



AMIGOS SCHOOL

15 Upton Street
Cambridge, MA 02139

Facilities Condition Assessment : October 14, 2022

Capacity Analysis
Master Plan

Facilities Condition Assessment, Capacity Analysis and Master Plan for CPS



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7.1 | AMIGOS SCHOOL BUILDING APPENDIX

HISTORICAL SUMMARY

The Amigos School is located at 15 Upton Street in Cambridge, MA and is located on the same block as Historical Register Historic Places and Landmarks Easements. The school started as a dual-language program in the Maynard School in 1986, and in its earlier years was divided between the Maynard School (housing K-3rd grade) and the Robert F. Kennedy School (housing 4th-8th grade). By 1997, the program was consolidated into the Robert F. Kennedy School only, but following further efforts from parents of the school, it turned into an autonomous school in 2001. Another addition was made to the school when the bilingual students from the Longfellow School were incorporated with Amigos in 2002, and the school was moved to the King School on Putnam Avenue. Eventually, the Amigos School was moved to its current location on Upton Street.

The building itself has a long history, as the first Cambridgeport school built after the city's incorporation. Built in 1852, the original structure was a rectangular plan with a projected pedimented wing that housed the entrance designed by Hovey and Ryder. The first remodel came in 1873, with an expansion that almost eliminated the projection of the front, but maintained its details like the roundheaded windows, elaborate lintels, and projecting cornices. The second addition came in 1885, designed by James Fogerty, and blending into the original structure while paring down on the details. In 1909, an even bigger expansion was made, and this part is still part of the current building. The 1852 and 1885 buildings were both demolished and made way for what is now the main area of the Amigos School building in 1915 and was further renovated in 1938.

To this day, the Amigos School follows a dual-language immersion model for children with and without native Spanish-speaking families. Currently, the school serves children from Junior Kindergarten to the 8th grade.



Webster School, Upton St., Demolished. Buildings Survey of Architectural History in Cambridge: Cambridgeport by Cambridge Historical Commission, The MIT Press 1971, 92.



Webster School Portico (Current). Survey of Architectural History in Cambridge: Cambridgeport by Cambridge Historical Commission, The MIT Press 1971, 92.

FCA FORMS - SCORING BREAKDOWN

The Facilities Condition Assessment was performed by the architectural team and consultants to assess the current physical conditions of the building and the building systems. Each assessor utilized checklists and the assessment criteria and rating scale below to maintain consistency across all fields. The Conditions criteria grades the overall quality of the building and systems, and the *Priority* criteria sets the time frame for addressing the issues noted. The two numbers were used together to rate the different areas of the facilities. To complete the analysis, each school was given an overall condition and priority score. These were calculated by combining and weighing all individual assessments based on the District’s priorities. Detailed reports for this school individually can be seen in the following pages.

ASSESSMENT CRITERIA				
CONDITION		PRIORITY		
Excellent	A	No visible defects, new or near new condition, may still be under warranty if applicable	Currently Critical (Immediate	1 Requiring immediate action including a cited safety hazard and ares of accelerated deteriorating, returning a building component to normal operation.
Good	B	Good condition, but no longer new, may be slightly defective or deteriorated, but is overall functional	Potentially Critical	2 Requiring action in the next year including components experiencing intermittent operations, potential life safety issues, and rapid deterioration, returning a building component to normal operation.
Adequate	C	Moderately deteriorated or defective, but has not exceeded useful life	Necessary - Not Yet Critical	3 Requiring appropriate attention to preclude predictable deterioration, potential downtime, additional damage, and higher cost to remediation if deferred further
Marginal	D	Defective or deteriorated in need of replacement; exceeded useful life	Recommended	4 Representing a sensible improvement to the existing conditions (not required for the most basic function of the facility; however, will improve overall usability and/or reduce long-term maintenance costs).
Poor	E	Critically damaged or in need of immediate repair; well past useful life	Does Not Meet Current Code but “Grandfathered”	5 No action required at this time, but should substantial work be undertaken correction would be required

FCA SCORE SUMMARY

ARCHITECTURAL - EXTERIOR	CONDITION	PRIORITY
<ul style="list-style-type: none">Isolated replacement of steel lintels with new galvanized lintelsIsolated replacement of cracked brick, cleaning and repointingRepair of cracked and spalled limestone sillsMake-safe survey and limestone repair work at delaminated and cracked limestone on North ElevationReplacement of doors and frames is recommendedReplacement of window and door perimeter sealantReplacement of existing roofing systems with new Code compliant insulation and incorporation of secondary drainage.	C	3
ARCHITECTURAL - INTERIOR	CONDITION	PRIORITY
<ul style="list-style-type: none">Typical classroom walls are gypsum with tectum located around 7' height to the ceilingTypical ACT celings and VCT flooring, generally worn condition.Wood door with transom for classrooms.Millwork in poor condition	C	3-4
STRUCTURAL SYSTEM	CONDITION	PRIORITY
<ul style="list-style-type: none">Exterior brick masonry walls - GeneralInvestigate water intrusion for sourcesGeneral Construction (Roof, Floor, Foundations).Lateral Force Resisting System - GeneralInvestigate structural integrity of interior stairsRepair roof flashing above main entrance	B	5
	C	4
		5
	D	2
		3
FOOD SERVICE	CONDITION	PRIORITY
<ul style="list-style-type: none">Replace Serving LineReplace reach-in freezer with maintenance issuesProvide Chemical storage cabinet	C	3
CONVEYING SYSTEM	CONDITION	PRIORITY
<ul style="list-style-type: none">Scrape and clean all car and hall door sills of debris.Clean door operators.	B	3

BUILDING SYSTEMS	CONDITION	PRIORITY
° Replace plumbing fixtures and fittings, replace H&V units, replace classroom window mounted AC cooling units, replace terminal heating units and fin tube radiation, replace building automation systems not associated with the heating plant, replace general exhaust fans, replace lighting fixtures, upgrade lighting controls with energy code compliant system	C-D	3-4
° Waste and vent piping has failed in many sections and should be replaced. Storm water leaks exist and roof drains leak – replace. Replace electrical service and distribution – 40+ years old	E	1-2
° Fire Protection systems – none exist.	N/A	5
Note: "5" not counted in priority average.	C	3

PORTFOLIO-LEVEL FINDINGS AND DEFICIENCIES

Site

Existing Condition

Amigos Elementary School is surrounded by quiet residential blocks. The front of the school is enclosed with a playful new gate and decorative fence that follows a play structure the length of the site. Most of the play structure is connected to the fence directly, with some free-standing elements, and all in great condition. This front area is paved with rubber, allowing for a safe playscape. The main entrance to the school is located up four steps and there is no ramp for accessible entry or direct drop off space on this side of the school. The sides of the school are fenced in with regular 6’ fencing and paved with asphalt.

On the east side of the school there are some bike parking racks as well as benches opposite the bike spaces. A side egress door is located one step up from grade, again with no ramp for accessible entry. The space that follows has play areas delineated on the ground as well as a basketball court with two hoops and markings on the asphalt. The court is accessed by community members after school hours. All elements on this side of the school are in good condition. Also located on this side are stairs leading to the basement as well as another side door, neither of which have ramps for accessible entry. The back of the school is located directly on the sidewalk, with a portico and steps recessed in, but there is no back entry off the back steps.

The west side of the site consists of parking space, an area for trash, as well as a drop off area with a receiving door on this side and an accessible entry. This side is in fair condition, with some cracks and holes in the asphalt in the parking area. There are no parking spaces marked; however, a satellite view shows 14 cars parked in this area in a tandem arrangement against the site fence. As you round the corner towards the front of the school, this side has more bike parking spaces, followed by another side egress door (similar as the opposite side), compost space, a shed, and gardening beds for the CitySprouts program, all in good condition.



Playground, South



Drop off/parking area, North

Architectural - Exterior

Existing Condition

The building exterior of the Amigos School comprises multi-wythe brick masonry with limestone windowsills and decorative facade accents, aluminum replacement windows and a ballasted EPDM roof. The masonry façade is in good condition overall with isolated areas in need of repair. The replacement windows are in fair condition and the roof is in fair condition.

Masonry:
The masonry façade is largely in good condition overall and there is evidence of previous repointing in some areas. There are isolated locations of cracked and displaced brick and mortar as a result of rust jacking of steel lintels at the head of window openings on the North Elevation. Vertical cracking of brick is present at a few locations as well as spalling mortar below window sills. There is some peeling paint and rusting of the steel lintels. (Ref: Photos AE-6-12)

Cracking of the limestone is evident at various locations throughout the façade, including at the horizontal accent bands and at decorative stonework surrounding building entrances. Isolated delamination and spalling of limestone were also observed, primarily at the former building entrance on the North Elevation. (Ref: Photos AE-13-17)

Windows and Doors:
The windows are aluminum double hung replacement assemblies with insulated glass and thermally broken frames. The windows are in fair condition overall. Security grilles are installed on the exterior at the lower floors, and some windows have been retrofitted to accommodate air conditioners. Exterior perimeter sealants are failed at some windows. There are some broken panes of glass, primarily at the Gymnasium in the North wing of the building. (Ref: Photo AE-19-25)

A former door opening at the center of the North Elevation has been infilled with glass block which appears in good condition. (Ref: Photo AE-18) A Greenhouse is located on the upper floor of the South Elevation but is not in use and is no longer accessible from the building interior. (Ref: Photo AE-23)

The exterior doors and associated window assemblies are hollow metal framed with surface rusting and peeling paint on the base of these frames at most locations. The hollow metal window assemblies at these entrances also exhibit rusting and peeling paint. (Ref: Photos AE-26-29)



AE-A: Main Entrance at South Elevation



AE-B: Typical aluminum window within brick masonry façade, with limestone sill and painted steel lintel.

