Facility Condition Assessment Summary Report

This report provides a summary of the Facility Condition Index (FCI) value of a school facility and select major building systems. The FCI calculation represents the cost of needed repairs divided by the replacement value. The FCI is a numerical value of condition and helps to identify the need for renewal or replacement of specific parts of the facility. The FCI is particularly useful when comparing similar facilities within the same portfolio.

Stetson School

Governance	CHARTER	Report Type	Middle
Address	3200 B. St. Philadelphia, Pa 19134	Enrollment	896
		Grade Range	'05-08'
Phone/Fax	215-291-4720 / N/A	Admissions Category	Neighborhood
Website	Www.Aspirapa.Org/Schools/Stetson-Charter/	Turnaround Model	Renaissance Charter

Building/System FCI Tiers

Facility Condition Index (FCI) = Cost of Assessed Deficiencies / Replacement Value

< 15%	15 to 25%	25 to 45%	45 to 60%	> 60%
Buildings				
Minimal Current Capital Funding Required	Refurbish Systems in building	Replace Systems in building.	Building should be considered for major renovation.	Building should be considered for closing/replacement.
Systems				
Perform routine maintenance on system	System requires minor repairs	System should be studied to determine repair vs. replacement.	System is nearing end of its life expectancy and should be considered for replacement	System should be replaced as part of the Capital Program

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	**39.80%**	**$28,492,562**	**$71,591,900**
Building	39.82 %	$28,355,337	$71,215,130
Grounds	36.42 %	$137,225	$376,770

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	86.71 %	$914,814	$1,055,030
Exterior Walls (Shows condition of the structural condition of the exterior facade)	12.42 %	$761,070	$6,129,200
Windows (Shows functionality of exterior windows)	00.00 %	$0	$2,996,000
Exterior Doors (Shows condition of exterior doors)	53.84 %	$109,288	$203,000
Interior Doors (Classroom doors)	76.20 %	$374,431	$491,400
Interior Walls (Paint and Finishes)	00.00 %	$0	$2,217,600
Plumbing Fixtures	02.42 %	$45,810	$1,892,800
Boilers	00.00 %	$0	$2,613,800
Chillers/Cooling Towers	67.94 %	$2,328,420	$3,427,200
Radiators/Unit Ventilators/HVAC	158.70 %	$9,551,421	$6,018,600
Heating/Cooling Controls	132.68 %	$2,507,596	$1,890,000
Electrical Service and Distribution	168.70 %	$2,290,935	$1,358,000
Lighting	49.04 %	$2,381,183	$4,855,200
Communications and Security (Cameras, Pa System and Fire Alarm)	26.79 %	$487,218	$1,818,600

Please note that some FCIs may be over 100% because there are times when replacing a building system requires that other building systems be upgraded to complete the installation. A FCI of 0.0% represents that there are no current deficiencies with the associated system.

School District of Philadelphia

S512001;Stetson

Final

Site Assessment Report

February 1, 2017

PARSONS

Table of Contents

Site Executive Summary

The organization of this report, as displayed in the Table of Contents, follows the structure of the associated eCOMET database. The overall node for each school campus begins with the letter "S", which indicates the "Site" label. Each Site is comprised of separate "Building" and "Grounds" nodes; their asset names begin with the letters "B" and "G" respectively. Information rolls up to the Site node from the Building and Grounds nodes. This Site report combines facility information with subsections for the Buildings And Grounds nodes.

The basis for the evaluation of condition is the functional systems and elements of a building and grounds organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are typically developed for similar building types and functions. Evaluation of systems and their elements takes into account their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) is an industry-standard measurement calculated as the ratio of the repair costs to correct a facility's deficiencies to the facility's Current Replacement Value. Condition Index (CI) for a system is calculated as the sum of a the deficiencies divided by the sum of a system's Replacement Value (both values include soft-cost) expressed as a percentage ranging from 0% 100%.

Gross Area (SF):	140,000
Year Built:	1917
Last Renovation:	
Replacement Value:	$71,591,900
Repair Cost:	$28,492,561.77
Total FCI:	39.80 %
Total RSLI:	61.09 %

Description:

Facility Assessment

July 2015

School District of Philadelphia

John B. Stetson Middle School

3200 B Street

Philadelphia, PA 19134

140,000 SF / 1,281 Students / LN 05

GENERAL

The John B Stetson ASPIRA Charter School Campus is identified as B512001 and was originally constructed in 1917 as the John B

Stetson Public Middle School. This facility is located at 3200 B Street in Philadelphia, PA. The design of the W-shaped, concrete and steel-framed building includes brick facades with a concrete foundation, detailing, and ornamental molding.

The main entrance faces the western most exterior on Kip Street. This School serves students in grades 5^{th} – 8^{th}. This school construction consists of a Basement level and four additional stories with a total gross square footage of 140,000 GSF.

This recent history of this school includes a minor remodeling effort. There were no records to indicate the date of completion. This school has several classrooms, a library, science labs, cafeteria, gym, ceramics lab, Art lab and student commons and auditorium, with supporting administrative spaces. The information for this report was collected during a site visit on July 16, 2015.

Mr. Thomas Darden, Chief Operations Officer with ASPIRA, Carlos Perez, Maintenance with ASPIRA, and Anthony Devlin, with the School District of Philadelphia, accompanied the assessment team on a tour of the school and provided detailed information on the building systems and maintenance history. Mr. Thomas Mullin, Principal, and Mr. Juan Santiago, Director of Safety and Security with ASPIRA, also shared information about the school with the assessment team.

ARCHITECTURAL/STRUCTURAL SYSTEMS

This school's concrete foundations appear to be in good condition considering the age of the facility. There were no reported issues during the time of the inspection. Basement walls are in good condition with no reported issues. The superstructure is sound consisting of reinforced concrete and masonry construction. The floor construction is reinforced concrete in good condition.

There two main levels of roof for this school and several small sections covering mechanical spaces, however all are the same built up application with the same date of installation. The upper section of the roof has been reported to have several minor leaks and is showing signs of age. During the time of the inspection evidence of water infiltration was evident as the surface of the roof was floating. This deficiency recommends removal and replacement of the roof system.

The exterior building wall that is also a barrier wall on the western exterior of the building is showing signs of age and deterioration associated with weather conditions such as freezing and thawing. This wall is in very poor condition and upgrades are recommended. The wall is recommended for point and tuck work as well as joint recovery and cleaning. Additional efforts may be required for the openings and metal gates.

The exterior brick surfaces are generally in fair to good condition for their age. In some locations, bricks have cracked or spalled and should be replaced. The repointing of deteriorated mortar joints is also recommended, using mortar of a similar color and consistency as the original. Following the detailed examination of the brick and repair of mortar construction joints, the entire building should be pressure washed to remove stains and embedded pollutants. If moisture is found to be penetrating the masonry façade, the application of a spray sealant to the suspected exterior masonry surface is recommended.

Exterior windows were reported to have been installed in 2000. The double pane aluminum framed weather tight windows are in very good condition considering the age of the application. This window system is expected to have a life cycle that exceeds the outlook of this report. There are no recommendations required at this time.

The main entrance is a double door system that has been upgraded from the original construction. This system is in good condition however as indicated in the photo the concrete step does not meet the length of the door thus allowing a trap hazard. Special consideration for a new door system is required and a modification to the exterior step removing the hazard. Remove and replace door and step.

The exterior stair railing system was designed and compliant during the original construction of this school however, current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Future efforts should include comprehensive stair railing removal and replacement upgrades

Special consideration for those that may be physically challenged was a main factor in the last re-construction effort for this school. The B Street entrance is the current entrance for those that may be physically challenged. The path of travel is not very clear from that entrance of the school and from the access points. The interior path of travel is partially supported by an elevator, an Interior access ramp, door hardware, with limited signage, hand rails and guard rails. Special consideration for those that may be physically challenged should be considered in any future construction efforts for this school.

Interior partitions mainly consist of painted walls, brick or tile finish. Interior partitions are in good condition. A majority of the

Interior doors are typically wood in metal frames with transom lites, sidelights, wired glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames at stairwells and exit ways, access doors, and closet doors. Doors are generally in good condition and are a mix of ADA compliant and non-complaint doors with both non -rated and fire rated. Doors swing in the direction of exit and do not obstruct hallways. Remove and replace transoms and doors.

As indicated in the photos some of the corridor doors have been removed with just the frame remaining other corridor doors are not fire-rated and should be replaced. To prevent doors from being improperly held open, magnetic door holders should be installed and tied to the building fire alarm system to ensure that the door can function as designed in the event of a fire. Other interior doors include solid core wooden in hollow metal frames at most of the classrooms and a few of the stairwells and exit ways, access doors, and folding closet doors.

Fittings include: chalkboards; tack boards; interior signage; toilet accessories and metal toilet partitions; fixed storage shelving. The restroom partitions are in good condition and there were no reported issues during the time of the inspection.

The classroom chalk boards have been upgraded and are in very good condition. There are no upgrades warranted at this time.

There are several tack boards in the hallways for student displays. The systems are beyond the expected service life for this application. Remove and replace tack boards is recommended.

The lab casework and working desk with countertop have been upgraded from the original construction and was reported to have a 2000 installation. The labs are in very good condition and expected to have a normal life cycle that exceeds the outlook of this report.

The Library has been modified with a clear path of travel and adjusted book shelving. The Art and Ceramic labs have been upgraded as well to include finishes and casework in 2014. The new Ceramics lab was reported to have a 2014 upgrade date to include the installation of a new Kiln. The Arts, Ceramics and Library are in very good condition and well maintained. There are no recommendations required at this time.

Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

Interior wall finishes are typically painted CMU or concrete. Other wall finishes include: ceramic tile at the staff restrooms. Brick, Ceramic and painted wall finishes are generally in very good condition. The school has maintained a very clean interior finish and it appears as if the repair and painting program is a success. There are no recommendations for the interior painted finish, brick finish or ceramic wall finish required at this time.

Interior floor finishes are typically VCT and VAT and wooden floors in classrooms while the corridors and stairs are concrete with a wooden Gym floor. Other floor finishes include: Tile in the administrative and library with sealed concrete in the student restrooms and mechanical spaces.

The ceiling finish is a mix of acoustical tile, painted and exposed concrete decking. The ceiling finish has been repaired in several areas and was reported to have been installed in 2012. This system is in good condition with very few areas of minor staining. This system is expected to have a normal life cycle that exceeds the purview of this report. There are no recommendations required at this time.

The polished and coated concrete floor system in this school is in very good condition and is well maintained. This system is expected to have a life cycle that exceeds the outlook of this report. There are no recommendations for the concrete floor at this time.

The classrooms in this school have a wooden floor finish that appears to be from original construction. The system is showing signs of age such as the effects of sanding and refinishing with yearly cleaning and waxing with some repairs. The floor finish is in fair condition however, the finish is beyond its expected life cycle. It is recommended that the wooden floor finish be removed and replaced with an in kind finish.

The GYM floor finish is beyond its expected life cycle for this application. The floor is recommended for universal upgrade. The tile floor applications are well maintained and in very good condition. There are no recommendations required for the tile floor at this time.

The main entrance has a small section of Terrazzo flooring with marble wall system. This area is well maintained and is in good condition. There are no recommendations for required at this time.

The vinyl floor finish in most of this school is in very good condition and appears to have part of an isolated upgrade. Some of the original flooring that was not a part of that effort consists of a 9x9 finish. This finish is suspect to contain asbestos and is recommended for upgrade. Remove and replace with a 12x12 vinyl tile application.

There is a single elevator that serves all floors of this school. This system is in very good condition and expected to have a life cycle that extends beyond this report.

Institutional equipment includes: library equipment that includes shelving and media equipment. A stage with original finishes with upgraded flyway equipment; instrumental equipment; A/V equipment; with exterior basketball backstops and playground. Furnishings include: fixed casework; window shades In each case the finishes are in good condition. There are no recommendations required at this time.

The fixed seating for this school is from the original construction. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades for the fixed seating and furnishing of this school.

There is no directional signage and room signage is scarce or painted with no consistency. Accessibility signage criteria have been established for the physically challenged. These include mounting heights, contrast and finish, raised and Braille characters and pictograms, and character proportions and heights. It is recommended that compliant signage be installed throughout the building.

The kitchen has been modified several times through minor renovation efforts and new equipment installations. During the time of the inspection it was noted that the corridor leading from the kitchen entrance to the break room is a dead end corridor with no clear egress path. This deficiency provides a budgetary consideration for the addition of a constructed exit path. It is recommended that a new door be added partially down the hallway to allow for proper egress.

