.</p>	Average
	Other Plumbing	<p>It was reported that rooms 104 and 105 have re-occurring problems with sanitary drainage lines backing up in both male and female restrooms.</p> <p>The roof drains for this structure consist of gutters and downspouts connecting to an underground drainage system supporting drainage from the roof surfaces. Deficiencies were observed at the downspout connections of this system, creating poor drainage conditions around this structure. This system must be repaired to avoid further inundating conditions during heavy rain events. The system was given a poor rating because of the deficiencies identified during visual survey and walkthrough.</p>	Poor
Mechanical/ HVAC	<p>The major mechanical equipment consists of indoor modular air handling units (AHUs) located primarily on the roof. Most sections of this facility have portable console units within individual classrooms. These units have reported issues with condensation lines kinking or collapsing and not draining properly, thus allowing condensate to leak onto respective floors. It was also reported that rooms 50 and 402, including the bookroom, have had condensers replaced this last year. This system consists of three 15-ton and one 17.5-ton package units located on the</p>		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>roof of the facility. The other main source of heating, ventilating, and air conditioning (HVAC) equipment located at the main school was one 2.5-ton package unit with two 7.5-ton and one 6-ton split system heat pumps to include one 3.5-ton split system heat pump. No known issues were reported within the entire system, other than the equipment reaching its manufacturer's life expectancy.</p> <p>Supplemental mechanical equipment for the HVAC system includes exhaust fans and fresh air intake powered units. The HVAC system was in average condition. Architect Julie Vetter (AISD Construction Management), reported that numerous work requests appear to be unresolved for several units within the building. Condenser and fan belt issues are also a common issue.</p>	
Fire Protection	Fire Alarm	<p>The building has a fire alarm system that consists of alarm and signaling devices such as fire alarm annunciators, strobes, horn and strobe combination devices, pull stations, and detectors.</p> <p>The fire alarm system was in good condition, but there were obvious areas where fire alarm and devices were observed as aged and may be past their design life expectancy.</p>	Good
	Fire Protection/Suppression	<p>This building does not have a fire protection sprinkler system. Portable fire extinguishers were present in allocated areas and proportionally placed within this facility.</p> <p>These fire protection elements were observed to be in good condition. The kitchen was equipped with a dry fire suppression system that had been certified recently.</p> <p>All observed portable fire extinguishers had inspection tags dated within the last year as required.</p>	Good
Electrical	Electrical Distribution	<p>The electrical service enters the building at the 480/277-volt, 3000-amp, 3-phase main switchboard and sub-panels supporting the service located in the electrical rooms near the kitchen loading dock. The service feeds transformers and 480-volt panelboards located in various electrical rooms throughout the building. There are proportionally placed distribution transformers rated at 480-volt primary that step-down to 120/208-volt secondary 4-wire, 3-phase, which feeds power to 120/208-volt panelboards. The building does not have a lightning protection system but does contain GFI (ground fault interruption) protection within the main panel.</p> <p>The electrical distribution equipment was in good condition.</p>	Good