Architectural - Exterior

Existing Condition

Roofing:
The roofing assembly is surfaced with a ballasted EPDM installed over a concrete waffle slab deck. Access to the roof is via a roof hatch. The EPDM roof is in fair condition overall and the ballast is not uniformly distributed throughout the roof. It is understood that the ballast was moved around the roof to expose the EPDM to identify and repair sources of roof leakage. (Ref: Photos AE-C-D, AE-30-40)

The presence of insulation (if any) or other existing roofing systems below the EPDM is unknown. The EPDM is loose laid below the stone ballast and appears tented in areas where no ballast is present. Prefabricated flashing boots and miscellaneous EPDM field repair patches are visible at various locations throughout the roof, with some failing lap sealants and associated flashings becoming unadhered. (Ref: Photos AE-36-40)

Roof drainage is via through internal roof drains and no secondary means of drainage such as overflow drains or scuppers was observed. The roof drains and strainers appear to have been recently replaced. (Ref: Photo AE-D)

Reported Envelope Issues:
While on site, discussions were held with facilities personnel to identify any building exterior-related issues that may exist. Those present were shown interior locations of recurrent water leakage that is believed to be a result of roofing deficiencies. Interior locations with active leakage include the Corridor near Room 304, the East Stairwell, (Ref: Photo AE-C) and in the Gymnasium at the North central wing of the building.



AE-C: Representative interior ceiling damage due to previous water leakage issues from roof.



AE-D: Representative ballasted EPDM roof with newer roof drain assembly.

Architectural - Exterior

Recommendations

Masonry:
Isolated replacement of the existing steel lintels could be performed with new galvanized lintels to reduce potential for future rusting and rust jacking damage to the brick and mortar. A short-term repair could include scraping and painting of the existing steel lintels, and introduction of soft joints where the mortar is cracking and becoming displaced due to the rust jacking lintels.

A scope of masonry cleaning, repointing and brick replacement should be undertaken in areas of cracked brick to extend the service life of the masonry and to reduce potential for further issues.

Repair of cracked and spalled limestone is also recommended. A make-safe survey and repair work is recommended for the areas with cracked and delaminated limestone on the North Elevation.

Windows and Doors:
The existing perimeter sealants at windows and doors should be replaced. Some of the surface rusting observed at the hollow metal doors and frames may be due to use of deicing salts during the winter months. Reduction in use of these materials against these metal assemblies should reduce potential for further damage. The replacement of doors and frames is recommended.

Roofing:
Replacement of all existing roofing systems is recommended. The roof has exceeded its expected service life and should be replaced with a new roofing system with Code compliant insulation and incorporation secondary drainage. Preparation for re-roofing should include investigations into the sources of water leakage observed in various areas of the building to confirm that leakage will be addressed by the proposed roof replacement work and there are no other sources of leakage. New roofing systems should include providing a safe means of access to each roof.

Architectural - Interior

Existing Condition

Multi-wythe brick masonry with limestone windowsills and decorative facade accents, aluminum replacement windows and a ballasted EPDM roof
1915 and 1938

The interior condition of the Amigos School has a majority of rooms in need of significant repair with a small portion in good/ new condition and another small portion failing.

The shared use spaces such as gym, library and cafeteria are in marginal condition. The school appears to have had limited interior upgrades since it’s construction in 1915 and 1938. Have had limited upgrades with some finish materials appear to be original. These spaces have a higher priority for attention to keep them in useful condition. There are limited toilet rooms, and those are generally in poor condition.

Ceilings:
The majority of the ceilings are acoustical tile ceilings (ACT) with the corridors either very ‘open’ ACT or tectum panels (which could not be determined on visual inspection). Ceiling conditions are in low adequate condition on the first floor and get worse as you move up through the building. The third floor corridor ceilings are in marginal to poor condition. These have overall deteriorated surfaces and some significant staining. Some selected spaces such as a handful of classrooms and some administrative areas have had ACT replaced recently. The first floor has several rooms with exposed, painted structure; these are in good condition typically with a few locations where paint is peeling. The gym ceiling is exposed structure with tectum panels; the tectum has passed its useful life.

Walls:
Typical classroom walls throughout are gypsum to the door heads and tectum above. The gypsum shows wear and is in need of painting; the tectum above is dirty and stained consistently in all rooms and appears to have only original finish. Some spaces, such as office spaces, appear to have been reconfigured recently and those gypsum walls are in good to adequate condition. The corridors are either brick or tile wainscot (six foot or higher) with gypsum above; they are in functional condition. One stair is brick while the other is tile and gypsum similar to corridor wall. The gym walls have a modular panel with dentil detail; they are in moderate condition.

Floors:
The flooring on opposite ends of the spectrum are about 8 rooms that have new linoleum in contract to about 5 rooms that have VAT 9x9 tile which is well worn and should be replaced. Replacement should be prioritized if possible and continue to be monitored (under the current protocols) until it can be replaced. About a dozen rooms have new linoleum and the rest are predominantly VCT.



Amigos First Floor Corridor



Amigos Typical Second Floor Classroom

Architectural - Interior

Existing Condition

While corridors are terrazzo, which is typically very durable, this floor is in marginal condition and has a lot of visible damage and cracking that spans significant portions of the floor. The carpet in the library and the wood floor at the stage are both in adequate condition. The gym floor appears to be a rubber or linoleum sheet floor; it is well past its useful life.

Windows:
This section addresses the conditions of the exterior windows from the interior view. All windows at the Amigos School were aluminum clad wood windows and appear in good condition from the inside. No evidence of leaks was apparent. There is a limited number of interior windows which are typically hollow metal frames. They are in good condition.

Doors:
Typical majority of the doors are wood doors in hollow metal frames. They are in moderate with a lot of wear and tear. About a third of the doors were hollow metal and are also in good condition.

FFE:
The furniture, fixtures and equipment vary in age throughout the school with the majority of it being in adequate to below adequate condition. Some furniture appears to be new, while some is quite worn.

Millwork:
The condition of the millwork, was consistently low throughout the building. Most of the teaching spaces had millwork. This varied from moderate at best to poor at worst. Especially millwork near sinks was delaminating and should be replaced. Open shelving which appeared to be original and was on the low end of adequate condition. The exception as the library where the shelving was in good condition and appears to be relatively newer.

Plumbing:
Classroom plumbing, when present, is in adequate to marginal condition. Some of the rest room fixtures appear to be more recent replacements; they and are covered in more depth by MEP analysis.

Recommendations

Interior finishes are overall well past their useful life. This building is in need of renovations and would best be handled as a full scope project rather than done in isolated scopes.



Amigos Typical Third Floor Classroom



Amigos Third Floor Corridor

Theater

Existing Condition

The theatrical equipment systems at the Amigos School are minimal and are in fair condition.

The stage rigging consists only of drapery track connected to directly structure. Support is by chain.

The stage drapes, track, and other hardware are showing signs of wear.

The theatrical lighting consists of a single bank of incandescent strip lights.

Recommendations

Theatrical Rigging:
Connections to structure should be inspected by a ETCP Certified rigging professional. Components not rated for overhead suspension or not appropriate for this application should be replaced. Some components may be reused.

Additional fixed pipe batten positions for lighting fixtures should be added.

Stage Drapery:
Stage draperies should be replaced with new, inherently flame-retardant drapes. Additional stage draperies should be added.

All drapery tracks and hardware should be inspected and replaced or maintained as needed.

This system should be upgraded. New power and control infrastructure should be installed. Existing fixtures should be replaced by LED fixtures and some additional LED fixtures should be added.



Existing Lighting Fixtures and Valance Curtain



Existing Curtain and Hardware

Structural System

Existing Condition

General
The Amigos Elementary School was constructed in 1915; a large addition expanded the building in 1938. A complete set of existing structural drawings for the 1938 building was available to the design team at the time of our visit to the school. The facility has three above-grade stories and a full basement. The 1915 building structure consists of concrete slabs on terracotta arches supported by steel beams and masonry bearing walls. The 1938 addition is structured with steel frames supporting one-way and two-way concrete rib slabs, with conventional, soil-supported foundations. The building structure of the original building and the addition generally appears to be in satisfactory condition.

Existing Structural Systems and Observations
Foundations for the 1915 building are assumed to be slabs on grade and continuous wall footings supporting masonry bearing walls. Foundations for the 1938 building consist of concrete slabs on grade, reinforced concrete foundation walls with continuous wall footings, and individual spread footings at building columns. Foundations appear to be performing adequately; there are no apparent signs of significant total or differential settlements.

Floor Construction in the 1915 building consists of a concrete topping slab over terracotta arches spanning between steel beams that are supported by masonry bearing walls. Floor construction of the 1938 building consists of one-way and two-way concrete joist slabs supported by steel beams spanning to steel (wide flange) columns. Floor construction appears to be performing satisfactorily. Minor cracks in floor finishes were observed but there is no evidence of structural distress that would indicate significantly overstressed, deteriorated, or failed structural members.

Roof Construction in the 1915 building consists of “book tiles” supported by tees spanning to steel beams which are supported by masonry bearing walls. Roof construction in the 1938 building consists of one- and two-way concrete joist slabs supported by steel beams spanning to steel (wide flange) columns. Loading information was not noted on the available original Structural Drawings; however, the original building and subsequent addition may have been designed to comply with the requirements of Boston Building Code which would have required a minimum design roof load of 40 psf. However, drifting snow loads were likely not accounted for in the original design. Overall, the roof construction appears to be performing satisfactorily; there is no evidence of structural distress that would indicate significantly overstressed, deteriorated, or failed structural members.

Exterior Wall Construction consists of brick masonry walls. Interior walls are also brick masonry construction. The exposed brick on the exterior of the building appears to be good condition.



Photo ST-1: Loose Flashing at Roof Edge

Structural System

There is no clearly defined lateral force resisting system for the building. By default, the lateral forces are likely being resisted by the perimeter and interior, unreinforced masonry walls. Due to the lack of a formal lateral force resisting system, the structure does not meet current design code wind and seismic load requirements. Lateral force resistance and seismic hazards, including unreinforced masonry wall issues, would need to be addressed in conjunction with a future major renovation of the building.

Recommendations

Structural Comments/Recommendations
Structural conditions at the school were reviewed at the site (to the extent possible) on August 30, 2022. While the building structure was observed to generally be in satisfactory condition, specific structural/structurally related conditions that may require further investigation and/or remediation in the future are listed below.