The main entrance to the school opens into a hallway and stair system. Currently the attendance desk consumes almost half of the egress path. Care should be taken to provide a different area for this desk as to prevent problems for egress.

Several sets of shelves and copier machines are located in the egress path of the hallways. As indicated in the photos the obstacles prevent proper egress. Care should be taken to relocate the equipment and shelves to mitigate any egress issues.

MECHANICAL SYSTEMS

PLUMBING- Plumbing fixtures are standard china commercial quality with wall mounted lavatories, urinals and water closets. Most lavatories have single wheel handle faucets and urinals and water closets have manual lever or push button flush valves. Custodial closets have cast iron service sinks. There are some stainless steel s counter top sinks. There are single level stainless steel water coolers with integral refrigeration and china drinking fountains with no refrigeration. The kitchen waste is piped through an above floor grease trap. There are two eighty gallon Bradford White electric water heaters in the basement mechanical room with a small inline circulating pump installed in 2012.There is no domestic water booster pump system, and there are pressure problems on the upper level. A Federal Pump duplex sump pump is in the mechanical room for ground water removal.

Water piping has been replaced since the original installation with copper, but may contain lead solder based on age. Sanitary, waste, vent and rainwater piping is original installation hub and spigot cast iron, with some hubless cast iron where additions or damage has occurred. There are two water services. One is a four inch line and meter from Kip St., located in the basement mechanical room. It was reported this serves only the mechanical equipment. The other service is a three inch line and meter from B St., located in a first floor mechanical room. This room also has two abandoned end suction pumps to increase water pressure. Both have backflow preventers and appear in good condition. Rainwater lines connect at Allegheny Ave. and Kip St. Main sewer line connection is at Allegheny Ave.

HVAC-The building is heated by a hot water system generated by three HB Smith 450 Mills cast iron sectional boilers. The boilers are oil fired two hundred eight hp each installed in 2012. Each unit has a Powerflame burner and control panel, separate oil pump and powered draft fan, connected to a common double wall manufactured vent system routed through an existing chimney to a roof cap. There is a twenty thousand gallon double wall underground steel oil tank installed in 2012. A duplex fuel oil pump system in the mechanical room provides circulation.

Classrooms and some other areas have Nesbitt unit ventilators with hot water coil, outside air damper, filter, blower and motor, control valve and controls. Hot water radiation and fan coils are located at entrances and other areas requiring heat. The auditorium

has electric baseboard radiation.

There is a heating and ventilating unit for the auditorium that is not used. The gym has unit ventilators and the locker room has a horizontal heating and ventilating unit that is inoperable. The kitchen has a heating and ventilating unit and there is a hood with a Trane gas fired make up air unit. Both air handling units are horizontal, located in the kitchen. The hood is a stainless steel double wall unit with Ansul fire suppression system, and has welded stainless steel exhaust duct to a dedicated fan. A mechanical room 110 contains two horizontal air handling units, one for the cafeteria and one for the office area, providing heating and ventilation. Each corridor has a large exterior louver and interior grill for relief air from the unit ventilators. There are four roof exhaust fans to provide toilet exhaust. The boiler room has high and low combustion air louvers with motorized dampers. There is a propeller fan in the boiler room and an inline fan ventilating the adjacent pump room.

There is no central air conditioning. The building has approximately fifty window air conditioners and a ductless split system for the IT room with the condensing unit mounted on the exterior wall. A nurse's area with several spaces has a DX split system with the fan coil unit above the ceiling and the condensing unit in an exterior areaway. Supply air is ducted to ceiling diffusers. The unit is fairly new but the space has never been used and remains vacant. An abandoned Dunham Bush reciprocating chiller is in the first level mechanical room.

Heating water piping is insulated welded black steel. Two B&G twenty five hp end suction pumps located in a separate basement mechanical space circulate hot water. Each pump has a variable frequency drive. Three horizontal expansion tanks are suspended in the pump area and an air separator is part of the piping system. Fuel oil piping is black steel with screwed fittings. Ductwork is uninsulated sheet metal since systems were heating only and condensation was not an issue.

There are no central control systems. There is a duplex controls air compressor in the mechanical room.

FIRE PROTECTION-There are sprinklers in the old wood shop only. There are dry standpipes at stairwells with exterior building fire department connections and fire hose connections at each level.

ELECTRICAL SYSTEMS

Electrical Service--The building is served by a 13.2 kV underground service from PECO Energy Company to a substation located in the Main Electrical Room in the Basement. The substation includes a 600A load interrupter switch, 1000 kVA, 208/120V, 3 phase, 4 wire liquid-filled transformer section and 3000A Main Switchboard with 3000A bolted pressure switch and two circuit breaker distribution sections. The substation is manufactured by Federal Pacific Electric and was installed in 1967. The substation has exceeded its 30 year useful life.

A 3000A, 208/120V substation would not have adequate capacity to serve a central air condition system for the school. A separate 480V, 3 phase electrical service is recommended to serve the central air conditioning equipment. The size of the service should have capacity to service other mechanical equipment, as equipment needs to be replaced.

The substation feeds approximately (45) panelboards that are recessed in corridor walls on each floor or surface mounted in some rooms, such as classrooms, kitchen and auditorium dimmer room. The recessed panelboards in corridors are beyond their useful life and need to be replaced.

Receptacles-- Classrooms are typically supplied with only two or three duplex receptacles and are not adequate. At least three duplex receptacles should be added in each classroom using surface metal raceway and spaced along all walls to eliminate the use of extension cords to connect equipment. There are approximately (13) duplex receptacles in the kitchen and serving area that need to be replaced with ground-fault circuit-interrupting type to comply with National Electrical Code (NEC) Article 210.8.

Lighting-- Fixtures in corridors, classrooms, cafeteria and most other rooms are 2x4 lay-in grid fluorescent troffers with acrylic prismatic lenses. Most of the fixtures have T12 lamps and have served their useful life and need to be replaced. Classroom lighting is controlled by two or three switches, typically one switch for each row of fixtures. The kitchen has 4 foot, vaportight, lensed fluorescent fixtures with T8 lamps. The illumination level measured 36 footcandles at the preparation table.

The auditorium is illuminated with ceiling recessed lensed incandescent fixtures above the seating area and under the balcony. Illumination level was measured at 15 footcandles. The stage has theatrical lighting fixtures and work lighting, all in good condition. The dimming panel is located at stage left on the balcony level.

The gymnasium 009 in the Basement is illuminated with stem mounted industrial metal halide fixtures that are switch controlled. The gymnasium 213 on Floor 2 has chain mounted 4 foot fluorescent fixtures.

The stairwells have one 4 foot surface mounted fluorescent fixture at each landing. Fixtures are in poor condition; the illumination level in the stairwell is inadequate, ranging from 1.0 to 3.7 footcandles.

Other than fluorescent lighting fixtures in the corridors and in some classrooms and offices, all fluorescent fixtures should be replaced with new troffers using T8 or T5 lamps.

Wall mounted exterior HID floodlighting fixtures are located along the perimeter of the building to provide area illumination of the site. There are no lighting fixtures above the doors at the exit discharges.

Fire Alarm System-- The fire alarm system is a Siemens, Model MXL, and is approximately 20 years old. The fire alarm control panel (FACP) is located in the Main Electrical Room in the Basement with a remote annunciator panel in the Main Office. The system includes smoke detectors in corridors at stairwells and elevator lobbies, manual pull stations at egress doors, and audible/visual notification appliances in the corridors and in larger rooms. There are no fire alarm notification appliances in classrooms. The fire alarm system should be replaced within the next 2 to 3 years.

Telephone/LAN-- A data outlet is provided in each classroom. Wireless access points are provided in classrooms, corridors, auditorium, gymnasium and cafeteria for Wi-Fi service throughout the entire school. There are IT distribution frames located in various locations. There are no telephones in classrooms.

Public Address/Paging/Sound Systems-- The paging system is accessed through the telephone system. Each classroom has a paging speaker. There are also flush mounted paging speakers in corridor ceilings. A separate sound system is provided for the auditorium, with speakers on each side of the stage.

Clock and Program System—There is a Simplex Time Control Center panel in Main Office 104M. The system was reported to be functional and in good condition. Wall mounted speakers from the obsolete program system still remain in place in classrooms and corridors.

Television System-- No television outlets were observed in classrooms. Most of the classrooms are provided with smart boards.

Video Surveillance and Security Systems-- video surveillance cameras provide coverage of all corridors, auditorium, gymnasiums, cafeteria, classrooms and stairwells. Exterior cameras are building mounted and provide coverage of the site and entrances. The video surveillance system rack, multiplexers and VCR are located in Room H107. The equipment was installed in 2014. There are a total of 160 surveillance cameras that are monitored by (10) video monitors located in Room 124. There are also (4) video monitors at the reception desk at the main entrance. The (8) exterior doors are provided with magnetic door contacts that are monitored by an Ademco security panel.

Emergency Power System--There is a Kohler 50 kW/62.5 kVA, 208/120V, 3 phase, 4 wire standby generator with Kohler 200A automatic transfer switch (ATS), located in the Main Electrical Room, that supplies 225A, plug-in, fusible type Panelboards LPE-1 and LPE-2. The standby generator, ATS and Panelboards LPE-1 and LPE-2 have exceeded their useful service life. Replace standby power system, sized to include elevator and some HVAC heating loads.

Emergency Lighting System / Exit Lighting-- Selected lighting fixtures are connected to the standby power system. No emergency lighting is provided in the classrooms. Additional directional exit signage is needed in the cafeteria and Basement corridor. The (11) exit signs in the Auditorium 122 need to be replaced. Except as noted, exit signs are in good condition with approximately (10) years useful life remaining.

Lightning Protection System --There is no lightning protection system for this facility.

Conveying Systems--There is one 25 HP electric traction, 3500 pound capacity, Payne Co. elevator that serves all floors. The elevator has served its useful life and needs to be upgraded and modernized to comply with ADA.

GROUNDS

This school's surroundings is very metropolitan and by far the most clean and clear of trash and debris. This shows the special care the staff takes to ensure a conducive level education by environment.

This school has a perimeter fence surrounding the front of the school only and several areas where fencing is used as a security measure on the lower section of the roof and retaining wall. The fence has several areas of repairs and the mounting posts are damaged in several areas, overall the securing fence is in poor condition. This fence system is recommended to be removed and

replaced with a new system.

The sidewalk system is original to the buildings construction. There are a several areas of cracking concrete but no tripping hazards. The sidewalk system is expected to expire in the near future. Removal of the entire system is recommended. Universal upgrades are required.

Site Lighting— Site lighting is provided by wall mounted HID lighting fixtures on the building that are aimed to illuminate the site. There are no pole mounted lighting fixtures on the site.