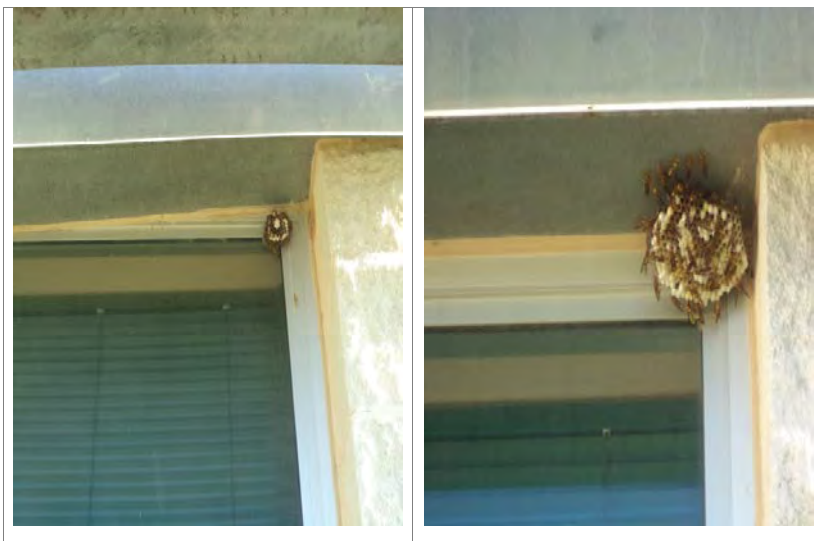
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Lighting	<p>The building's exterior lighting consists of wall mounted package lights and HID (high-intensity discharge) luminaires that are located along the entire perimeter of these facilities exterior walls and are set to illuminate at dusk. Three exterior down lights have been upgraded to LED, and had been reported as inadequate with regard to illumination and coverage in the back of the building around the 300- and 400-wings.</p> <p>The interior lighting primarily consists of T8 fluorescent luminaires set in troffers common to classrooms and corridors.</p> <p>The lighting for the building was in average condition. Many interior and exterior luminaires appeared to be aged and past their life expectancy.</p>	Average
	Communications & Security	<p>This facility has a security system including alarms and surveillance cameras as well as a functioning public address system. According to facility staff, the system is aged and has potentially reached the end of its design life. It was reported that the card reader outside the 200-wing was damaged and has not been repaired.</p> <p>The facility staff reported that there was a significant reception deficiency in the Wi-Fi system near the library.</p>	Average

Exterior System Deficiency Examples

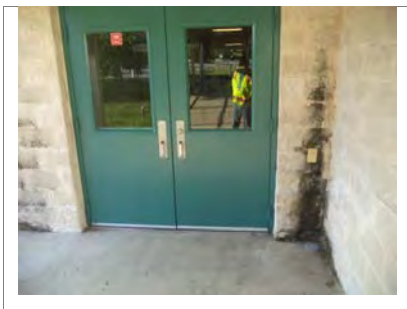
Exterior Walls



Exterior Windows



Exterior Doors

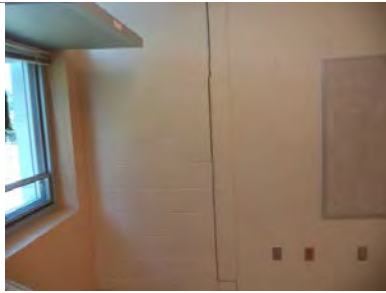


Roofing Deficiency Examples



Interior Construction Deficiency Examples

Interior Walls

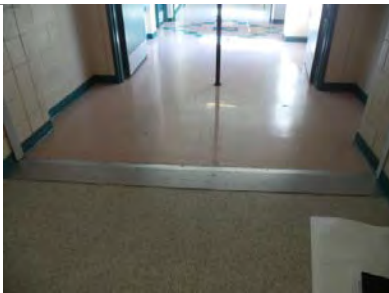


Interior Finish Deficiency Examples

Interior Wall Finishes



Interior Floor Finishes



Interior Ceiling Finishes



Plumbing System Deficiency Examples

Other Plumbing



Stand-Alone Classroom Building - BLDG-182B

Building Purpose	Classrooms
Building Area	10,996.30 SF.
Inspection Date	July 19, 2016
Inspection Conditions	97°F - Partly cloudy, sunny
Facility Condition Index	