Brake metal flashing at the roof edge above the main entry appeared loose. This should be secured to the building. Refer to Photo ST-1.

Evidence of water/moisture issues were observed in multiple locations (both on the interior and exterior of the building), which may be indicative of failing roofing systems or caulked joints, and/or leaking mechanical systems. Further investigation is recommended. Refer to Photos ST-2 and ST-3.

Corrosion and deterioration of the treads and risers of interior stairs were observed in various locations. This type of corrosion typically occurs at ground floor stairs with access to the exterior where exposure to de-icing salts is common. Further evaluation and inspection of all interior stairs is recommended. Refer to Photo ST-4.

General Comments on Renovations, Alterations, Repairs, and Additions
Renovations, alterations, repairs, and additions to existing buildings in Massachusetts are governed by the provisions of the Massachusetts State Building Code (MSBC – 9th Edition) and the Massachusetts Existing Building Code (MEBC), which defines three compliance methods for the repair, alteration, change of occupancy, addition, or relocation of an existing building. The method of compliance is chosen by the Design Team (based on the project scope and cost considerations) and cannot be combined with other methods. The Work Area Compliance Method (IEBC Chapters 4 through 12) is the most common compliance method chosen.



Photo ST-2: Water Infiltration in Gymnasium

Structural System

The design and construction of any proposed addition(s) to the existing building would be conducted in accordance with the Code for new construction. Generally speaking, additions should be structurally separated from the existing, adjacent construction by an expansion (seismic) joint to avoid an increase in gravity loads or lateral loads to existing structural elements.

Where proposed alterations to existing structural elements carrying gravity loads result in a stress increase of over 5%, the affected element will need to be reinforced or replaced to comply with the Code for new construction. Alterations to existing structural elements resisting lateral loads (i.e., masonry walls) which result in an increase in the demand - capacity ratio of over 10% should be avoided; otherwise, a seismic evaluation and potential upgrade will be required. Essentially, this means that removal of, or major alterations to the existing lateral force resisting elements (masonry walls) should be avoided if possible. Structurally attached additions (horizontal or vertical) which result in an increase in the demand - capacity ratio of over 10% would also trigger a seismic evaluation and potential seismic evaluation.



Photo ST-3: Peeling Paint



Photo ST-4: Rusty/Corroded Stair Treads

Mechanical System

Executive Summary

Fire Protection Systems
The existing building is not provided with an automatic sprinkler system or a manual-wet standpipe system in the egress stairwells.

Mechanical Systems
The existing building is provided with a centralized hot water boiler heating system, (2) air handling units for distributed ventilation with heating coils, hot water fin tube radiation, cabinet and propeller unit heaters, general exhaust fans, and a hybrid DDC control system. There is no dedicated or centralized cooling system. Classroom and/or office space cooling is provided by individual space window mounted air conditioning units.

The air handling systems and classroom/interior room fin tube radiation and unit heaters are original to the 1982 building renovation. The central heating system boilers, pumps, controls, etc. were replaced in 2017. The kitchen exhaust fan and associated cafeteria area unit ventilators were replaced in 2012.

The heating hot water system is relatively new and requires no upgrades or replacement are recommended. The air handling systems are beyond the anticipated service life of 25-30 years and should be replaced along with associated controls. Concurrent with air handling unit and controls replacement a plan should be developed to eliminate the window mounted air conditioning units.

Plumbing Systems
The existing building is provided with conventional plumbing systems which include a domestic water distribution system, sanitary waste and vent system, storm water system and a natural gas system.

The plumbing piping systems have an expected service life of 50-100 years. The existing plumbing systems were renovated in 1982 with a significant amount of pipe original to the building construction still in use. The plumbing systems are generally in poor condition and should be replaced in their entirety.

Electrical Systems
The existing electrical distribution, lighting, fire alarm, and IT systems are partially original to the 1982 building renovation and new construction project, approximately 40 years old, and have had only minor modifications to support program changes.

Most of the feeders in the electrical distribution system were not upgraded in the 1982 renovation and are original to 1938. This equipment is past its useful life.



M-1: 2017 Benchmark Aerco Boiler

Fire Protection System

Sprinkler System

Existing Condition
The existing building is not provided with an automatic sprinkler system.

Recommendations
Provide an automatic sprinkler system when required based on proposed building renovations.

Standpipe System

Existing Condition
The existing building is not provided with a manual-wet standpipe system.

Recommendations
Provide a manual-wet standpipe system when required based on proposed building renovations.

Mechanical System

Heating System

Existing Condition
The heating source for the building consists of (2) Benchmark Aerco boilers with two heating hot water pumps all located in the mechanical room. Heating hot water is distributed throughout the building using two (2) base mounted pumps located in configured for lead/standby operation. The boilers have local controllers which are interfaced to a Johnson Controls (JCI) FX system. The JCI system is connected to the Cambridge Schools campus BAS network via JCI Facility Explorer.

The heating hot water system was replaced in 2017 and is in very good condition. Service tags were noted on the boilers and routine maintenance has been occurring on a regular basis. There is little to no evidence of any residual repair and upkeep having taken place on this fairly new equipment. All equipment appears to be in working order.

The median service life is for high efficiency, gas fired, condensing boilers and base mounted pumps of this type is anticipated to be 20-25 years.

Recommendations
Although service life for this type of equipment is ultimately related to run time duty, environmental conditions, quality and periodicity of routine maintenance, etc. It is recommended that replacement of the heating hot water system should be considered in the next 15-20 years. No action beyond routine maintenance is required at this time.

Cooling System

Existing Condition
There is no dedicated or centralized cooling system in the building. Occupied area cooling is accomplished through individual room window mounted air conditioning units.

Recommendations
Concurrent with any air handling system upgrades, replace window mounted air conditioning units with a centralized cooling system.



M-2: Hot Water Pumps and VFD's (2017 Replacement)



M-3: Typical Classroom with Window Mounted AC Unit

Mechanical System

Ventilating and Air Conditioning System

Existing Condition
Ventilation for the building is provided primarily through all-air systems using a total of two (2) heating and ventilating (HV) air handling units. Both units are constant volume units and utilize heating hot water coils and provide ventilation but neither provide any means of mechanical cooling.

Unit HV-1, located in the boiler room, supplies constant volume air to the classrooms which is distributed by duct work system. The associated piping and duct work are in fair condition. This unit is operational and given its age (installed circa 1982) is in reasonably good shape. However, the unit outside air dampers appear to have been fixed in place and the mixed air dampers to the unit have been removed some time in the past. The unit DDC controls do not appear to be fully functional and are antiquated.

Unit HV-2, located in Mech Room 200, is a dedicated unit which serves the gymnasium area. The associated piping and duct work are in fair condition. This unit does not appear to be operational. Given its age (installed circa 1982) the unit itself appears to be in reasonably good physical shape. However, the unit is shut off locally via its electrical disconnect switch. The hot water coil appears to have been valved off and drained and the hot water control valve wiring has been disconnected. The unit may have experienced a water coil leak sometime in the past. The unit controls do not appear to be fully functional and are antiquated.

The kitchen area is served by a kitchen hood exhaust fan with make up air provided by (2) two unit ventilators located in the cafeteria space. This equipment is DDC controlled via Reliable controllers with a Tridium Vykon JACE for interface to the Cambridge Schools BAS network. This equipment was upgraded/replaced in 2012. Beyond some duct insulation cosmetic repairs, no operational or performance issues were noted.

Classrooms and interior spaces are served by a combination of perimeter fin tube radiation, cabinet unit heaters, and window mounted air conditioning units. General exhaust fans provide ventilation to toilet and restroom spaces. With the exception of the window AC units, all this equipment appears to be original to the 1982 building renovations and is in fair shape.



M-4: Classroom Window Mounted AC Unit



M-5: General Condition of Unit HV-1

Mechanical System

Ventilating and Air Conditioning System

Recommendations
Unit HV-1 is beyond its anticipated service life (25-30 years) and should be considered for replacement. The unit structure appears to be sound but at a minimum the unit air dampers should be restored to service and the controls, including valve and damper actuators, should be upgraded to current technology.

Unit HV-2 is beyond its anticipated service life (25-30 years) and should be considered for replacement. The unit structure appears to be sound but at a minimum the unit hot water coil and/or control valve should be repaired and the unit returned to operation. The controls, including valve and damper actuators, should be upgraded to current technology.

Kitchen exhaust and unit ventilators are still within their anticipated service life (25 years) having been replaced approximately 10 years ago and no operational recommendations are being made at this time. However, the damaged and exposed duct insulation in the occupied cafeteria space should be repaired.

Classroom and interior space heating and ventilating systems appear to be largely functional and in fair condition. Fin tube radiation and unit heaters are still within a reasonable service life and in no need of imminent replacement. However, a plan should be developed to provide cooling to the occupied spaces via some sort of centralized system in order to eliminate the large number of window mounted AC units. Coordinated/staged control of the heating and cooling in these spaces via DDC controllers should also be considered as part of this AC unit replacement.

Mechanical System

Building Automation System

Existing Condition
The existing building automation system is a hybrid of different age and manufacturer control systems which consist of vintage Barber Coleman controllers for the HV air handling units, Reliable/Vykon controllers for the kitchen exhaust system, and a relatively up-to-date JCI Facility Explorer system for the heating hot water plant. As noted above, the controls for the HV units do not appear to be functional. Given the age of this equipment, finding replacement/repair parts is not likely. The kitchen equipment controls are much more modern, though in the middle of anticipated service life (20 years) and appear to be functional with no operational issued noted. The more technologically current JCI Facility Explorer system interfacing with the heating hot water system was installed in 2017 and is fully functional.