RECOMMENDATIONS

- Remove and replace interior corridor doors - wood doors with hollow metal frames - per leaf
- Remove and Replace Built Up Roof
- Remove and replace exterior doors - per leaf
- Remove and replace partial area of wood flooring and refinish entire floor
- Add interior door for ingress or egress
- Remove VAT and replace with VCT - SF of area
- Replace auditorium seating - add tablet arms if required. Veneer seating is an option.
- Remove and replace wood flooring
- Replace inadequate or install proper stair railing
- Replace missing or damaged signage
- Remove and replace tackboards
- Install fire rated walls and door where required
- Remove and replace lockers
- Remove and replace custom interior doors
- Remove non-rated interior glass panels and replace with studs, gypsum board, paint (E) wall
- Install fire rated walls and door where required
- Remove and Replace Built Up Roof
- Remove and replace exterior doors
- Remove and replace expansion joints at exterior walls
- Repair spalled concrete wall structure
- Repair cracks in masonry - replace missing mortar and repoint
- Replace the existing unit ventilators with new units designed for quiet operation and equipped with hot water and chilled water coils, hydronic control valves with digital controls and integral heat exchangers to provide code required fresh air quantities. Connect to new chilled and hot water piping systems and building automation control system.
- Remove the existing window air conditioning units and install a 350 ton air-cooled chiller on the roof with chilled water distribution piping, two pumps, chemical treatment and controls located in a mechanical room on the basement level.
- Install complete NFPA wet pipe automatic sprinkler system and standpipes. If required provide fire pump and jockey pump with controller.
- Provide a new central station air handling unit for the boys gymnasium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.
- Provide a new central station air handling unit for the auditorium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.
- Provide a new central station air handling unit for the cafeteria with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

- Install new direct digital control system and building automation system with remote computer control capability and graphics package.
- Provide a new central station air handling unit for the office with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

- Inspect old cast iron sanitary piping including camera observation and replace damaged sections.
- Install one ton ductless DX split system to cool elevator equipment penthouse. Locate condensing unit on adjacent roof. Include refrigerant line set and drain line.
- Replace older plumbing fixtures, including lavatories and water coolers. Include fittings and trim.
- Replace domestic hot and cold water piping including valves, fittings, hangars and insulation.
- Provide new domestic water booster pump system with two pumps, pressure tank, and controls. Connect to main domestic water line.
- Provide a new central station air handling unit for the girls gymnasium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

- Replace existing 600A, 13.2 kV load interrupter switch and 1000 kVA liquid-filled substation transformer switch with two 600A, 13.2 kV load interrupter switches, 1000 kVA, 208/120V, dry-type substation transformer for existing building loads and a 750 kVA, 480/277V transformer for central air conditioning equipment.
- Replace (15) recessed panelboards located in corridors.
- Add surface raceway system with minimum three duplex receptacles in each of the classrooms. Approximately 50 rooms.
- Replace approximately (13) duplex receptacles in the kitchen with ground-fault circuit-interrupting type receptacle to comply with current code.
- Replace lighting in approximately 104,000 SF of the building.
- Add wall mounted exterior lighting fixtures above doors at exit discharges. Total of (8).
- Replace fire alarm system with addressable type, complying with ADA requirements.
- Replace standby generator, automatic transfer switch and distribution equipment. Size system to include emergency lighting, elevator and some heating loads.
- Add (4) exit signs in Basement and replace (11) exit signs in auditorium.
- Upgrade and modernize elevator hoist system, cab and machine room.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 1 / Tm 1
Status:	Accepted by SDP	Team:	Tm 1
Site ID:	S512001		

Site Condition Summary

The Table below shows the CI and FCI for each major system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

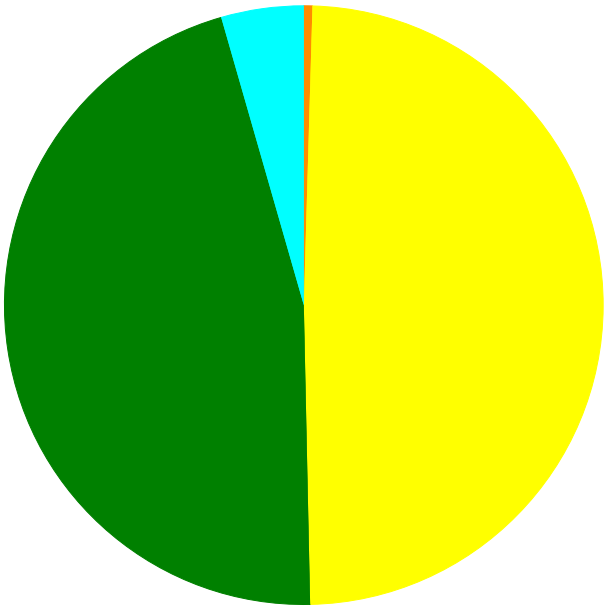
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	44.82 %	9.33 %	$870,358.30
B30 - Roofing	25.58 %	86.71 %	$914,814.30
C10 - Interior Construction	39.12 %	17.20 %	$590,882.05
C20 - Stairs	37.00 %	23.42 %	$46,228.13
C30 - Interior Finishes	65.18 %	18.23 %	$1,350,960.50
D10 - Conveying	105.71 %	89.58 %	$191,880.83
D20 - Plumbing	35.96 %	66.98 %	$1,879,054.47
D30 - HVAC	105.38 %	92.48 %	$14,402,078.27
D40 - Fire Protection	92.47 %	177.49 %	$2,002,761.07
D50 - Electrical	79.14 %	66.53 %	$5,474,984.80
E10 - Equipment	18.61 %	0.00 %	$0.00
E20 - Furnishings	12.50 %	211.71 %	$631,333.86
G20 - Site Improvements	82.02 %	69.78 %	$137,225.19
G40 - Site Electrical Utilities	43.33 %	0.00 %	$0.00
Totals:	**61.09 %**	**39.80 %**	**$28,492,561.77**

Condition Deficiency Priority

Facility Name	Gross Area (S.F.)	FCI %	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)
B512001;Stetson	140,000	39.82	$0.00	$22,660.46	$14,019,305.91	$13,044,984.75	$1,268,385.46
G512001;Grounds	31,000	36.42	$0.00	$108,459.49	$0.00	$28,765.70	$0.00
Total:		**39.80**	**$0.00**	**$131,119.95**	**$14,019,305.91**	**$13,073,750.45**	**$1,268,385.46**

Deficiencies By Priority



- 1 - Response Time (< 2 yr)
- 2 - Response Time (2-3 yrs) - $131,119.95
- 3 - Response Time (3-4 yrs) - $14,019,305.91
- 4 - Response Time (4-5 yrs) - $13,073,750.45
- 5 - Response Time (> 5 yrs) - $1,268,385.46

Budget Estimate Total: $28,492,561.77

Executive Summary

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

Function:	Middle School
Gross Area (SF):	140,000
Year Built:	1917
Last Renovation:	
Replacement Value:	$71,215,130
Repair Cost:	$28,355,336.58
Total FCI:	39.82 %
Total RSLI:	61.08 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B512001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S512001		

Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	44.82 %	9.33 %	$870,358.30
B30 - Roofing	25.58 %	86.71 %	$914,814.30
C10 - Interior Construction	39.12 %	17.20 %	$590,882.05
C20 - Stairs	37.00 %	23.42 %	$46,228.13
C30 - Interior Finishes	65.18 %	18.23 %	$1,350,960.50
D10 - Conveying	105.71 %	89.58 %	$191,880.83
D20 - Plumbing	35.96 %	66.98 %	$1,879,054.47
D30 - HVAC	105.38 %	92.48 %	$14,402,078.27
D40 - Fire Protection	92.47 %	177.49 %	$2,002,761.07
D50 - Electrical	79.14 %	66.53 %	$5,474,984.80
E10 - Equipment	18.61 %	0.00 %	$0.00
E20 - Furnishings	12.50 %	211.71 %	$631,333.86
Totals:	**61.08 %**	**39.82 %**	**$28,355,336.58**

Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$23.16	S.F.	140,000	100	1917	2017	2052	37.00 %	0.00 %	37			$3,242,400
A1030	Slab on Grade	$5.17	S.F.	140,000	100	1917	2017	2052	37.00 %	0.00 %	37			$723,800
A2010	Basement Excavation	$4.36	S.F.	140,000	100	1917	2017	2052	37.00 %	0.00 %	37			$610,400
A2020	Basement Walls	$10.05	S.F.	140,000	100	1917	2017	2052	37.00 %	0.00 %	37			$1,407,000
B1010	Floor Construction	$85.94	S.F.	140,000	100	1917	2017	2052	37.00 %	0.00 %	37			$12,031,600
B1020	Roof Construction	$9.26	S.F.	140,000	100	1917	2017	2052	37.00 %	0.00 %	37			$1,296,400
B2010	Exterior Walls	$43.78	S.F.	140,000	100	1917	2017	2052	37.00 %	12.42 %	37		$761,070.45	$6,129,200
B2020	Exterior Windows	$21.40	S.F.	140,000	40	2000	2040		62.50 %	0.00 %	25			$2,996,000
B2030	Exterior Doors	$1.45	S.F.	140,000	25	1990	2015	2020	20.00 %	53.84 %	5		$109,287.85	$203,000
B3010105	Built-Up	$37.76	S.F.	27,000	20	1990	2010	2020	25.00 %	89.73 %	5		$914,814.30	$1,019,520
B3010130	Preformed Metal Roofing	$54.22	S.F.	500	30	2000	2030		50.00 %	0.00 %	15			$27,110
B3020	Roof Openings	$0.06	S.F.	140,000	30	1990	2020		16.67 %	0.00 %	5			$8,400
C1010	Partitions	$17.91	S.F.	140,000	100	1917	2017	2052	37.00 %	2.26 %	37		$56,611.45	$2,507,400
C1020	Interior Doors	$3.51	S.F.	140,000	40	2000	2040		62.50 %	76.20 %	25		$374,431.22	$491,400
C1030	Fittings	$3.12	S.F.	140,000	40	1917	1957	2025	25.00 %	36.59 %	10		$159,839.38	$436,800
C2010	Stair Construction	$1.41	S.F.	140,000	100	1917	2017	2052	37.00 %	23.42 %	37		$46,228.13	$197,400
C3010230	Paint & Covering	$13.21	S.F.	140,000	10	2012	2022		70.00 %	0.00 %	7			$1,849,400
C3010232	Wall Tile	$2.63	S.F.	140,000	30	1917	1947	2025	33.33 %	0.00 %	10			$368,200

Site Assessment Report - B512001;Stetson

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
C3020412	Terrazzo & Tile	$75.52	S.F.	10,000	50	1917	1967	2025	20.00 %	0.00 %	10			$755,200
C3020413	Vinyl Flooring	$9.68	S.F.	60,000	20	2012	2032		85.00 %	26.11 %	17		$151,666.68	$580,800
C3020414	Wood Flooring	$22.27	S.F.	40,000	25	1917	1942	2020	20.00 %	134.63 %	5		$1,199,293.82	$890,800
C3020415	Concrete Floor Finishes	$0.97	S.F.	30,000	50	1917	1967	2025	20.00 %	0.00 %	10			$29,100
C3030	Ceiling Finishes	$20.97	S.F.	140,000	25	2012	2037		88.00 %	0.00 %	22			$2,935,800
D1010	Elevators and Lifts	$1.53	S.F.	140,000	35	1917	1952	2052	105.71 %	89.58 %	37		$191,880.83	$214,200
D2010	Plumbing Fixtures	$13.52	S.F.	140,000	35	1985	2020		14.29 %	2.42 %	5		$45,809.92	$1,892,800
D2020	Domestic Water Distribution	$1.68	S.F.	140,000	25			2042	108.00 %	268.33 %	27		$631,123.38	$235,200
D2030	Sanitary Waste	$2.52	S.F.	140,000	30			2047	106.67 %	340.74 %	32		$1,202,121.17	$352,800
D2040	Rain Water Drainage	$2.32	S.F.	140,000	30	1917	1947	2025	33.33 %	0.00 %	10			$324,800
D3020	Heat Generating Systems	$18.67	S.F.	140,000	35	2012	2047		91.43 %	0.00 %	32			$2,613,800
D3030	Cooling Generating Systems	$24.48	S.F.	140,000	30			2047	106.67 %	67.94 %	32		$2,328,419.52	$3,427,200
D3040	Distribution Systems	$42.99	S.F.	140,000	25			2042	108.00 %	158.70 %	27		$9,551,421.34	$6,018,600
D3050	Terminal & Package Units	$11.60	S.F.	140,000	20			2037	110.00 %	0.90 %	22		$14,641.41	$1,624,000
D3060	Controls & Instrumentation	$13.50	S.F.	140,000	20			2037	110.00 %	132.68 %	22		$2,507,596.00	$1,890,000
D4010	Sprinklers	$7.05	S.F.	140,000	35			2052	105.71 %	202.91 %	37		$2,002,761.07	$987,000
D4020	Standpipes	$1.01	S.F.	140,000	35				0.00 %	0.00 %				$141,400
D5010	Electrical Service/Distribution	$9.70	S.F.	140,000	30	1917	1947	2047	106.67 %	168.70 %	32		$2,290,935.06	$1,358,000
D5020	Lighting and Branch Wiring	$34.68	S.F.	140,000	20	1917	1937	2030	75.00 %	49.04 %	15		$2,381,183.44	$4,855,200
D5030	Communications and Security	$12.99	S.F.	140,000	15	1917	1932	2025	66.67 %	26.79 %	10		$487,218.23	$1,818,600
D5090	Other Electrical Systems	$1.41	S.F.	140,000	30	1917	1947	2047	106.67 %	159.90 %	32		$315,648.07	$197,400
E1020	Institutional Equipment	$4.82	S.F.	140,000	35	1917	1952	2025	28.57 %	0.00 %	10			$674,800
E1090	Other Equipment	$11.10	S.F.	140,000	35	1917	1952	2020	14.29 %	0.00 %	5			$1,554,000
E2010	Fixed Furnishings	$2.13	S.F.	140,000	40	1917	1957	2020	12.50 %	211.71 %	5		$631,333.86	$298,200
								Total	**61.08 %**	**39.82 %**			**$28,355,336.58**	**$71,215,130**

System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

System: C3010 - Wall Finishes — This system contains no images

Note: Polished CMU 30
Brick 20
Painted plaster 50

System: C3020 - Floor Finishes — This system contains no images

Note: Carpet 4%
Tile 4%
Vinyl floor tile both 9x9 and 12x12 43%
Wood 29%
Concrete 20%

System: D5010 - Electrical Service/Distribution — This system contains no images

Note: There are no secondary step-down transformers.

Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$28,355,337**	**$0**	**$0**	**$0**	**$0**	**$7,481,250**	**$0**	**$2,501,982**	**$0**	**$0**	**$6,515,643**	**$44,854,211**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** A10 - Foundations**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1010 - Standard Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1030 - Slab on Grade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** A20 - Basement Construction**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2010 - Basement Excavation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2020 - Basement Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B - Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B10 - Superstructure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1010 - Floor Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1020 - Roof Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$761,070	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$761,070**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$109,288	$0	$0	$0	$0	$258,866	$0	$0	$0	$0	$0	**$368,154**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$914,814	$0	$0	$0	$0	$1,300,093	$0	$0	$0	$0	$0	**$2,214,908**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$10,712	$0	$0	$0	$0	$0	**$10,712**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$56,611	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$56,611**
C1020 - Interior Doors	$374,431	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$374,431**
C1030 - Fittings	$159,839	$0	$0	$0	$0	$0	$0	$0	$0	$0	$645,725	**$805,564**

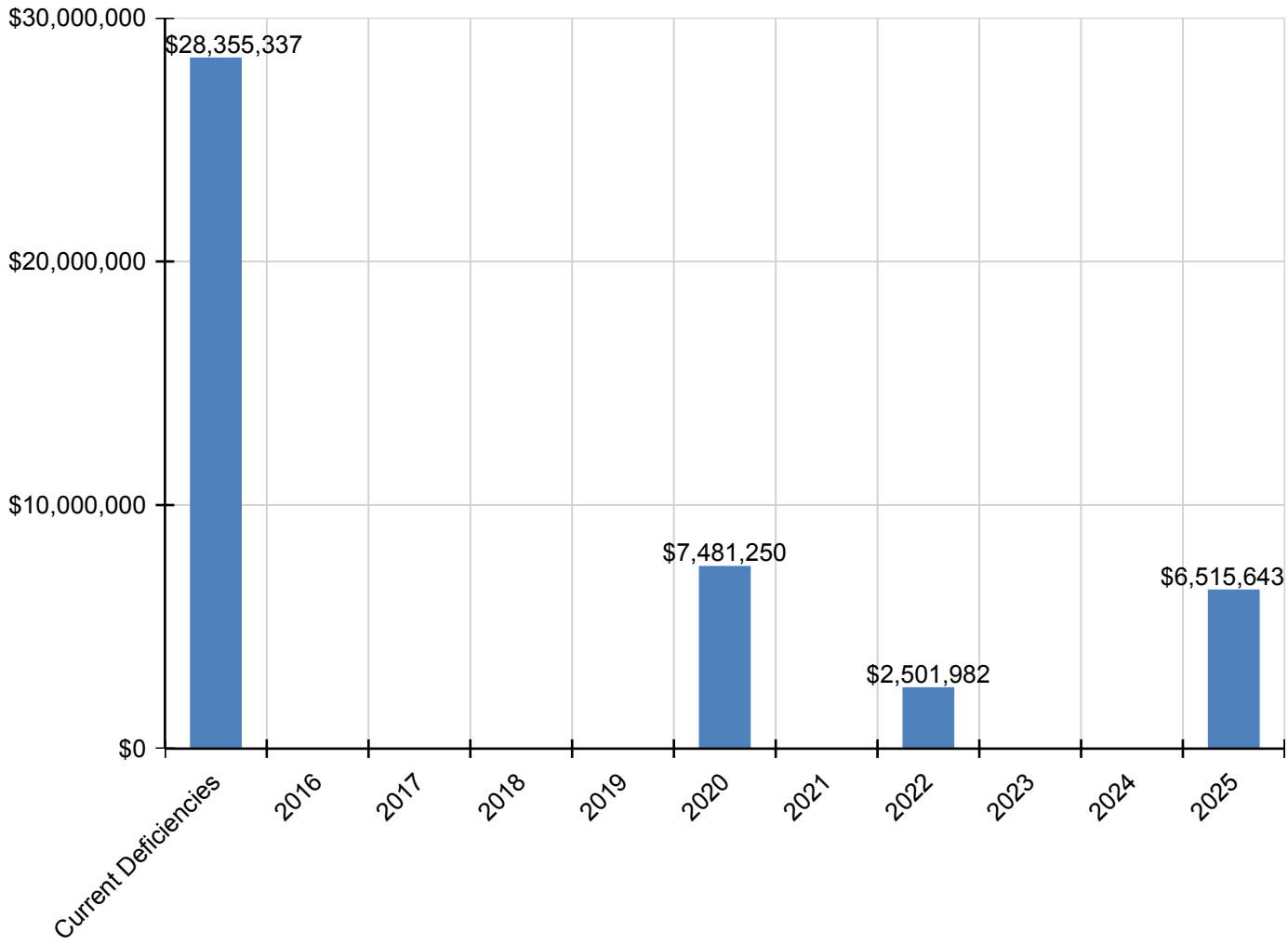
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$46,228	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$46,228**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$0	$2,501,982	$0	$0	$0	**$2,501,982**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$544,313	**$544,313**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,116,418	**$1,116,418**
C3020413 - Vinyl Flooring	$151,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$151,667**
C3020414 - Wood Flooring	$1,199,294	$0	$0	$0	$0	$1,135,949	$0	$0	$0	$0	$0	**$2,335,243**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$43,019	**$43,019**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$191,881	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$191,881**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$45,810	$0	$0	$0	$0	$2,413,701	$0	$0	$0	$0	$0	**$2,459,511**
D2020 - Domestic Water Distribution	$631,123	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$631,123**
D2030 - Sanitary Waste	$1,202,121	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,202,121**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$480,154	**$480,154**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$2,328,420	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,328,420**
D3040 - Distribution Systems	$9,551,421	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$9,551,421**
D3050 - Terminal & Package Units	$14,641	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$14,641**
D3060 - Controls & Instrumentation	$2,507,596	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,507,596**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$2,002,761	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,002,761**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$2,290,935	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,290,935**
D5020 - Lighting and Branch Wiring	$2,381,183	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,381,183**
D5030 - Communications and Security	$487,218	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,688,451	**$3,175,669**

D5090 - Other Electrical Systems	$315,648	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$315,648**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$997,562	**$997,562**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$1,981,663	$0	$0	$0	$0	$0	**$1,981,663**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$631,334	$0	$0	$0	$0	$380,265	$0	$0	$0	$0	$0	**$1,011,599**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

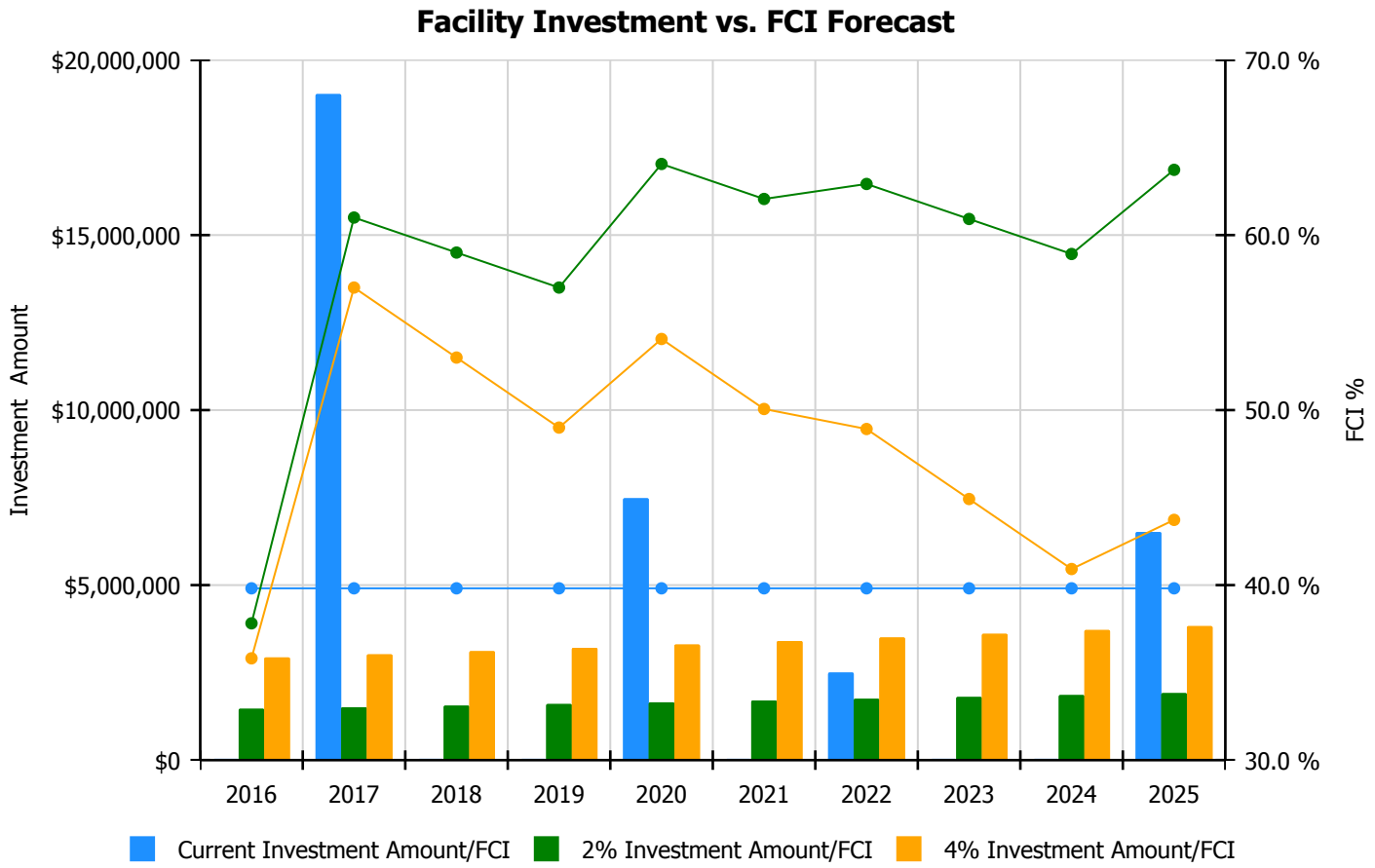
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

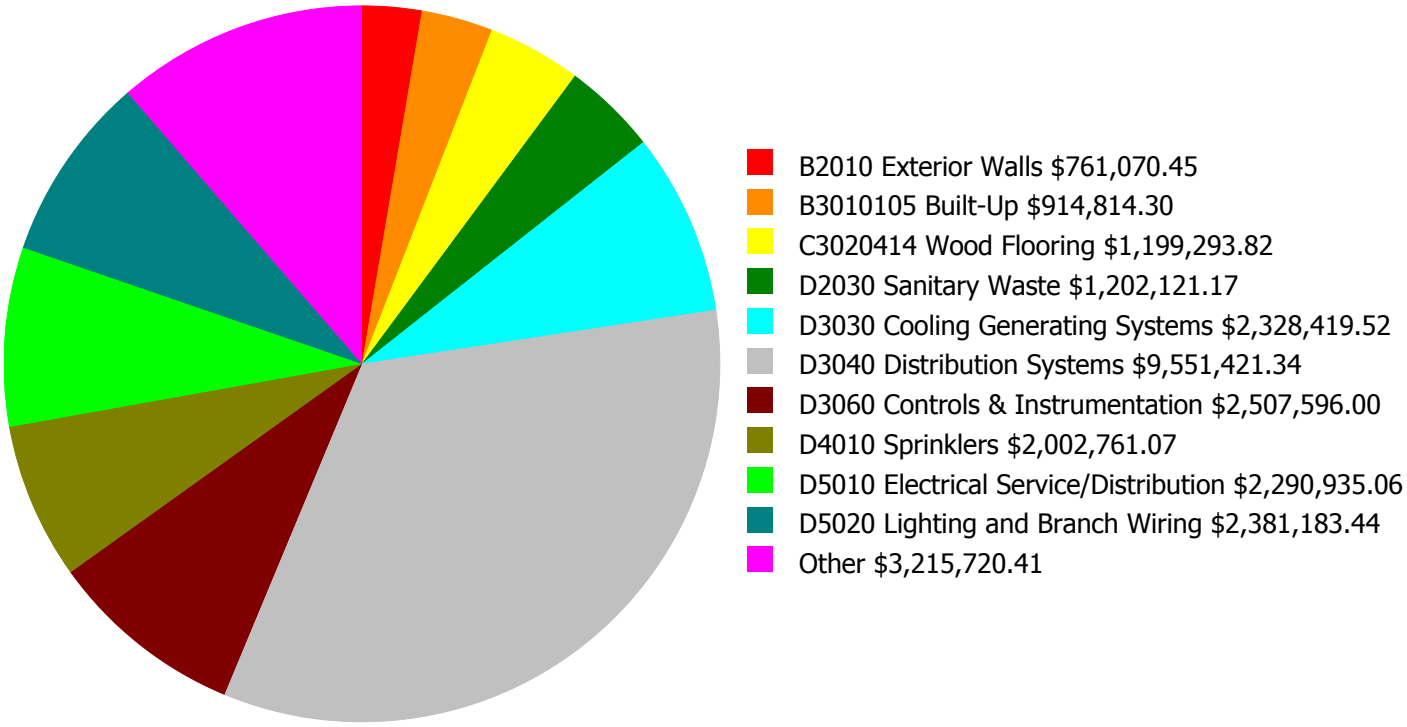
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation



Year	Investment Amount Current FCI - 39.82%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$1,467,032.00	37.82 %	$2,934,063.00	35.82 %
2017	$19,027,072	$1,511,043.00	61.00 %	$3,022,085.00	57.00 %
2018	$0	$1,556,374.00	59.00 %	$3,112,748.00	53.00 %
2019	$0	$1,603,065.00	57.00 %	$3,206,130.00	49.00 %
2020	$7,481,250	$1,651,157.00	64.06 %	$3,302,314.00	54.06 %
2021	$0	$1,700,692.00	62.06 %	$3,401,384.00	50.06 %
2022	$2,501,982	$1,751,713.00	62.92 %	$3,503,425.00	48.92 %
2023	$0	$1,804,264.00	60.92 %	$3,608,528.00	44.92 %
2024	$0	$1,858,392.00	58.92 %	$3,716,784.00	40.92 %
2025	$6,515,643	$1,914,144.00	63.73 %	$3,828,287.00	43.73 %
Total:	**$35,525,946**	**$16,817,876.00**		**$33,635,748.00**	

Deficiency Summary by System

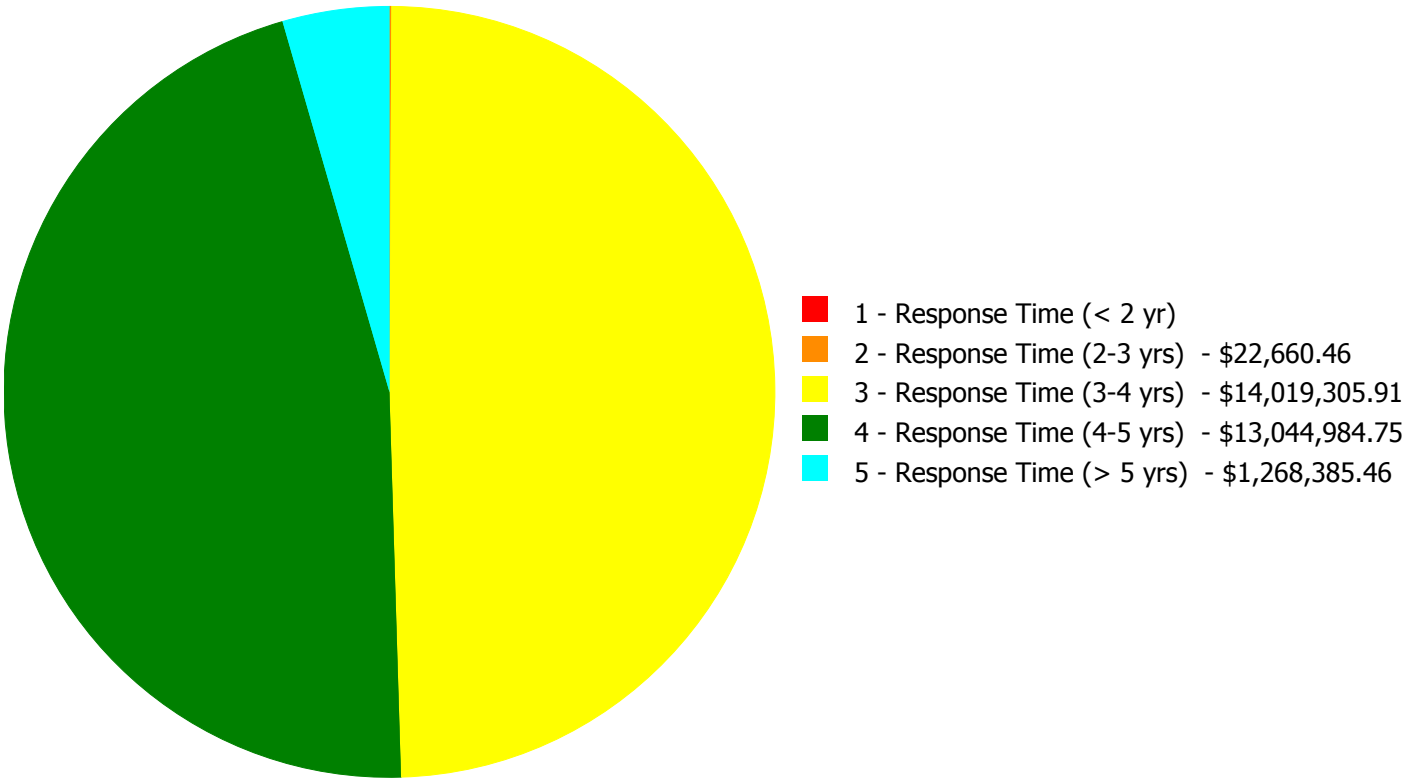
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



Budget Estimate Total: $28,355,336.58

Deficiency Summary by Priority

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



Budget Estimate Total: $28,355,336.58

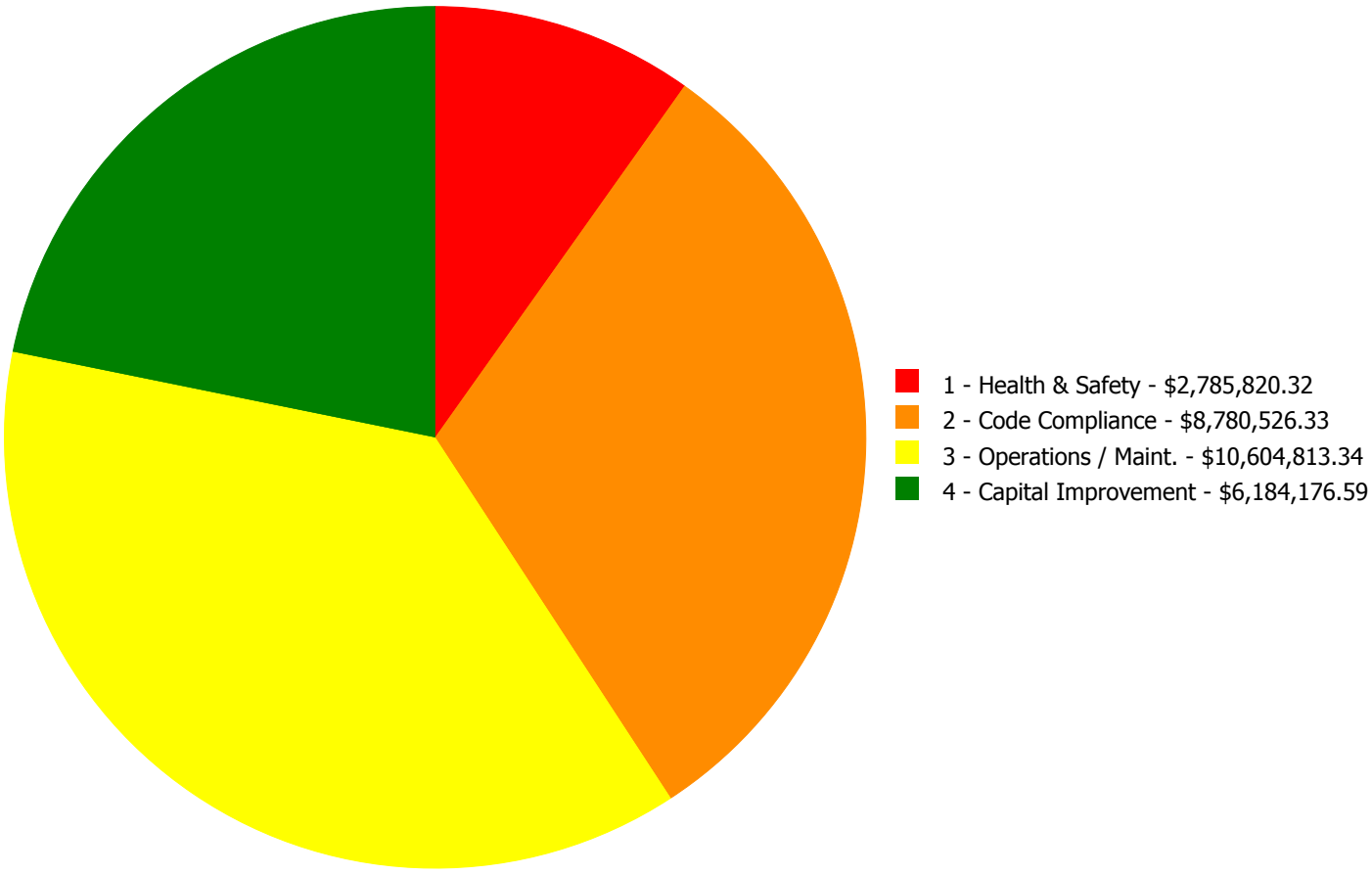
Deficiency By Priority Investment Table

The table below shows the current investment cost grouped by deficiency priority and building system.

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
B2010	Exterior Walls	$0.00	$0.00	$0.00	$761,070.45	$0.00	$761,070.45
B2030	Exterior Doors	$0.00	$18,214.64	$91,073.21	$0.00	$0.00	$109,287.85
B3010105	Built-Up	$0.00	$0.00	$0.00	$914,814.30	$0.00	$914,814.30
C1010	Partitions	$0.00	$0.00	$56,611.45	$0.00	$0.00	$56,611.45
C1020	Interior Doors	$0.00	$0.00	$309,270.47	$0.00	$65,160.75	$374,431.22
C1030	Fittings	$0.00	$0.00	$0.00	$0.00	$159,839.38	$159,839.38
C2010	Stair Construction	$0.00	$0.00	$33,772.56	$12,455.57	$0.00	$46,228.13
C3020413	Vinyl Flooring	$0.00	$0.00	$151,666.68	$0.00	$0.00	$151,666.68
C3020414	Wood Flooring	$0.00	$0.00	$0.00	$1,199,293.82	$0.00	$1,199,293.82
D1010	Elevators and Lifts	$0.00	$0.00	$191,880.83	$0.00	$0.00	$191,880.83
D2010	Plumbing Fixtures	$0.00	$0.00	$0.00	$45,809.92	$0.00	$45,809.92
D2020	Domestic Water Distribution	$0.00	$0.00	$50,533.86	$580,589.52	$0.00	$631,123.38
D2030	Sanitary Waste	$0.00	$0.00	$1,202,121.17	$0.00	$0.00	$1,202,121.17
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$2,328,419.52	$0.00	$2,328,419.52
D3040	Distribution Systems	$0.00	$0.00	$7,256,831.78	$1,897,179.50	$397,410.06	$9,551,421.34
D3050	Terminal & Package Units	$0.00	$0.00	$0.00	$0.00	$14,641.41	$14,641.41
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$2,507,596.00	$0.00	$2,507,596.00
D4010	Sprinklers	$0.00	$0.00	$2,002,761.07	$0.00	$0.00	$2,002,761.07
D5010	Electrical Service/Distribution	$0.00	$0.00	$1,869,916.53	$421,018.53	$0.00	$2,290,935.06
D5020	Lighting and Branch Wiring	$0.00	$4,445.82	$0.00	$2,376,737.62	$0.00	$2,381,183.44
D5030	Communications and Security	$0.00	$0.00	$487,218.23	$0.00	$0.00	$487,218.23
D5090	Other Electrical Systems	$0.00	$0.00	$315,648.07	$0.00	$0.00	$315,648.07
E2010	Fixed Furnishings	$0.00	$0.00	$0.00	$0.00	$631,333.86	$631,333.86
	Total:	$0.00	$22,660.46	$14,019,305.91	$13,044,984.75	$1,268,385.46	$28,355,336.58

Deficiency Summary by Category

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



Budget Estimate Total: $28,355,336.58

Deficiency Details by Priority

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

Priority 2 - Response Time (2-3 yrs):

System: B2030 - Exterior Doors

Location: Main Entrance
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace exterior doors - per leaf
Qty: 2.00
Unit of Measure: Ea.
Estimate: $18,214.64
Assessor Name: System
Date Created: 08/14/2015

Notes: The main entrance is a double door system that has been upgraded from the original construction. This system is in good condition however as indicated in the photo the concrete step does not meet the length of the door thus allowing a trip hazard. Special consideration for a new door system is required and a modification to the exterior step removing the hazard. Remove and replace door and step.