System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a block façade on the lower section with the upper portion being ridged metal panels. This building was reported to have been constructed in 2008. The exterior walls were in good condition, with isolated areas in need of proper sealing at interfacing joints and consistent regiment of periodic maintenance pressure washing on façade where organic growth is evident. It was reported that rodents are able to enter the building through the bookroom and room 506. No evidence of rodent presence in these areas was observed at the time of survey.	Good
	Exterior Windows	The exterior windows consist of single-pane glazing units with metal aluminum frames. The windows were reported in good condition.	Good
	Exterior Doors	Entryway doors located at this building consist of hollow metal with a metal frame. The exterior doors were in good condition The main entry exterior doors appeared to be in good working order with no deficiencies.	Good
Roofing	The roof material covering the building consists of modified bitumen with granular topping roll type roofing. All covered walkways supporting these structures are constructed with ridged metal roof. The roof surfaces in this facility were observed as newer than roof surface of Bldg.182A and in good condition.		Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Construction	Interior Walls	The interior partitions original to the building are predominantly constructed of painted CMU with glazed tile on the lower portion of the wall. The majority of walls within this building had painted gypsum board construction, CMU, and brick walls. The interior partitions appeared to be in good condition with instances of minor cracking and chipping.	Good
	Interior Doors	The interior doors consist of hollow wood doors and metal door jams. No upgrades have taken place at this facility. The interior doors and frames were in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior walls to this structure consisted of CMU and dry wall finishes. The interior wall finishes are in good condition.	Good
	Interior Floor Finishes	Vinyl floor tile is found throughout the building and is original to construction. The flooring appeared to be in good condition with no significant issues.	Good
	Interior Ceiling Finishes	The ceilings consist of common 2x4 acoustical fiberglass panels within this structure. It was reported that periodic replacements of these panels is required due to student damages. These ceilings were observed to be in good working condition.	Good
Conveying	There are no conveying systems present at this facility.		NA
Plumbing	Plumbing Fixtures	The building has public restrooms for men, women, and students, and separate staff restrooms located within the facility. These restrooms are standard floor and wall mounted toilets with manual flushing mechanisms, including standard, wall-hung urinals in the male restrooms with manual flushing mechanisms. There are service sinks found in the janitor closets, and water fountains located throughout the facility, typically near the restrooms. The restroom plumbing fixtures were in good condition with reported leaky fixtures in rooms 504 and 503. During the walkthrough, these particular fixtures were observed to have been repaired and in working order.	Good
	Domestic Water Distribution	Specific plumbing fixtures are serviced with cold and hot water in the administration segment of this structure	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		from an electric water heater. The student bathrooms are supplied with only cold water. The plumbing distribution equipment was in good condition with no evident signs of malfunction or degradation of components.	
	Other Plumbing	The roof drains consist of gutters and downspouts that connect to an underground drainage system and appear to be functioning as intended with no deficiencies.	Good
Mechanical/ HVAC	The major mechanical equipment consists of indoor modular AHUs located primarily on the roof. Package units are located on the roof of the facility. These serve the HVAC system. This particular structure is very small and is supported significantly. The HVAC system was in good condition with no deficiencies to report on supporting equipment.		Good
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as, fire alarm annunciator horn strobe, combos, pull stations, and detectors. The fire alarm system was in good condition and reported as functioning as intended with no signs of degradation or deficiencies.	Good
	Fire Protection/ Suppression	Fire suppression is established in the form of portable fire extinguishers placed throughout the facility. All observed portable fire extinguishers had inspection tags dated within the last year as required and were in proper working order.	Good
Electrical	Electrical Distribution	The electrical service enters the building at the 277/480-volt, 600-amp 3-phase, 4-wire switchboard located in the electrical room labeled ELEC500. The service feeds smaller transformers and distribution panel boards. These distribution transformers are rated at 480-volt primary that step-down to 120/208-volt secondary, which feeds power to 120/208-volt panel boards. The electrical distribution equipment was in good working condition.	Good
	Lighting	The building's exterior lighting consists of HID, and LED luminaires that are located around the entire perimeter and are set to illuminate at dusk. These luminaires are wall mounted packs that support the perimeter lighting of the facility. The interior lighting primarily consists of T8 fluorescent luminaires. The lighting for the building was in good condition. All interior and exterior luminaires appeared to be operating properly with staff reporting no deficiencies within this	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		structure other than they felt controls to the dimming aspect of light switches would be causing more problems in the future. A simple fix would be replacing with traditional on and off switches in the future. Staff reported the need for more lighting was necessary around the entire campus and all HID lights should be changed to LED lights. No emergency lighting is established at this facility.	
	Communications & Security	There is a security system within this structure including alarms, card readers, and surveillance cameras in and around the interior and exterior of this building. According to facility staff, the system is functioning properly but there are issues with the resolution from the placed cameras. There is a public address system in the building, and it was in good condition with no reported deficiencies.	Good

Baranoff Elementary School Campus Summary of Recommendations

This document is based on conditions observed during field survey 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 at this campus.