Recommendations
The existing HV unit’s DDC systems in their entirety should be replaced. They are well past the expected operational service life (20 years). This replacement should be concurrent with any replacement or upgrades of the air handling units and/or the occupied area heating/cooling equipment. The kitchen equipment DDC devices are in no need of replacement. However, if the HV system controls are to be replaced then it is recommended that the kitchen equipment controls be upgraded with equivalent controls at that time in order to provide a seamless building automation system. The heating hot water/boiler system DDC controls are technologically current and are still fully operational and interface with the current Cambridge School system BAS network. No recommendations are made for replacement/upgrades of this system. Any upgrades to the building’s BAS network should be fully compatible with the current Tridium Niagara platform. Any control system upgrades should include a complete system of DDC controllers, sensors, actuators, and head-end graphics with full integration to the campus-wide network.



M-6: JCI Boiler System Controls



M-7: HV-1/2 Unit Controller

Electrical System

Power Distribution

Existing Condition
The Amigos School building is currently served by a utility-owned transformer, located at the south-eastern exterior area of the building.

The electrical service is an 1200A, 208/120VAC, 3-phase, 4-wire, underground service, located in the electrical room at the southern lower level of the school. The Crouse & Hinds Switchboard main service is floor mounted; this panel is from the 1982 upgrade.

This switchboard provides power to 12 branch circuit panels that were upgraded in the 1982 renovation. The feeders from the switchboard to the panels in the basement were also upgraded in 1982.

The feeders from the pull box to the branch circuit panels on floors 1-3 were not upgraded in the 1982 renovation and appear to be original to the 1938 building. Numerous electrical equipment (panels) were observed during a walk-through of the building. It has been observed that the locations of panel boards are poorly designed, as they are situated in corridors and general areas where students frequent. Panel boards are in fair/poor condition given their age, and there were no signs of maintenance being performed on them since 1982.

Emergency Electrical Distribution
There was no generator power noted. Emergency egress lighting is provided by Emergency Battery Units (EBU) along the emergency egress path.

Recommendations
It is generally accepted that the life of an electrical system is thirty (30) years. Beyond that point, it becomes increasingly difficult to cost effectively maintain the system. Wire insulation and equipment failure becomes more common as the system ages, with an increase in outage longevity due to the design of the system and the availability of replacement parts. Often new systems need to be installed to bypass the old system without the benefit of a comprehensive plan designed for the needs of the building. With the aged electrical devices, the devices may not operate under faulty conditions.

The main electrical distribution provides 346KW with an area of 56,976 square feet or 6 W/SF. New highly efficient mechanical designs generally require 19- 24w/sq/ft. The main service would be required to be upgraded complete for a large-scale mechanical upgrade.



E-1: Main Electrical Service (Entrance)



E-2: Circuit Panel ~1982 Renovation

Electrical System

Power Distribution

The electrical code now requires Arc Fault Protection labeling for the safety of the electrical staff. It is recommended that an Arc Fault/Coordination study be performed, and associated labeling be provided to meet today's electrical code. Arc fault reduction is now a code requirement for electrical services of 800A and larger in order to reduce the available Arc Fault, this is not available on the existing equipment.

Due to the age of the existing electrical distribution system (40-84yrs), it is recommended that the existing systems be provided with a full range of electrical preventive maintenance, to include:

- Panelboards and switchgear:
- Inspection and cleaning
 - Ground resistance test
 - Thermal imaging
 - Insulation resistance testing

- Cables:
- Inspection
 - Verify tightness of bolted connections
 - Insulation resistance testing
 - Circuit Breakers
 - Inspection and cleaning
 - Measure contact resistance
 - Thermographic Survey
 - Operate circuit breaker to verify smooth operation
 - Verify tightness of bolted connections
 - Verify trip operation of circuit breaker by primary current injection
 - Verify setting required by coordination study
 - Verify operation of any auxiliary function (i.e. remote trip and close)

Due to the age of the existing electrical distribution system, it is recommended that the existing systems be scanned with an infrared camera to identify any loose or weak electrical connections. The generator should be tested, and a testing regime should be established.

The electrical system should be replaced completely with the next renovation or large-scale mechanical upgrade.

Electrical System

Lighting & Devices

Existing Condition
The majority of the lighting installed in the 1982 building renovation was fluorescent lighting. Lighting control is accomplished with manual switches in most spaces. Classrooms are provided with wall switched lighting and fluorescent fixtures.

Recently, most of the fluorescent lighting in the corridors, gymnasium, common spaces, office, and classrooms were replaced with LED light tubes in the existing fixtures, although fluorescent light fixtures remain. LED lighting fixtures save energy and have reduced maintenance costs as compared to fluorescent fixtures.

Emergency egress lighting is provided by Emergency Battery Units (EBU) along the emergency egress path. The light level at the stairwells should be reviewed. Emergency exit signs were provided and appeared properly located for emergency access.

A spot check of wiring devices indicated varying conditions. Light switches and receptacles were generally in poor to fair condition, although many were older and showing wear. Lack of a sufficient quantity of receptacles was noted. In addition, in the cafeteria ground fault circuit breakers were not provided as required by the latest electrical code. Tamper resistance receptacles are also required in Preschools and elementary education facilities

Recommendations
If a major renovation is undertaken, RFS recommends that the lighting fixtures are removed, and new fixtures be provided that meet current energy efficiency standards and are available for possible utility rebate programs. Lighting in all spaces should be reviewed to ensure adequate levels are provided.

The lighting design should incorporate modern lighting techniques and controls, such as zoned indirect lighting, dimming capabilities for audio-visual presentations, as well as low-level direct lighting. Additionally, high-efficiency light fixtures with daylight harvesting controls should be used; although not required by code, it may offer additional energy savings.

Occupancy sensors should also be provided to comply with current energy conservation requirements. Provide a full test of the emergency lighting, verify that light levels meet existing code required levels and ensure compliance with 527 CMR, NFPA 70 and NFPA 101.



E-3: LED Lighting



E-4: Emergency Egress Lighting

Electrical System

Lighting & Devices

It is recommended that all devices be replaced with the next major renovation, as ceilings will need to be removed for MEP work.

Emergency lighting should be upgraded by providing additional fixtures in areas that lack sufficient levels of emergency lighting (stairways).

Plumbing System

Domestic Water System

Existing Condition
Water Service Entrance: The building is provided with two separate 2” water service entrances located on the Upton Street side of the building. Each water service is provided with a 2-inch Neptune T-10 meter with remote read.

Domestic Water Quality: Cambridge water supply has been known to contain hard water containing minerals below the Maximum Contaminant Level by the Cambridge Water Department. It is suspected that faster than normal corrosion of domestic systems is caused by scale build of from the water being supplied to the building.

Non-Potable Piping: Many of the plumbing fixtures have stickers above them stating “NOTICE NON-POTABLE WATER NOT FOR DRINKING OR COOKING USE” The existing science classrooms appear to be served with non-potable hot and cold water supplied by two backflow preventers located in the third floor science classrooms. Further investigation is necessary to determine if there are no plumbing fixtures requiring non-potable water connected to the potable system.

Domestic Water Heater: Domestic hot water is generated from a simplex Bradford White gas fired water heater with 60 gallons of integral storage. The hot water system is fully circulated back to the heater with the use of a Taco Model 010-SF3 cartridge circulator. The domestic hot water system is provided with a Amtrol ST-8 expansion tank. The hot water system is not provided with a master thermostatic mixing valve. The outlet temperature of the water heater is set at 120-degrees. The heater appears to be in good condition. The expected service life for the water heater is 20 years.

A separate electric water heater serves the kitchen. The RUUD heater has 40 gallons of integral storage and is rated at 4,500 watts and was manufactured in 06/2011. The heater is not provided with a master thermostatic mixing valve or expansion tank. The heater was installed 08/15/2012 and appears to be in good condition.

System Piping: The piping serving the domestic water system includes soldered copper with brass ball valves. Recent repairs and fixture replacements use press fittings. The piping system appears to be in fair condition. The expected service life for copper pipe is 80 years.



PL-1: Art Room Sink.



PL-2: Exterior drinking fountain.

Plumbing System

Domestic Water System

Recommendations
Replace corroded pipe, valves, and fittings as required.

Provide a water quality report for the building to determine the characteristics of the domestic water. Provide water softening equipment on domestic water supply to the building to slow the degradation of existing domestic systems if required.

All science classroom lab sinks shall be provided with a protected water system. Non-potable Hot and cold water supplies shall be protected with the use of reduced pressure backflow preventers. A dedicated water heater with circulator shall be provided if it is determined hot water is required in the labs.

Check all piping insulation for asbestos containing materials. All existing domestic water piping should be provided with fiberglass insulation.

Remove and replace all existing domestic water pipe which contains lead-solder.

Domestic Plumbing Fixtures

Existing Condition
The domestic plumbing fixtures located within the building include wall mounted 3.5 gpf water closets with manual flush valves. The building also includes wall mounted urinals with manual flush valves, wall mount china lavatories with push button manual metering faucets, stainless-steel wall mount handwashing sinks with push button manual metering faucets, and stainless-steel wall mount drinking fountains. Some fixtures did appear to be ADA compliant.

Science classrooms are provided with lab sinks which include epoxy basins and manual faucets with integral vacuum breakers. Emergency shower and eyewashes with integral Leonard mixing valves were recently provided.

The art room is provided with a stainless steel sink and a solids interceptor.

An exterior stainless steel drinking fountain and bottle filler is provided on site. The fixture appears to be in good condition.

Exterior hose bibbs appear to be frost-free with integral vacuum breakers.

Many of the domestic plumbing fixtures appear to be in poor condition except for some fixtures that have been recently replaced. The domestic plumbing fixtures have an expected service life of 30-40 years.



PL-3: Privacy Shields Should Be Provided



PL-4: Failed Cast Iron Pipe

Plumbing System

Domestic Plumbing Fixtures

Recommendations
Public lavatories shall be provided with thermostatic mixing valves to limit the outlet temperature to a maximum of 110-degrees. Insulation kits shall be provided at all ADA lavatories at the supplies, stops, p-trap and tailpiece.

Urinals shall be side shielded for privacy as required by the Massachusetts Plumbing Code, 248 CMR.

Replace plumbing fixtures and floor drains which are heavily corroded and exceeded their useful service life.

Replace plumbing fixtures throughout the building with water conserving low-flow fixtures.