System: D5020 - Lighting and Branch Wiring

Location: Kitchen
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace Wiring Device
Qty: 13.00
Unit of Measure: Ea.
Estimate: $4,445.82
Assessor Name: System
Date Created: 08/05/2015

Notes: Replace approximately (13) duplex receptacles in the kitchen with ground-fault circuit-interrupting type receptacle to comply with current code.

Priority 3 - Response Time (3-4 yrs):

System: B2030 - Exterior Doors

Location: Exterior Elevation

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Remove and replace exterior doors - per leaf

Qty: 10.00

Unit of Measure: Ea.

Estimate: $91,073.21

Assessor Name: System

Date Created: 08/13/2015

Notes: The exterior doors are a combination of wooden and metal applications with wooden or metal frames. There is a storefront system at the main entrance with a metal-framed metal door application. The exterior door system for this school is a very high traffic system. The doors are in fair condition with the exception of the wooden doors to the air handling rooms and to the service rooms. These doors are out of service and need immediate attention. Other doors are aging at a faster rate than expected based on traffic and condition. The exterior door system, store front and service doors are recommended for upgrade.

System: C1010 - Partitions

Location: Building Wide

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Install fire rated walls and door where required - insert number of doors

Qty: 10.00

Unit of Measure: S.F.

Estimate: $40,626.80

Assessor Name: System

Date Created: 08/13/2015

Notes: This building has adequate exit pathways and no egress obstructions were noted during our building walk through. However the corridor doors on all floors are not fire rated and should be upgraded. Install new fire rated flush wood doors on all floor corridors. If the recommended lever hardware and room signage has not been implemented then these features should be incorporated into the work scope.

System: C1010 - Partitions

Location: Hallways

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Remove non-rated interior glass panels and replace with studs, gypsum board, paint (E) wall

Qty: 1.00

Unit of Measure: S.F.

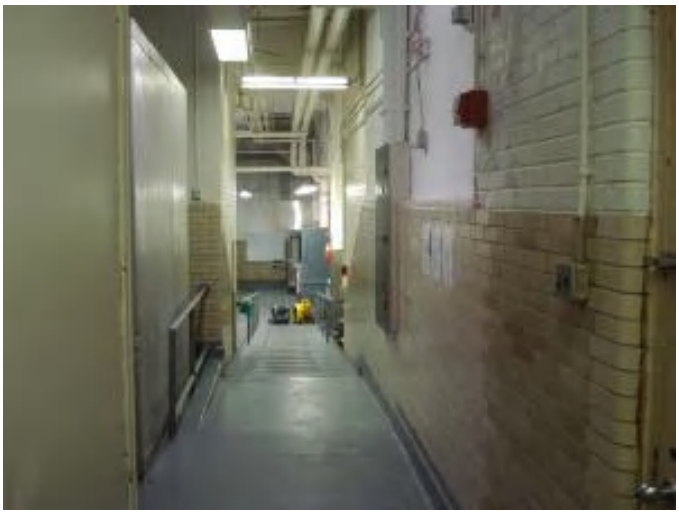
Estimate: $15,984.65

Assessor Name: System

Date Created: 08/13/2015

Notes: There are several transom lites and sidelights constructed into hallway wall systems. It is recommended that the lites and sidelights be removed and replaced with a fire rated wall construction. The deficiency provides a budgetary consideration to correct the hallway, transoms, lites and sidelights.

System: C1020 - Interior Doors



Location: Kitchen

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Add interior door for ingress or egress

Qty: 40.00

Unit of Measure: Ea.

Estimate: $261,564.60

Assessor Name: System

Date Created: 08/13/2015

Notes: The kitchen has been modified several times through minor renovation efforts and new equipment installations. During the time of the inspection it was noted that the corridor leading from the kitchen entrance to the break room is a dead end corridor with no clear egress path. This deficiency provides a budgetary consideration for the addition of a constructed exit path. It is recommended that a new door be added partially down the hallway to allow for proper egress.

System: C1020 - Interior Doors

Location: Corridor doors

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Remove and replace interior doors - wood doors with hollow metal frames - per leaf

Qty: 10.00

Unit of Measure: Ea.

Estimate: $47,705.87

Assessor Name: System

Date Created: 08/14/2015

Notes: As indicated in the photos some of the corridor doors have been removed with just the frame remaining other corridor doors are not fire-rated and should be replaced. To prevent doors from being improperly held open, magnetic door holders should be installed and tied to the building fire alarm system to ensure that the door can function as designed in the event of a fire.

System: C2010 - Stair Construction

Location: Exterior Stair

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace inadequate or install proper stair railing - select appropriate material

Qty: 200.00

Unit of Measure: L.F.

Estimate: $33,772.56

Assessor Name: System

Date Created: 08/14/2015

Notes: The exterior stair railing system was designed and compliant during the original construction of this school however, current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Future efforts should include comprehensive stair railing removal and replacement upgrades.

System: C3020413 - Vinyl Flooring

Location: Building Wide

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Remove VAT and replace with VCT - SF of area

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $151,666.68

Assessor Name: System

Date Created: 08/13/2015

Notes: The vinyl floor finish in most of this school is in very good condition and appears to have part of an isolated upgrade. Some of the original flooring that was not a part of that effort consist of a 9x9 finish. This finish is suspect to contain asbestos and is recommended for upgrade. Remove and replace with a 12x12 vinyl tile application.

System: D1010 - Elevators and Lifts

Location: Elevator

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Upgrade elevator cab and machinery - based on 3 stops, change the stops if required

Qty: 1.00

Unit of Measure: Ea.

Estimate: $191,880.83

Assessor Name: System

Date Created: 08/05/2015

Notes: Upgrade and modernize elevator hoist system, cab and machine room.

System: D2020 - Domestic Water Distribution

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace duplex domestic booster pump set (5 HP)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $50,533.86

Assessor Name: System

Date Created: 08/22/2015

Notes: Provide new domestic water booster pump system with two pumps, pressure tank, and controls. Connect to main domestic water line.

System: D2030 - Sanitary Waste

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Inspect sanitary waste piping and replace damaged sections. (+200KSF)

Qty: 140,000.00

Unit of Measure: S.F.

Estimate: $607,596.34

Assessor Name: System

Date Created: 08/11/2015

Notes: Inspect old cast iron sanitary piping including camera observation and replace damaged sections.

System: D2030 - Sanitary Waste

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Inspect sanitary waste piping and replace damaged sections. (+100KSF)

Qty: 140,000.00

Unit of Measure: S.F.

Estimate: $594,524.83

Assessor Name: System

Date Created: 08/22/2015

Notes: Inspect old cast iron sanitary piping including camera observation and replace damaged sections.

System: D3040 - Distribution Systems

Location: classrooms

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace the existing unit ventilators with new units designed to provide adequate ventilation per ASHRAE Std 62 - insert the SF of bldg. in the qty.

Qty: 140,000.00

Unit of Measure: S.F.

Estimate: $6,753,489.90

Assessor Name: System

Date Created: 08/22/2015

Notes: Replace the existing unit ventilators with new units designed for quiet operation and equipped with hot water and chilled water coils, hydronic control valves with digital controls and integral heat exchangers to provide code required fresh air quantities. Connect to new chilled and hot water piping systems and building automation control system.

System: D3040 - Distribution Systems

Location: auditorium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 3 - Response Time (3-4 yrs)

Correction: Install / replace HVAC unit for Auditorium (800 seat).

Qty: 500.00

Unit of Measure: Seat

Estimate: $279,634.38

Assessor Name: System

Date Created: 08/22/2015

Notes: Provide a new central station air handling unit for the auditorium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3040 - Distribution Systems

Location: auditorium

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Install / replace HVAC unit for Auditorium (800 seat).

Qty: 400.00

Unit of Measure: Seat

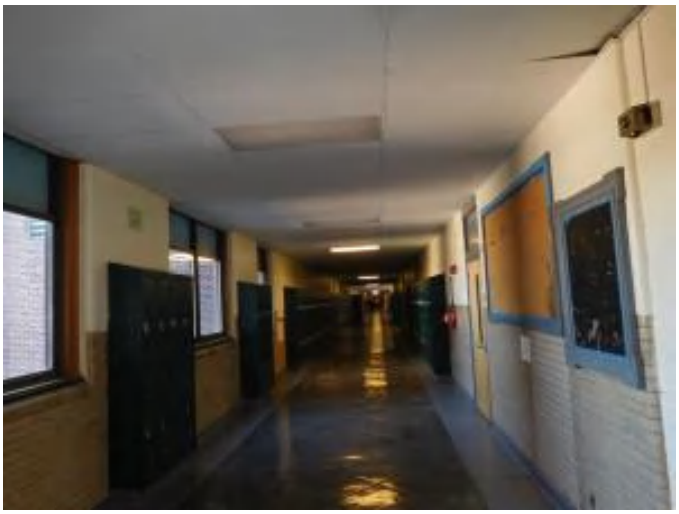
Estimate: $223,707.50

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide a new central station air handling unit for the auditorium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D4010 - Sprinklers



Location: entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Install a fire protection sprinkler system

Qty: 140,000.00

Unit of Measure: S.F.

Estimate: $2,002,761.07

Assessor Name: System

Date Created: 08/22/2015

Notes: Install complete NFPA wet pipe automatic sprinkler system and standpipes. If required provide fire pump and jockey pump with controller.

System: D5010 - Electrical Service/Distribution

Location: Main Electrical Room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace Substation

Qty: 0.00

Unit of Measure: Ea.

Estimate: $1,869,916.53

Assessor Name: System

Date Created: 08/05/2015

Notes: Replace existing 600A, 13.2 kV load interrupter switch and 1000 kVA liquid-filled substation transformer switch with two 600A, 13.2 kV load interrupter switches, 1000 kVA, 208/120V, dry-type substation transformer for existing building loads and a 750 kVA, 480/277V transformer for central air conditioning equipment.

System: D5030 - Communications and Security

Location: Main Electrical Room

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace fire alarm system

Qty: 1.00

Unit of Measure: S.F.

Estimate: $487,218.23

Assessor Name: System

Date Created: 08/05/2015

Notes: Replace fire alarm system with addressable type, complying with ADA requirements.

System: D5090 - Other Electrical Systems

Location: Main Electrical Room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace standby generator system

Qty: 1.00

Unit of Measure: Ea.

Estimate: $300,390.48

Assessor Name: System

Date Created: 08/05/2015

Notes: Replace standby generator, automatic transfer switch and distribution equipment. Size system to include emergency lighting, elevator and some heating loads.

System: D5090 - Other Electrical Systems

Location: Basement and Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace Emergency/Exit Lighting

Qty: 15.00

Unit of Measure: Ea.

Estimate: $15,257.59

Assessor Name: System

Date Created: 08/05/2015

Notes: Add (4) exit signs in Basement and replace (11) exit signs in auditorium.

Priority 4 - Response Time (4-5 yrs):

System: B2010 - Exterior Walls

Location: Exterior Walls

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Repair cracks in masonry - replace missing mortar and repoint - SF of wall area

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $322,894.72

Assessor Name: System

Date Created: 08/13/2015

Notes: The exterior brick surfaces are generally in fair to good condition for their age. In some locations, bricks have cracked or spalled and should be replaced. The repointing of deteriorated mortar joints is also recommended, using mortar of a similar color and consistency as the original. Following the detailed examination of the brick and repair of mortar construction joints, the entire building should be pressure washed to remove stains and embedded pollutants. If moisture is found to be penetrating the masonry façade, the application of a spray sealant to the suspected exterior masonry surface is recommended.

System: B2010 - Exterior Walls

Location: Exterior Wall

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Remove and replace expansion joints at exterior walls

Qty: 3,000.00

Unit of Measure: L.F.