Mechanical/HVAC

1. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, repainting, or repairing to prevent further deterioration.
2. Repair or replace any systems that are damaged or missing piping insulation as needed at both facilities.
3. Repair any observed leaks to prevent water damage to the asset, its piping, support components, or any other sub-assets. Ensure routine preventive maintenance is conducted.

Fire Protection

1. Continue annual inspections of the fire protection system (at the main school building) and the portable fire extinguishers (at both facilities).
2. Fire extinguishers do exist at this facility but were observed to all be locked in their wall-mounted cases, recommend this be evaluated further by building staff to allow accessibility to this equipment.

Electrical

1. Replace all outdated exterior HID luminaries with LED luminaries.
2. Replace outdated security camera systems and add more cameras for adequate coverage for all buildings with better resolution, particularly at all building entry access points and areas specifically identified by current staff.
3. Provide emergency egress lighting in accordance with NFPA 101
4. Recommend that a forced entry alarm system be installed due to safety concerns presented by staff entering and leaving the facility outside normal business hours.
5. Use only appliances and devices, which have power consumption equal to or less than the rating of the circuit to which they are connected. Remove motor loads from GFCI receptacles in order to prevent nuisance tripping."

Main School Building Recommendations

Exterior

1. Recommend having this structure evaluated by a structural engineer to address severe cracking with movement around this main facility.
2. Recommend a civil engineer evaluate further the exterior drainage system where water ponding and inundating conditions occur during heavy rain events and have reportedly penetrated walls and washed out areas around this structure.
3. Investigate and block potential access points for rodents through the walls or structures separated by foundation shifting.

Roofing

1. Replace the entire roof system on BLDG-182A. Obvious signs of wear and tear with the appearance of having outlived its industry recommended life expectancy were observed. This system was reported to be failing in

several areas during strong rain events with substantial water intrusion. The assessment took place on an extremely dry and hot day, which made detection of these system deficiencies difficult.

2. Maintain and repair gutters and downspouts from the roof to the underground drainage system where shifting and separated components have compromised drainage.

Interior Construction

1. Repair or fill damaged walls where stress cracking as well as shifting and settling have impacted the walls in classrooms and corridors throughout this facility.

Interior Finishes

1. Conduct further investigation into the settling and shifting cracks observed in classrooms and corridors. Structural monitoring may be required.
2. Repair damaged ceiling tiles when necessary. Monitor and repair lower walls where water intrusion has had an impact during heavy rain events.

Plumbing

1. Repair or maintain all plumbing fixtures in as needed.
2. Investigate further the reoccurring backing up of toilets within rooms 104 and 105 and remedy as needed.
3. Recommend as a maintenance activity to periodically pour water down floor drains in the kitchen area where stagnant water conditions in the past have caused a foul odor to be emitted from the drain. This will "prime" the trap and prevent sewer gasses from escaping into the room.

Mechanical/HVAC

1. Resolve ongoing HVAC issues and correct condenser/fan belt issues.

Electrical

1. It is recommended that the exterior lighting be evaluated further for adequate coverage. Additional lighting is recommended to be placed in areas around the outside of the 300- and 400-wings.
2. It is recommended that all foliage be removed or trimmed back from the exterior lights around the 100-wing as they are blocking the lighting's ability to illuminate the area.

Baranoff Elementary School Planned Future Improvements

The following are any known planned and funded improvements scheduled to take place at this campus in the future. Their scope and schedule are subject to change.

2016-2017 Bond Planned Improvements from Architect Julie Vetter on 10/31/16.

- Winter 2016-2017.
 - RTUs (roof top units) 3 and 4 to be replaced.
 - RTUs 1 and 2 to be inspected for similar issues related to rusted heat exchanger pipes causing high risk carbon monoxide poisoning as found in RTUs 3 and 4.