Sanitary Waste and Vent System

Existing Condition
The building is provided with a sanitary waste and vent system which collects sanitary sewage from the domestic plumbing fixtures located throughout the building.

The pot sink in the kitchen is provided with a recessed grease interceptor. The outlet of the interceptor is piped to the sanitary waste piping.

The waste stream from the science classrooms sinks is piped to point-of-use pH chip tanks.

The observed waste piping is cast iron pipe with 4-band clamps. The expected service life for cast iron pipe is 80-100 years. Most of the cast iron pipe located in the mechanical sub-basement level has failed and should be immediately replaced.

Recommendations
Replace existing corroded and failed piping and fittings as required.

Perform all required service on the pH neutralization chip tanks to assure system is discharging a neutral waste stream.

Coordinate the need to provide an exterior grease interceptor with the Cambridge Sewer Department. Assure interior grease interceptor is properly maintained.



PL-5: Failed Cast Iron Pipe



PL-6: Corroded classroom sink drainage

Plumbing System

Storm System

Existing Condition
The building is provided with a storm system which collects rainwater from the roof drains located on all flat sections of roof. The piping is installed down through the building and discharges to the municipal storm sewer by gravity.

The sub-basement mechanical room is provided with a duplex sump pump. One of the pumps appears to have been recently replaced. The pumps and discharge piping are in poor condition.

The storm system consists of cast iron pipe with hub and spigot joints. Some of the horizontal sections of pipe are provided with insulation. The piping appears to be in fair condition. The expected service life for cast iron pipe is 80-100 years.

Recommendations
Coordinate with a roofing contractor and identify all roof drain bodies which leak and replace all drain bodies and piping subject to leaking.

Replace the existing sump pumps and controller. Provide cover over existing sump basin.

Natural Gas System

Existing Condition
The building is provided with a natural gas system. The service entrance is on the north-west side of the building. Natural gas serves the mechanical boilers, domestic water heater, science classrooms, and kitchen equipment. The natural gas piping is black steel and appears to be in fair condition.

The expected service life of black steel pipe is 75 years.

Recommendations
The existing gas isolation valves located in each of the science classrooms are in a surface mounted cabinet with a hinged door. The Massachusetts Plumbing Code requires the gas valves to be readily accessible which would prevent the use of the cabinet door.

If it is determined the natural gas piping to the science classrooms has been disconnected or is no longer required, then the piping and associated gas turrets shall be removed in its entirety.



PL-7: Leaking Roof/ Drains at Attic



PL-8: Existing Gas Valve Cabinet

Fire/Life Safety

Fire Alarm

Existing Condition
The existing fire alarm control panel (Horn/Strobe) has been upgraded since the 1982 renovation and appears in fair to good condition. The system is in good operating condition. The main system is located in the main electrical room. There is a Knox box and Beacon at the main entrance.

The International Building Code (IBC) requires that a speaker type system be provided in an education occupancy (K-12), the system is a horn-type system and does not meet today's code requirements.

Smoke detectors are present in most emergency egress paths, heat detectors were also noted in utility closets, kitchens, and mechanical spaces. The devices appear to be in fair working order.

Pull stations were observed at most exits and at entrance points to level change. CO detection was not noted in classrooms or areas adjacent to carbon monoxide producing equipment.

Horns/lights are installed in corridors and some common spaces to provide alarm notification to occupants. The devices appear in fair/poor working order with white strobe lenses in several areas and not clear as required by code.

Recommendations
The existing fire alarm control panel is not code complaint - non-compliant ADA type indicating devices are installed. A new addressable voice system should be installed due to occupancy requirements within the building to replace the existing system. Additional speaker strobe coverage and proper relocation of pull stations should be conducted to meet code.

It is recommended that a speaker type-system be provided for transmitting voice notifications in the event of a fire alarm and/or mass notification.

Install carbon monoxide devices in alarms devices in every classroom where carbon emitting devices are located. Verify all devices are provided as required by NFPA 72, the currently adopted IBC, and the Mass Fire Alarm code (Missing pull stations, smoke detection not code compliant etc.)



E-5: Existing Fire Alarm Device

Accessibility

Existing Condition

The Amigos Elementary School is an existing 56,976 ft2 three and a half story Cambridge public school. The building was reportedly originally constructed in 1939 and last renovated in 1983.

Occupancy Classification

- Use Group E (School)

Construction Type

Based on the field observations the building most closely resembles Type IIIB construction due to partial interior wood framing and masonry exterior walls.

Vertical Openings

All existing vertical openings in the work area connecting two or more floors must be enclosed with 1 hour rated construction and approved opening protectives unless the openings meet one of the exceptions in IEBC 803.2.1.

The building includes two egress stairways connecting all four levels. They are enclosed with masonry walls and wired-glass which may be acceptable to the building official as an existing 1-hour enclosure.

Interior Finishes

The existing interior finish of walls and ceilings in the work area and in all exits and corridors serving the work area must comply with the code requirements for new construction (IEBC 803.4).

Walls & Ceilings (IBC Table 803.11)

Use Group:	E (Sprinklered)	E (Non-Sprinklered)
Exit Enclosures	Class B	Class A
Exit Access Corridors	Class C	Class B
Rooms & Enclosed Spaces	Class C	Class C

Existing interior finishes in both buildings typically consist of painted gypsum wallboard or masonry which meets these requirements.



Existing Stairway

Accessibility

Existing Condition

Means of Egress

Means of egress conforming to the requirements of the building code under which the building was constructed are considered compliant means of egress if, in the opinion of the code official, they do not constitute a distinct hazard to life (IEBC 805.1). This section allows the existing means of egress stairs, doors, etc. to remain unless they are considered hazardous.

All levels are served by two enclosed egress stairs as well as additional exterior doors. No hazardous egress conditions were noted during the site visit. Illuminated exit signs and emergency lighting appear to be provided throughout.

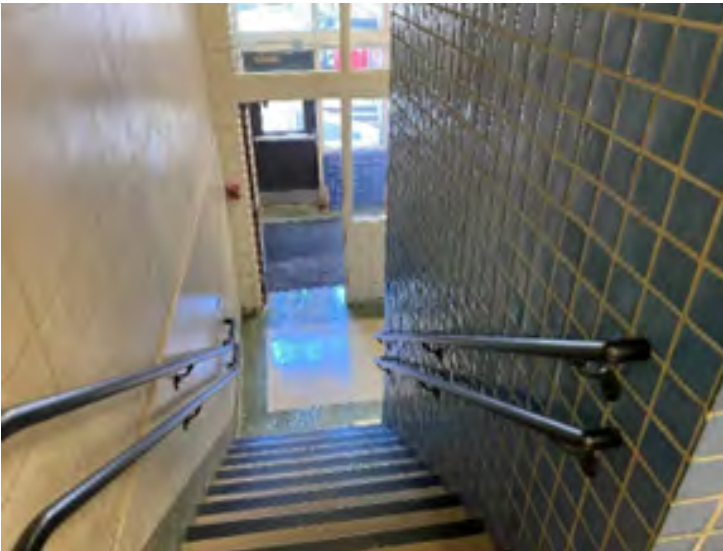
Required Fire Protection Systems

The building does not have sprinkler protection, but does have an existing fire alarm and detection system, as well as fire extinguishers. The following fire protection systems are required in the areas noted if the building is renovated:

- Automatic sprinkler protection is required throughout the work area if the work area includes exits or corridors serving an occupant load greater than 30 and the work area exceeds 50% of an individual floor area (IEBC 804.2.2). Since the gross area of the building is more than 7,500 ft2, if it undergoes a major renovation Massachusetts General Law Chapter 148 Section 26G would require sprinkler protection throughout the building.
- Existing previously approved fire alarm systems are permitted to remain if the building undergoes a Level 1 or Level 2 alteration (IEBC 804.4.1). A Level 3 alteration would require the fire alarm system to comply with the code requirements for new construction, which would require a voice-alarm system (IEBC 904.2).
- Fire extinguishers (527 CMR 1 Section 13.6 & IBC 906.1). Fire extinguishers must be maintained and located throughout the building so that the maximum travel distance to an extinguisher is less than 75 feet.



Existing Egress Stairs



Existing Egress Stairs

Accessibility

Existing Condition

Accessibility for Persons with Disabilities

The building has an accessible drinking fountain and toilet room. The entrance is functionally accessible but does not provide the fully clear floor space beyond the latch on the pull side of the door. If the cost of work exceeds \$100,000 the accessible entrance door would have to be modified by adding an automated power door operator.

The Cambridge Assessor’s on-line database indicates the Amigos Elementary School has an assessed value of \$14,592,800 and the Massachusetts Department of Revenue’s website indicates the assessment ratio for Cambridge is 0.92. Therefore, the 100% equalized assessed value is \$15,861,739 and 30% of this value is \$4,758,521. Full compliance with 521 CMR would be required if the aggregate cost of renovations in any three-year period exceed this amount. Significant alterations to the building would be required to achieve full compliance, including (but not limited too) all public entrances must be accessible, wheelchair access to the stage, compliant handrails on both sides of the existing ramps & stairs, etc.



Entrance



Drinking fountain

Accessibility



Toilet room



Stage



Main entrance

Conveying System

Existing Condition

The Amigos School is serviced by one (1) direct (in-ground) hydraulic passenger elevator. The elevator has a rated capacity of 2,000 lbs. and travels at a rated speed of 100 fpm. The entrances are 3’-0” wide by 7’-0” high, front and rear opening. The elevator services 4 landings – B, V(rear), 1, 2, 3.

The elevator appears to have been last upgraded in 2011 with a TEC (Traction Elevator Controls) controller, which utilizes a PLC (Programmable Logic Controller) module. TEC was a local elevator controls fabricator, which is no longer in business. The controls utilize predominantly third party electronic components, most of which are still available through various third party parts suppliers. However, technical support for this product no longer exists. Various other components, including the cab enclosure and signal fixtures appear to be original. The hydraulic jack and components appear to have been manufactured by ESI (Elevator System, Inc.). The power unit is a submersible type, with the motor and pump submerged within the oil reservoir, with a Maxton valve. This equipment is all still supported by the respective OEM and maintainable by any provider.