Estimate: $268,027.09

Assessor Name: System

Date Created: 08/13/2015

Notes: The expansion joints to this facility are in very poor condition. Several areas are showing signs of water penetration and as a result damage to the exterior brick surface is occurring. It is recommended that the expansion joint system be renewed.

System: B2010 - Exterior Walls

Location: Exterior Wall
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Repair spalled concrete wall structure
Qty: 3,000.00
Unit of Measure: S.F.
Estimate: $170,148.64
Assessor Name: System
Date Created: 08/13/2015

Notes: The exterior building wall that is also a barrier wall on the western exterior of the building is showing signs of age and deterioration associated with weather conditions such as freezing and thawing. This wall is in very poor condition and upgrades are recommended. The wall is recommended for point and tuck work as well as joint recovery and cleaning. Additional efforts may be required for the openings and metal gates.

System: B3010105 - Built-Up

Location: Roof
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Remove and Replace Built Up Roof
Qty: 27,000.00
Unit of Measure: S.F.
Estimate: $914,814.30
Assessor Name: System
Date Created: 08/14/2015

Notes: There two main levels of roof for this school and several small sections covering mechanical spaces, however all are the same built up application with the same date of installation. The upper section of the roof has been reported to have several minor leaks and is showing signs of age. During the time of the inspection evidence of water infiltration was evident as the surface of the roof was floating. This deficiency recommends removal and replacement of the roof system.

System: C2010 - Stair Construction

Location: Stair System

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 4 - Response Time (4-5 yrs)

Correction: Replace inadequate or install proper stair railing - select appropriate material

Qty: 800.00

Unit of Measure: L.F.

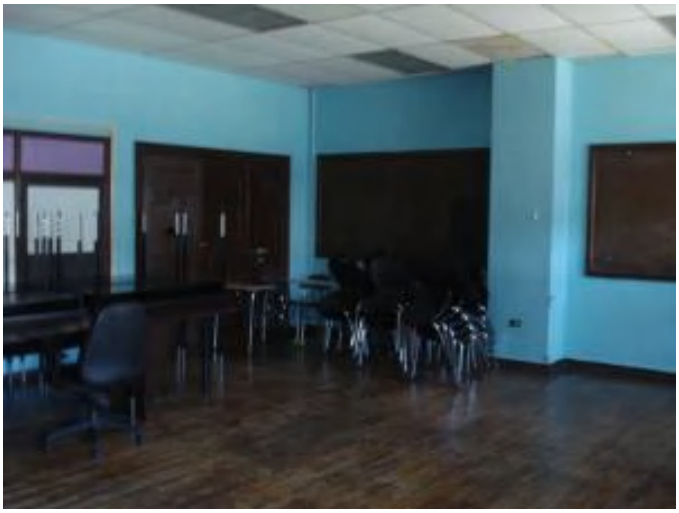
Estimate: $12,455.57

Assessor Name: System

Date Created: 08/13/2015

Notes: Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

System: C3020414 - Wood Flooring



Location: Classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Remove and replace partial area of wood flooring and refinish entire floor - set replacement area

Qty: 35,000.00

Unit of Measure: S.F.

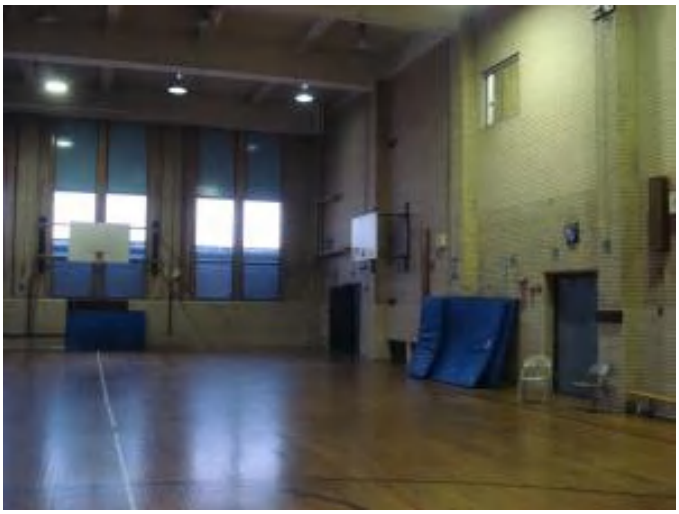
Estimate: $1,053,533.46

Assessor Name: System

Date Created: 08/13/2015

Notes: The classrooms in this school have a wooden floor finish that appears to be from original construction. The system is showing signs of age such as the effects of sanding and refinishing with yearly cleaning and waxing with some repairs. The floor finish is in fair condition however, the finish is beyond its expected life cycle. It is recommended that the wooden floor finish be removed and replaced with an in kind finish.

System: C3020414 - Wood Flooring



Location: Gym

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Remove and replace wood flooring

Qty: 5,000.00

Unit of Measure: S.F.

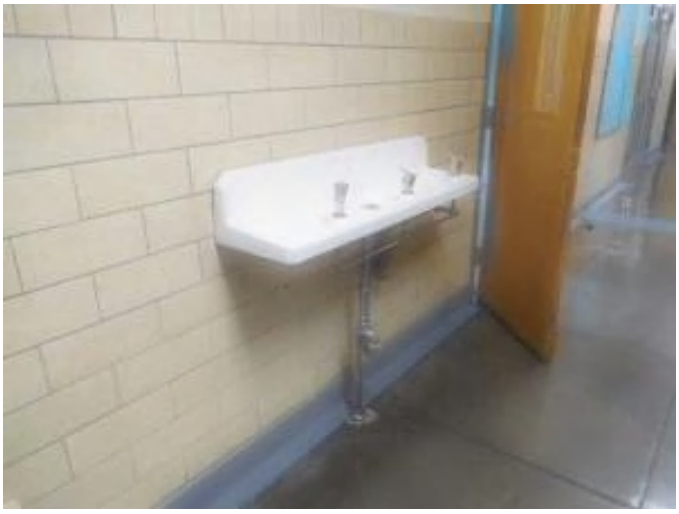
Estimate: $145,760.36

Assessor Name: System

Date Created: 08/13/2015

Notes: The GYM floor finish is beyond its expected life cycle for this application. The floor is recommended for universal upgrade.

System: D2010 - Plumbing Fixtures



Location: corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Remove and Replace Water Fountains - without ADA new recessed alcove

Qty: 4.00

Unit of Measure: Ea.

Estimate: $30,316.76

Assessor Name: System

Date Created: 08/22/2015

Notes: Replace older plumbing fixtures, including lavatories and water coolers. Include fittings and trim.

System: D2010 - Plumbing Fixtures

Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Remove and replace or replace lavatory - quantify accessible if required

Qty: 4.00

Unit of Measure: Ea.

Estimate: $15,493.16

Assessor Name: System

Date Created: 08/22/2015

Notes: Replace older plumbing fixtures, including lavatories and water coolers. Include fittings and trim.

System: D2020 - Domestic Water Distribution

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Replace domestic water piping (150 KSF)

Qty: 140,000.00

Unit of Measure: S.F.

Estimate: $580,589.52

Assessor Name: System

Date Created: 08/22/2015

Notes: Replace domestic hot and cold water piping including valves, fittings, hangars and insulation.

System: D3030 - Cooling Generating Systems

Location: roof, mechanical room

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 4 - Response Time (4-5 yrs)

Correction: Install chilled water system with distribution piping and pumps. (+150KSF)

Qty: 140,000.00

Unit of Measure: S.F.

Estimate: $2,328,419.52

Assessor Name: System

Date Created: 08/22/2015

Notes: Remove the existing window air conditioning units and install a 350 ton air-cooled chiller on the roof with chilled water distribution piping, two pumps, chemical treatment and controls located in a mechanical room on the basement level.

System: D3040 - Distribution Systems

Location: cafeteria

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 4 - Response Time (4-5 yrs)

Correction: Install HVAC unit for Cafeteria (850 students).

Qty: 1,281.00

Unit of Measure: Pr.

Estimate: $598,925.35

Assessor Name: System

Date Created: 08/22/2015

Notes: Provide a new central station air handling unit for the cafeteria with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3040 - Distribution Systems

Location: office

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 4 - Response Time (4-5 yrs)

Correction: Install HVAC unit for Administration (2000 students).

Qty: 600.00

Unit of Measure: Pr.

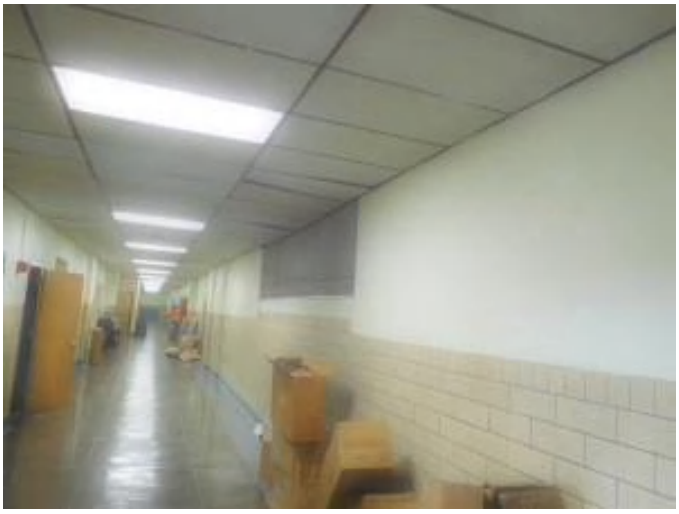
Estimate: $259,694.18

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide a new central station air handling unit for the office with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3040 - Distribution Systems



Location: office

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 4 - Response Time (4-5 yrs)

Correction: Install HVAC unit for Administration (2000 students).

Qty: 500.00

Unit of Measure: Pr.

Estimate: $216,411.85

Assessor Name: System

Date Created: 08/22/2015

Notes: Provide a new central station air handling unit for the office with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3040 - Distribution Systems

Location: boysgymnasium

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 4 - Response Time (4-5 yrs)

Correction: Install HVAC unit for Gymnasium (single station).

Qty: 4,000.00

Unit of Measure: Ea.

Estimate: $205,537.03

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide a new central station air handling unit for the boys gymnasium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3040 - Distribution Systems

Location: girls gymnasium

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 4 - Response Time (4-5 yrs)

Correction: Install HVAC unit for Gymnasium (single station).

Qty: 4,000.00

Unit of Measure: Ea.

Estimate: $205,537.03

Assessor Name: System

Date Created: 08/12/2015

Notes:

System: D3040 - Distribution Systems

Location: girls gym

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 4 - Response Time (4-5 yrs)

Correction: Install HVAC unit for Gymnasium (single station).

Qty: 4,000.00

Unit of Measure: Ea.

Estimate: $205,537.03

Assessor Name: System

Date Created: 08/22/2015

Notes: Provide a new central station air handling unit for the girls gymnasium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3040 - Distribution Systems

Location: boys gym

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 4 - Response Time (4-5 yrs)

Correction: Install HVAC unit for Gymnasium (single station).

Qty: 4,000.00

Unit of Measure: Ea.

Estimate: $205,537.03

Assessor Name: System

Date Created: 08/22/2015

Notes: Provide a new central station air handling unit for the boys gymnasium with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3060 - Controls & Instrumentation

Location: entire building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 4 - Response Time (4-5 yrs)

Correction: Replace pneumatic controls with DDC (150KSF)

Qty: 140,000.00

Unit of Measure: S.F.

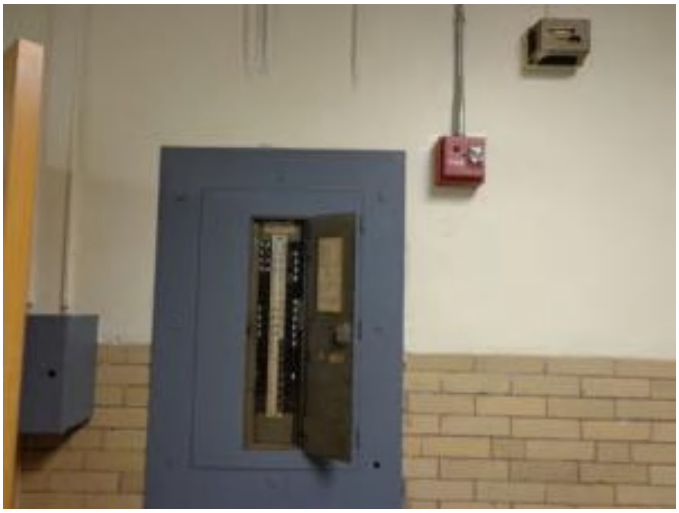
Estimate: $2,507,596.00

Assessor Name: System

Date Created: 08/11/2015

Notes: Install new direct digital control system and building automation system with remote computer control capability and graphics package.