The existing signal fixtures and car operating panel are not compliant with current 521 CMR / ADA requirements pertaining to button height.

Maintenance Deficiencies:

- Scrape and clean all car and hall door sills of debris.
- Clean door operators.

Recommendations

We recommend budgeting for a modernization of the elevator within the next 3-5 years. While this type of equipment should generally be expected to have a useful and reliable lifespan of 20-25 years, based on the controller manufacturer and limited available support, we recommend planning for a replacement sooner. As part of the modernization, we recommend the scope include replacement of the controls, power unit, signal fixtures, machine room and hoistway wiring, car door equipment, and car enclosure and finishes.

Budget: \$120,000 - \$150,000 (Budget estimates are based on commencement of work in 2023)



Door Hardware

Existing Condition

Site shows doors on site range from adequate to poor conditions. Many of the classroom doors look to be in poor condition and will require replacement. Exterior and corridor doors look to meet egress requirements. Overall the site has many openings that will need to be assessed for replacement and repairs.

Food Service

Executive Summary

The Amigos school is an average sized kitchen serving a medium sized population of students at the preschool through 8th grade levels. The finishes and kitchen equipment appear to be newer and constructed within the last 20 years. This kitchen was observed to be properly sized and functioning at a higher level than some of the other schools within the district, but would still benefit from some equipment upgrades to improve its current operation. Updates to cooking, storage and serving equipment would allow the foodservice operations team some flexibility to adapt and more efficiently serve the district’s needs.

Improving cooking and serving equipment will modernize the program allowing it to more easily meet the demands of health code regulations as well as improve the appeal of the food offerings. Modernizing workstations, preparation and cooking equipment will allow the kitchen staff to focus on food production resulting in a more efficient operation. Overall, the program is well run and the staff are highly trained and dedicated. However, they lack the full complement of tools needed to truly operate at a higher level of service.

Kitchen and Servery

General Overview
The Amigos School Foodservice program currently serves a population of approximately 425 students from Pre-K through the 8th grade. The kitchen is mostly intact with minor modifications and equipment upgrades done over the years. Major infrastructure items such as the cooking equipment, serving line and work tables have not been updated in a several years. While the equipment in this school is newer and in better shape than some of the other schools, the program would still benefit greatly on updates and upgrades. Overall, the kitchen staff does a great job of maintaining and keeping the kitchen very clean.

The kitchen walls and storage areas are finished in a mixture of durable painted CMU block or brick and have held up very well over the years. While the walls have held up fairly well, there are some areas where cracks in the CMU and brick walls that are visible and should be properly sealed. Due to the solid nature of the walls, there’s instances where utilities are exposed and not contained within the wall which can present cleanability issues of not maintained properly. Ceilings are a smooth and washable drop-in tile in good condition that meets the modern health code. The flooring material in the kitchen is epoxy type and is also in good condition.

The epoxy style flooring is provided with the required coved based where the floor meets the walls for proper cleanability.



FS-1: Reach-ins cabinets on site were observed outside of food safe temperatures. The reach-in refrigerator was operating at 65° F and the freezer was operating at 20° F. Freezer shall maintain a temperature of -10° F and a refrigerator should be 33°-38° F for proper food holding temperatures. These units require repair or replacement.

Food Service

Refrigerated and dry storage capacities for the school kitchen are limited. The operations team would benefit from additional space to properly store and hold food product at food safe temperatures. Not only is the equipment limited, but there’s also a history of issues with reach-in freezer of holding temperature. Dry goods product is scattered across the kitchen since there’s no dedicated dry storage room. While there’s several stainless work tables in the kitchen, there is a limited amount of food preparation areas with sinks to properly separate and wash food product prior to the cooking process. Chemical storage is another item that’s not present in this kitchen as cleaning chemicals and supplies were exposed to the kitchen elements. By health code, all cleaning and chemical supplies for the kitchen are required to be enclosed in a storage cabinet or secluded in a separate room. The exhaust hood and cooking equipment for this school is much newer than other locations in the district. The equipment, hood and fire suppression system all appear to be in good working order and there’s currently no history of any service issues for this location.

The serving line for this kitchen is limited to individual hot and cold food tables and significantly limits the staff’s ability to function properly. Operationally this proves very challenging for staff to serve students and keep a proper operational flow in a timely manner. The mobile counters being used have full length sneeze guards and the passing of food is challenging in the current setup. Sneeze guards on these mobile counters are outdated and no longer in compliance with current NSF regulations.

This facility has no means of mechanical ware washing which requires all cooking utensils to be manually washed by the staff. While it’s a small operation, this does require a lot of time and dedicated staff to keep up with this operation. Modern day ware washing equipment allows staff to properly clean and sanitize cooking equipment and utensils at a higher level within a matter of minutes. This facilities operation could be improved by the addition of a mechanical ware washer. The following specific issues will reference codes and standards. For the purposes of this report when the health code is referenced, we are citing requirements of the Federal Food Code, 2017 addition, published by the FDA as well as the Merged Massachusetts Food Code 2013 addition. We will also reference the National Sanitation Foundation (NSF). This is an independent governing body that develops standards for foodservice equipment and facility design. All equipment, in commercial kitchens must be built in accordance to NSF standards as a requirement of the food codes.



FS-2: The serving counters are limited to only (1) each of mobile hot and cold mobile units. For this population of students, the operations team would greatly benefit from additional temperature-controlled food at the serving line. The sneeze guards are full length and make passage of food to be challenging.

FCA FORMS - AMIGOS

Amigos School			Architectural				
EXTERIOR							
Room # on Site:							
Area	Part	Type	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Exterior	Façade	Brick Masonry		B	3	AE-6-12	Overall condition of brick masonry
				C	3		Isolated replacement of steel lintels with new galvanized lintels
				C	3		Isolated replacement of cracked brick, cleaning and repointing
Exterior	Façade	Limestone Sills		B	4	AE-13-17	Overall condition of limestone sills
				C	3		Repair of cracked and spalled limestone sills
Exterior	Façade	Limestone at Entrances		D	2	AE-15-17	Make-safe survey and limestone repair work at delaminated and cracked limestone on North Elevation
Exterior	Façade	Windows		C	3	AE-19-25	
Exterior	Façade	Hollow Metal Doors		D	3	AE-26-29	Replacement of doors and frames is recommended
Exterior	Façade	Sealants		D	3	AE-20-21	Replacement of window and door perimeter sealant
Exterior	Roofing	Roofing		D	3	AE-30-40	Replacement of existing roofing systems with new Code compliant insulation and incorporation of secondary drainage.
					3C		

Room Schedule_AMIGOS

RM NAME	RM #	AREA	CEILING MATERIAL	CEILING CONDITION	CEILING PRIORITY	WALL MATERIAL	WALL CONDITION	WALL PRIORITY	FLOOR MATERIAL	FLOOR CONDITION	FLOOR PRIORITY	WINDOWS MATERIAL	WINDOWS CONDITION	WINDOWS PRIORITY	DOORS MATERIAL	DOORS CONDITION	DOORS PRIORITY	FFE CONDITION	FFE PRIORITY	MILLWORK CONDITION	MILLWORK PRIORITY	PLUMBING CONDITION	PLUMBING PRIORITY	
GIRLS BATHROOM	-	408 SF	EXP	C	4	CT FULL HT	B	4	CT	C	4	AL/WD	B	4	WD	C	3	N/A	N/A	N/A	N/A	B	4	
MUSIC STORAGE	-	33 SF	ACT	C	3	GYP/BRICK	C	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
OFFICE	-	123 SF	ACT	C	4	GYP/CMU	C	4	VCT	C	4	N/A	N/A	N/A	N/A	WD	C	4	C	4	N/A	N/A	N/A	
ART	1	918 SF	EXP	C	4	BRICK	C	3	VCT	C	3	AL/WD	C	4	HM	C	3	D	4	D	3	N/A	N/A	
VESTIBULE	2	26 SF	EXP	C	3	CMU	C	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
MUSIC	2	1047 SF	EXP	C	3	BRICK/CMU/GYP/TECTUM	C	4	VCT	C	3	AL/WD	C	4	WD	C	4	C	4	N/A	N/A	N/A	N/A	
PRACTICE 1	002A	79 SF	ACT	C	3	BRICK/CMU/TECTUM	C	4	VCT	C	3	AL/WD	C	4	WD	C	4	C	4	N/A	N/A	N/A	N/A	
PRACTICE 2	002B	153 SF	ACT	C	3	BRICK/CMU/TECTUM	C	4	VCT	C	3	AL/WD	C	4	WD	C	4	C	4	N/A	N/A	N/A	N/A	
STORAGE	002C	41 SF	EXP	C	3	GYP/CMU	C	4	VCT	C	3	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
OT/PT ROOM	3	358 SF	EXP	C	4	GYP/CMU	C	3	VCT	C	3	N/A	N/A	N/A	WD	C	3	D	4	D	3	N/A	N/A	
OFFICE	3	79 SF	ACT/GYP	C	3	GYP/CMU	C	4	VCT	C	3	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
OFFICE	003A	156 SF	EXP	C	4	BRICK	C	3	VCT	C	3	N/A	N/A	N/A	HM	C	3	D	4	D	3	D	3	
OFFICE	4	92 SF	ACT	C	3	GYP/CONC	C	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
ELEC ROOM	6	184 SF	EXP	C	3	BRICK/CMU	D	3	CONC	D	3	AL/WD	C	4	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
MATH/LITERARY ROOM	7	216 SF	ACT	C	3	GYP	C	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	C	3	N/A	N/A	N/A	
FIRE/ ELEC ROOM	8	231 SF	EXP	C	3	BRICK	D	3	CONC	D	3	N/A	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	
OFFICE	9	68 SF	ACT	C	3	GYP	C	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
OFFICE	11	66 SF	ACT	C	3	GYP	C	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	B	3	N/A	N/A	N/A	
OFFICE	12	71 SF	ACT	C	3	GYP	C	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
FOOD SERVICE	14	162 SF	EXP	C	3	BRICK	C	3	CONC	D	3	AL/WD	C	4	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
FOOD PREP	15	662 SF	ACT	B	4	BRICK	D	3	EP	B	4	AL/WD	B	4	WD	B	4	B	4	N/A	N/A	N/A	N/A	
RR CLASSROOM	16	374 SF	EXP	C	4	BRICK/TILE	C	3	VCT	C	3	AL/WD	C	4	HM	C	3	D	4	D	3	N/A	N/A	
MUSIC CLASSROOM	17	917 SF	EXP	C	4	BRICK	C	3	VCT	C	3	AL/WD	C	4	HM	C	3	D	4	D	3	N/A	N/A	
STAIR	20	348 SF	EXP	C	4	BRICK	C	4	VCT	C	4	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
CAFETERIA	21	2872 SF	ACT	C	3	BRICK/CMU	B	3	VCT	C	3	AL/WD	C	4	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
CORRIDOR	23	372 SF	ACT	C	3	CMU	B	3	VCT	C	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
BATHROOM	023A	59 SF	ACT	C	3	GYP/CMU	B	4	CT	B	4	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
BOYS BATHROOM	023B	359 SF	EXP	C	4	CT FULL HT	B	4	CT	C	4	AL/WD	B	4	WD	C	3	N/A	N/A	N/A	N/A	N/A	N/A	
STAIR	24	287 SF	EXP	C	4	GYP/TILE	C	4	VCT	C	4	N/A	N/A	N/A	N/A	HM	C	4	N/A	N/A	N/A	N/A	N/A	
CUSTODIAL	25	614 SF	EXP	D	4	BRICK	C	3	CONC	D	4	N/A	N/A	N/A	N/A	WD	C	4	D	3	N/A	N/A	N/A	
STORAGE	025A	115 SF	EXP	D	4	BRICK	C	3	CONC	D	4	N/A	N/A	N/A	N/A	WD	C	4	D	3	N/A	N/A	N/A	
MECH/STORAGE	26	2581 SF	EXP	C	4	BRICK/CMU	D	3	CONC	C	3	N/A	N/A	N/A	N/A	HM	D	3	D	3	N/A	N/A	N/A	
VESTIBULE	026A	122 SF	EXP	D	3	BRICK/CMU	C	4	VCT	D	3	HM	B	3	HM/WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A	
BATHROOM	026B	122 SF	GYP	D	2	BRICK	D	3	CONC	D	3	STL	D	3	WD	C	3	N/A	N/A	N/A	N/A	D	2	
MECH/STORAGE	026B	57 SF	EXP	C	4	BRICK/CMU	D	3	CONC	C	3	N/A	N/A	N/A	N/A	HM	D	3	D	3	N/A	N/A	N/A	
MECH/STORAGE	026C	311 SF	EXP	C	4	BRICK/CMU	D	3	CONC	C	3	N/A	N/A	N/A	N/A	HM	D	3	D	3	N/A	N/A	N/A	
MECH/STORAGE	026D	131 SF	EXP	C	4	BRICK/CMU	D	3	CONC	C	3	N/A	N/A	N/A	N/A	HM	D	3	D	3	N/A	N/A	N/A	
STAIR	2	282 SF	GYP	B	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	N/A	HM/WD	B	4	N/A	N/A	N/A	N/A	N/A	
CLASSROOM	101	923 SF	ACT	D	3	GYP/TECTUM	C	3	VCT	C	3	AL/WD	B	4	HM	C	4	C	3	D-E	3	C	3	
CLASSROOM	102	862 SF	ACT	D	3	GYP/TECTUM	C	3	VCT	C	3	AL/WD	B	4	HM	C	4	C	3	D-E	3	C	3	
TOILET	102A	16 SF	GYP	C	3	CT FULL HT	B	2	CT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	C	3
VESTIBULE	103	157 SF	GYP	C	3	GYP	C	3	VAT 9X9	D	2	N/A	N/A	N/A	N/A	WD	C	4	D	3	N/A	N/A	N/A	N/A
STORAGE	103A	31 SF	ACT	D	4	GYP	C	3	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	C	3	N/A	N/A
CORRIDOR	103E	1210 SF	ACT	D	3	BRICK	B	4	TERRZ	C	4	N/A	N/A	N/A	N/A	N/A	N/A	C	3	N/A	N/A	N/A	N/A	
CLASSROOM	104	890 SF	ACT	D	3	GYP/TECTUM	C	3	VCT	C	3	AL/WD	B	4	WD	C	4	C	3	D-E	3	C	3	
NURSE	105	198 SF	GYP	B	3	GYP	C	3	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
COT	105A	70 SF	GYP	B	3	GYP?	C	3	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
OFFICE	105B	87 SF	GYP	B	3	GYP	C	3	VCT	C	3	AL/WD	B	4	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOILET	105C	62 SF	GYP	C	3	GYP	B	4	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	B	4
OFFICE	107	381 SF	ACT	D	3	GYP/TECTUM	B	3	LIN	A	4	AL/WD	B	4	WD	C	3	C	4	D-E	3	N/A	N/A	
TOILET	107A	16 SF	GYP	C	3	CT FULL HT	B	2	CT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	C	3
PRINCIPAL OFFICE	107B	200 SF	ACT	D	3	GYP/TECTUM	B	3	LIN	A	4	AL/WD	B	4	WD	C	3	C	4	D-E	3	N/A	N/A	
COPY	107C	141 SF	ACT	D	3	GYP/TECTUM	B	3	LIN	A	4	N/A	N/A	N/A	N/A	WD	C	3	C	4	C	3	N/A	N/A
CLASSROOM	108	921 SF	ACT	D	3	GYP/TECTUM	C	3	VCT	C	3	AL/WD	B	4	WD	C	4	C	3	D-E	3	C	3	
STORAGE	108A	30 SF	ACT	D	4	GYP	C	3	VCT	C	3	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	C	3	N/A	N/A
BATHROOM	108B	43 SF	ACT	C	3	GYP/TECTUM	C	3	VCT	B	3	AL/WD	B	4	WD	C	4	N/A	N/A	N/A	N/A	N/A	C	3
CLASSROOM	109	918 SF	ACT	D	3	GYP/TECTUM	C	3	LIN	A	4	AL/WD	B	4	HM	C	4	C	3	D-E	3	C	3	
GYM/AUDITORIUM	110	3106 SF	EXP?	B	4	GYP/TILE	B	4	RUBBER	D	3	AL/WD	C	4	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CLASSROOM	110	867 SF	ACT	D	3	GYP/TECTUM	C	3	VCT	C	3	AL/WD	B	4	HM	C	4	C	3	D-E	3	C	3	
STAGE	110A	867 SF	GYP	C	3	GYP	C	3	WD	D	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	110B	96 SF	GYP	C	4	GYP	C	4	VAT 9X9	C	2	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	110C	111 SF	GYP	C	4	GYP	C	4	VAT 9X9	C	2	N/A	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
GYM STORAGE	110D	364 SF	ACT/GYP	D	3	GYP	C	3	TERRZ/ CONC	D	3	AL/WD	B	4	WD	D	3	C	3	N/A	N/A	N/A	N/A	N/A
STAIR	110E	190 SF	GYP	C	3	GYP	C	3	TERRZ	C	3	N/A	N/A	N/A	N/A	HM/WD	C	3	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	110F	72 SF	GYP	C	3	GYP	C	3	TERRZ	C	3	N/A	N/A	N/A	N/A	HM/WD	C	3	N/A	N/A	N/A	N/A	N/A	N/A
STORAGE	110G	66 SF	ACT/GYP	D	3	GYP	C	3	TERRZ/ CONC	D	3	AL/WD	B	4	WD	D	3	C	3	N/A	N/A	N/A	N/A	N/A
VESTIBULE	111	77 SF	GYP	B-C	3	GYP	C	3	TERRZ	C	3	AL/WD	B	4	HM	C	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VESTIBULE	113	79 SF	BRICK	B	4	BRICK	B	4	TERRZ	C	4	AL/WD	B	4	HM	C	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STAIR	114	381 SF	EXP	C	4	GYP/BRICK	C	4	TERRZ	C	4	AL/WD	B	4	HM	B	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
JANITOR CLOSET	115A	29 SF	GYP	B	3	GYP/TILE	C	3	VCT	C</														

SCHOOL LIASON	119	252 SF	GYP	B	3	GYP	C	3	VCT	C	3	AL/WD	B	4	WD	C	4	N/A	N/A	N/A	N/A	N/A	N/A
DATA	119B	37 SF	GYP	B	3	GYP	C	3	VCT	C	3	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
CORRIDOR	130A	427 SF	ACT	D	3	BRICK	B	4	TERRZ	C	4	N/A	N/A	N/A	N/A	N/A	C	3	N/A	N/A	N/A	N/A	
CORR	130B	187 SF	ACT	D	3	TILE/GYP	C	4	TERRZ	C	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
RAMP	130C	195 SF	ACT	D	3	GYP	C	4	VCT	C	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
STORAGE	200	615 SF	EXP	C	3	GYP	C	3	CONC	C	3	N/A	N/A	N/A	N/A	HM	C	3	N/A	N/A	N/A	N/A	
CLASSROOM	201	912 SF	ACT	C	3	GYP/TECTUM	C	3	VCT	D	3	AL/WD	B	4	HM	C	4	C	3	C	3	N/A	
CLASSROOM	202	858 SF	ACT	C	3	GYP/TECTUM	C	3	VCT	D	3	AL/WD	B	4	HM	C	4	C	3	C	3	N/A	
COACH'S ROOM	203	294 SF	ACT	C	3	GYP	C	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	C	4	N/A	N/A	N/A	
CLASSROOM	204	866 SF	ACT	C	3	GYP/TECTUM	C	3	VCT	D	3	AL/WD	B	4	WD	C	4	C	3	C	3	N/A	
JANITOR	205	59 SF	GYP	C	4	GYP/TILE	C	3	TERRZ	D	3	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	3	
CONF	206A	247 SF	ACT	A	4	GYP	B	4	VCT	B	4	N/A	N/A	N/A	WD	C	4	B	4	C	4	N/A	
DATA CLOSET	207	107 SF	ACT	D	3	GYP	C	3	VCT	C	3	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
TEACHERS' ROOM	208	441 SF	ACT	A	4	GYP	B	4	VCT	B	4	AL/WD	B	4	WD	C	4	B	4	C	4	C	
ASSIST PRINCIPAL	208A	180 SF	ACT	A	4	GYP	B	4	VCT	B	4	AL/WD	B	4	WD	C	4	B	4	C	4	N/A	
BATHROOM	208B	45 SF	GYP	A	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	B	
BATHROOM	208C	44 SF	GYP	A	4	CT FULL HT	B	4	CT	B	4	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	B	
MATH OFF	209	88 SF	ACT	D	4	GYP	D	3	VCT	D	4	N/A	N/A	N/A	WD	C	4	C	4	N/A	N/A	N/A	
STORAGE?	210	146 SF	ACT	C	4	GYP	B	4	VCT	C	4	N/A	N/A	N/A	WD	C	4	C	3	N/A	N/A	N/A	
SCHOOL PSYCH	211	152 SF	ACT	C	3	CMU/GYP	C	3	VCT	C	3	AL/WD	B	4	WD	C	4	D	3	N/A	N/A	N/A	
STORAGE	214	68 SF	GYP	B	4	GYP	C	4	VAT 9X9	D	2	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	N/A	
CLASSROOM	215	690 SF	ACT	C	3	GYP	D	3	VCT	D	3	AL/WD	B	4	WD	C	4	C	3	C	3	N/A	
LIBRARY	216	480 SF	EXP	B	4	GYP	C	3	CPT	B	4	AL/WD	B	4	WD	C	4	B	4	C	4	N/A	
CLASSROOM	217	931 SF	ACT	C	3	GYP/TECTUM	C	3	LIN	A	4	AL/WD	B	4	HM	C	4	C	3.5	C	3.5	N/A	
LIBRARY	218	1286 SF	EXP	B	4	GYP/TECTUM	C	3	CPT	B	4	AL/WD	B	4	HM	C	4	B	4	C	4	N/A	
STAIR	220	454 SF	GYP	B	4	GYP/BRICK	B	4	TERRZ	D	3	AL/WD	B	4	HM	C	4	N/A	N/A	N/A	N/A	N/A	
CORRIDOR	221	907 SF	ACT	C	4	BRICK/TILE	B	4	TERRZ	D	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
BATHROOM	221A	52 SF	GYP	D	3	TILE	C	4	CT	C	3	N/A	N/A	N/A	WD	C	4	N/A	N/A	N/A	N/A	C	
CORRIDOR	221A	459 SF	ACT	C	4	TILE/GYP	C	4	TERRZ	D	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CORR	221B	155 SF	ACT	C	4	TILE/GYP	C	4	VCT	C	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
STAIR	223	439 SF	GYP	B	4	GYP/BRICK	B	4	TERRZ	D	3	AL/WD	B	4	HM	C	4	N/A	N/A	N/A	N/A	N/A	
DIRECTOR	224	224 SF	ACT	A	4	GYP	B	4	VCT	B	4	AL/WD	B	4	WD	C	4	B	4	C	4	N/A	
CLASSROOM	301	919 SF	ACT	B	4	GYP/TECTUM	C	3	VCT	C	4	AL/WD	B	4	HM	C	3	B-C	3.5	C	3	N/A	
CLASSROOM	302	883 SF	ACT	B	4	GYP/TECTUM	C	3	VCT	C	4	AL/WD	B	4	HM	C	3	B-C	3.5	C	3	N/A	
CLASSROOM	303	894 SF	ACT	B	4	GYP/TECTUM	C	3	VCT	C	4	AL/WD	B	4	WD	C	3	B-C	3.5	C	3	N/A	
CLASSROOM	304	872 SF	ACT	B	4	GYP/TECTUM	C	3	VCT	C	4	AL/WD	B	4	WD	C	3	B-C	3.5	C	3	N/A	
CLASSROOM	305	845 SF	ACT	B	4	GYP/TECTUM	C	3	VCT	C	4	AL/WD	B	4	WD	E	1	B-C	3.5	C	3	N/A	
SCIENCE LAB	306	971 SF	ACT	C	3	GYP/TECTUM	C	3	VCT	C	4	AL/WD	B	4	WD	C	3	C	3.5	D	3	N/A	
PREP	306A	80 SF	ACT	C	3	GYP/TECTUM	C	3	VCT	C	3	N/A	N/A	N/A	WD	C	3	N/A	N/A	C	3	D	
INCLUSIVE SPEC OFF	307	158 SF	ACT	C	3	GYP/CONC	C	3	VCT	C	4	AL/WD	B	4	WD	C	3	C	4	N/A	3	N/A	
CLASSROOM	308	932 SF	ACT	C	3	GYP/TECTUM	C	3	LIN	B	4	AL/WD	B	4	WD	C	3	C	3.5	D	3	N/A	
CLASSROOM	309	698 SF	ACT	C	3	GYP/TECTUM	C	3	VCT	C	4	AL/WD	B	4	WD	C	3	C	3.5	D	3	N/A	
CLASSROOM	310	874 SF	ACT	C	3	GYP/TECTUM	C	3	LIN	B	4	AL/WD	B	4	HM	C	3	C	3.5	D	3	N/A	
CLASSROOM	311	909 SF	ACT	C	3	GYP/TECTUM	C	3	LIN	B	4	AL/WD	B	4	HM	C	3	C	3.5	D	3	N/A	
STAIR	320	454 SF	EXP	B	4	GYP/BRICK	B	4	TERRZ	D	3	AL/WD	B	4	HM	C	3	N/A	N/A	N/A	N/A	N/A	
CORRIDOR	321	996 SF	ACT	C	3	BRICK/GYP	B	4	TERRZ	D	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
JANITOR CLOSET	321A	17 SF	GYP	C	4	GYP	C	3	VCT	D	3	N/A	N/A	N/A	WD	C	3	D	3	N/A	N/A	D	
CORRIDOR	321A	451 SF	ACT	C	3	TILE/GYP	C	3	TERRZ	D	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
STAIR	323	439 SF	GYP	B	4	GYP/BRICK	B	4	TERRZ	D	3	AL/WD	B	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Amigos Elementary School		Structural			
Structural or Structurally-Related Item	Condition (A-E)	Priority (1-5)	Photos	Notes	
Roof Construction - General	C	5		Evaluate roof structure in snow drift areas in conjunction with a future renovation.	
Floor Construction - General	C	5		Limited Work.	
Foundations - General	C	5		Limited Work.	
Lateral Force Resisting System - General	C	5		Building does not meet current seismic code. Unreinforced masonry walls; future modification of existing walls may require seismic upgrades to the building.	
Exterior Walls - General	B	5		Brick masonry	
Roof Flashing	D	3	ST-1	Loose flashing above the main entrance should be fastened to roof edge.	
Water/Moisture Intrusion	C	4	ST-2, ST-3	Evidence of water/moisture within the building may indicate failing roofing and/or caulked joints; further investigation is recommended.	
Interior Stairs	D	2	ST-4	Evidence of rust/corrosion of steel risers, treads and connection angles; structural integrity of all stairs should be investigated.	

Amigos School			Foodservice				
Kitchen							
Room # on Plan:			Room Use on Plan:				
Room # on Site:			Room Use on Site:				
Area	Part	Type	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Kitchen	Finishes	Ceilings, Walls & Floors		B	4		
Kitchen	Refrigerated Storage	Walk-ins and Reach-ins		D	3		
Kitchen	Food Preparation Equipment	Work Tables, Prep Tables, Prep Equipment		C	3		
Kitchen	Cooking Equipment	Hoods, Ovens, Ranges, Kettles, Braising Pans, Steamers, etc.		D	3		
Kitchen	Serving Equipment	Serving Counters, Heated and Refrigerated Holding & Support		D	3		
			Overall	C	3		Comments:

Replace Serving Line
Replace reach-in freezer with maintenance issues
Provide Chemical storage cabinet

Amigos School			Plumbing				
Domestic Water System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Water Service	009 and 010	P1.01		B	4		
Water Heater	001	P1.02		B	4		
Domestic Water Piping	Building Wide	P1.03		C	3		Domestic water pipe fittings throughout the bulding indicate general corrosion at various pipe fittings at fixtures and equipment due to the municipal water. Fittings should be replaced as required.
Water Heater - Kitchen	015HW	P1.04		C	3		
Domestic Plumbing Fixtures							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Water Closets	Building Wide	P2.01		B	4		
Lavatories	Building Wide	P2.02		B	4		
Urinals	Building Wide	P2.03		B	2	PL-3	Provide side shielding for privacy as required by the Massachusetts Plumbing Code, 248 CMR
Service Sinks	Building Wide	P2.04		D	3		
Classroom Sinks	Building Wide	P2.05		D	3	PL-1, PL-6	
Kitchenettes	Building Wide	P2.06		D	3		
Floor Drains	Building Wide	P2.07		D	3		
Drinking Fountains	Building Wide	P2.08		C	3	PL-2	

Sanitary Waste and Vent System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Piping - Above Grade	Building Wide	P3.01		E	1	PL-4, PL-5	Many sections of observed cast iron pipe has failed and should be immediately replaced.
Piping - Below Grade	Building Wide	P3.02		E	1		
Storm Water System							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Piping - Above Grade	Building Wide	P4.01		E	1	PL-7	Known storm water leaks need to be immediately addressed.
Piping - Below Grade	Building Wide	P4.02		E	1		
Roof Drains	Building Wide	P4.03		E	1		Known roof drain leaks need to be immediately addressed
Sump Pump	001	P4.04		D	2		
Natural Gas							
System	Location	Item Code	Quantity to be Replaced	Condition (A-E)	Priority (1-5)	Photos	Notes
Gas Service	Site	P5.01		B	4		
Gas Piping	Building Wide	P5.02		B	4		