System: D5010 - Electrical Service/Distribution



Location: Corridors - all floors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Replace Panelboard - 225A

Qty: 15.00

Unit of Measure: Ea.

Estimate: $421,018.53

Assessor Name: System

Date Created: 08/05/2015

Notes: Replace (15) recessed panelboards located in corridors.

System: D5020 - Lighting and Branch Wiring

Location: Entire Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Replace Lighting Fixtures (SF)

Qty: 104,000.00

Unit of Measure: S.F.

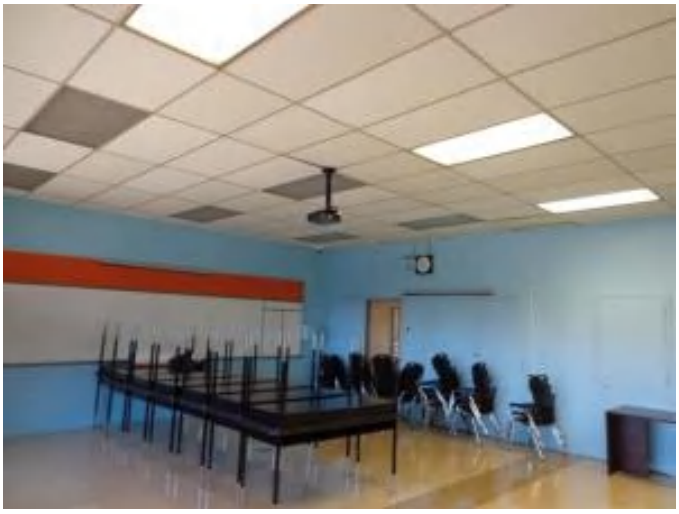
Estimate: $2,198,680.41

Assessor Name: System

Date Created: 08/05/2015

Notes: Replace lighting in approximately 104,000 SF of the building.

System: D5020 - Lighting and Branch Wiring



Location: Classrooms

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 4 - Response Time (4-5 yrs)

Correction: Provide surface raceway system and wiring devices

Qty: 50.00

Unit of Measure: L.F.

Estimate: $158,914.52

Assessor Name: System

Date Created: 08/05/2015

Notes: Add surface raceway system with minimum three duplex receptacles in each of the classrooms. Approximately 50 rooms.

System: D5020 - Lighting and Branch Wiring

Location: Exterior Doors

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 4 - Response Time (4-5 yrs)

Correction: Add Exterior Lighting

Qty: 8.00

Unit of Measure: Ea.

Estimate: $19,142.69

Assessor Name: System

Date Created: 08/05/2015

Notes: Add wall mounted exterior lighting fixtures above doors at exit discharges. Total of (8).

Priority 5 - Response Time (> 5 yrs):

System: C1020 - Interior Doors

Location: Building Wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace interior doors - wood doors with wood frame - per leaf

Qty: 14.00

Unit of Measure: Ea.

Estimate: $65,160.75

Assessor Name: System

Date Created: 08/13/2015

Notes: A large portion of the interior doors are code compliant with both ADA and are fire rated. However, several interior doors including the auditorium doors and support office doors are typically wood in wood frames with transom lites or sidelights, glass glazing. The older doors are generally in good condition considering the age of the application. To restore the door finishes, universal upgrades are required for the older door applications. Remove and replace original door systems.

System: C1030 - Fittings

Location: Building Wide Signage

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace missing or damaged signage - insert the number of rooms

Qty: 350.00

Unit of Measure: Ea.

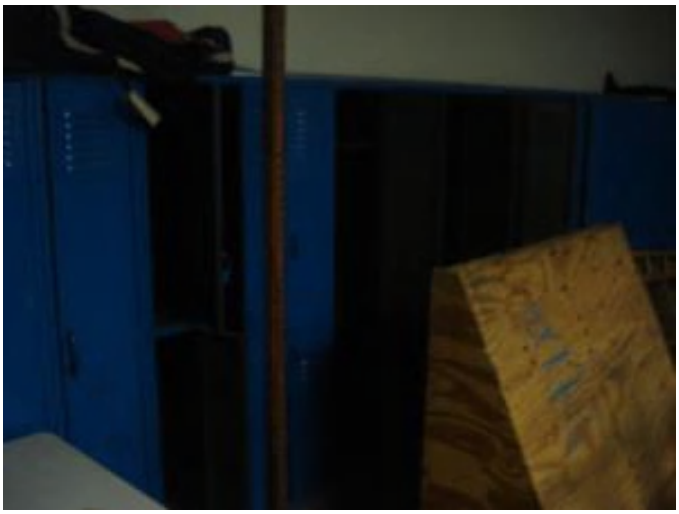
Estimate: $78,116.76

Assessor Name: System

Date Created: 08/13/2015

Notes: There is no directional signage and room signage is scarce or painted with no consistency. Accessibility signage criteria have been established for the physically challenged. These include mounting heights, contrast and finish, raised and Braille characters and pictograms, and character proportions and heights. It is recommended that compliant signage be installed throughout the building.

System: C1030 - Fittings



Location: Gym Locker-rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace lockers - select size

Qty: 100.00

Unit of Measure: Ea.

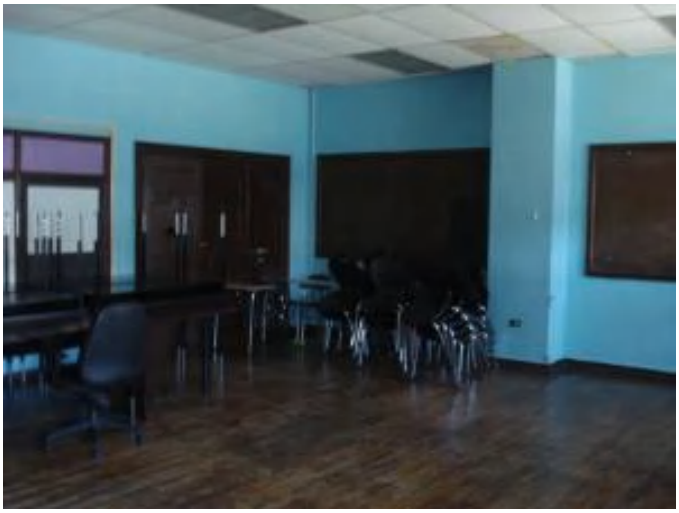
Estimate: $65,868.11

Assessor Name: System

Date Created: 08/13/2015

Notes: The locker room locker system is beyond its expected life, several of the lockers are damaged and some of the doors are missing. The locker system is recommended for removal and replacement with a new system.

System: C1030 - Fittings



Location: Hallways

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace tackboards - select size

Qty: 20.00

Unit of Measure: Ea.

Estimate: $15,854.51

Assessor Name: System

Date Created: 08/13/2015

Notes: There are several tack boards in the hallways for student displays. The systems are beyond the expected service life for this application. Remove and replace tack boards is recommended.

System: D3040 - Distribution Systems

Location: cafeteria

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for Cafeteria (850 students).

Qty: 850.00

Unit of Measure: Pr.

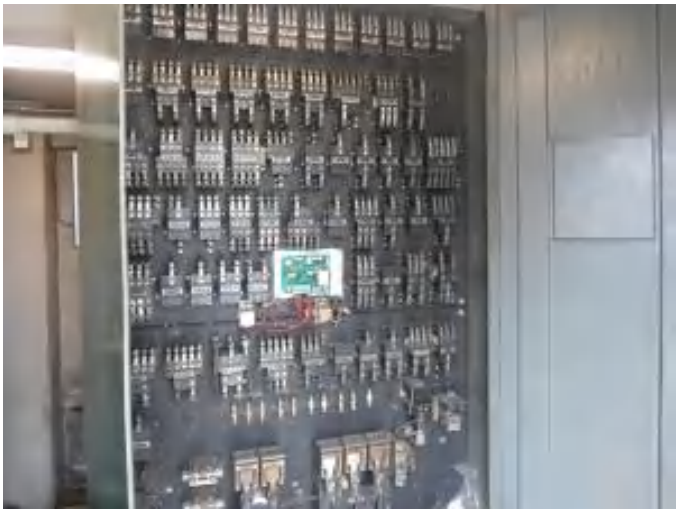
Estimate: $397,410.06

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide a new central station air handling unit for the cafeteria with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems.

System: D3050 - Terminal & Package Units



Location: roof

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Install ductless split system for equipment room

Qty: 1.00

Unit of Measure: Ea.

Estimate: $14,641.41

Assessor Name: System

Date Created: 08/22/2015

Notes: Install one ton ductless DX split system to cool elevator equipment penthouse. Locate condensing unit on adjacent roof. Include refrigerant line set and drain line.

System: E2010 - Fixed Furnishings

Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace auditorium seating - add tablet arms if required. Veneer seating is an option.

Qty: 700.00

Unit of Measure: Ea.

Estimate: $631,333.86

Assessor Name: System

Date Created: 08/13/2015

Notes: The fixed seating for this school is from the original construction. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades for the fixed seating and furnishing of this school.

Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D1010 Elevators and Lifts	Traction geared elevators, passenger, 3500 lb, 5 floors, 200 FPM	1.00	Ea.	Machine Room	Payne Co.	NA	402-468		35	1917	2052	$181,650.00	$199,815.00
D3020 Heat Generating Systems	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 6970 MBH, includes standard controls and insulated flush jacket, packaged	1.00	Ea.	mechanical room	hb smith	mills450			35	2012	2047	$158,614.00	$174,475.40
D3020 Heat Generating Systems	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 6970 MBH, includes standard controls and insulated flush jacket, packaged	1.00	Ea.	mechanical room	hb smith	mills450			35	2012	2047	$158,614.00	$174,475.40
D3020 Heat Generating Systems	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 6970 MBH, includes standard controls and insulated flush jacket, packaged	1.00	Ea.	mechanical room	hb smith	mills450			35	2012	2047	$158,614.00	$174,475.40
D3040 Distribution Systems	Pump, circulating, cast iron, close coupled, end suction, bronze impeller, flanged joints, 25 H.P., to 1550 GPM, 5" size	1.00	Ea.	mechanical room	B&G	1510			25	2012	2037	$10,858.50	$11,944.35
D3040 Distribution Systems	Pump, circulating, cast iron, close coupled, end suction, bronze impeller, flanged joints, 25 H.P., to 1550 GPM, 5" size	1.00	Ea.	mechanical room	B&G	1510			25	2012	2037	$10,858.50	$11,944.35
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 400 kVA & above, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	1.00	Ea.	Main Electrical Room	Federal Pacific Electric	Cat. No. 2651 D 1595	NA		30	1968	2047	$42,849.00	$47,133.90
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 2000 A	3.00	Ea.	Main Electrical Room	Federal Pacific Electric	NA	S.O. 14458-01		30	1968	2047	$47,537.55	$156,873.92
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 600 A	1.00	Ea.	Boiler Room	Eaton	PRL3A	NA		30	2012	2042	$16,891.20	$18,580.32
D5010 Electrical Service/Distribution	Transformer, liquid-filled, 5 kV or 15 kV primary, 277/480 V secondary, 3 phase, 1500 kVA, pad mounted	1.00	Ea.	Main Electrical Room	Federal Pacific Electric	NA	T-3390-1		30	1968	2047	$58,498.20	$64,348.02
D5090 Other Electrical Systems	Variable frequency drives, enclosed, 460 volt, 25 HP motor size, NEMA 1	1.00	Ea.	mechanical room	danfoss	vlt			30	2012	2042	$8,818.20	$9,700.02
D5090 Other Electrical Systems	Variable frequency drives, enclosed, 460 volt, 25 HP motor size, NEMA 1	1.00	Ea.	mechanical room	danfoss	vlt			30	2012	2042	$8,818.20	$9,700.02
												Total:	**$1,053,466.10**

Executive Summary

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

Function:	
Gross Area (SF):	31,000
Year Built:	1917
Last Renovation:	
Replacement Value:	$376,770
Repair Cost:	$137,225.19
Total FCI:	36.42 %
Total RSLI:	63.53 %

Description:

Attributes:

General Attributes:

Bldg ID:	S512001	Site ID:	S512001

Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
G20 - Site Improvements	82.02 %	69.78 %	$137,225.19
G40 - Site Electrical Utilities	43.33 %	0.00 %	$0.00
Totals:	**63.53 %**	**36.42 %**	**$137,225.19**

Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$8.50	S.F.		30				0.00 %	0.00 %				$0
G2030	Pedestrian Paving	$12.30	S.F.	5,000	40	1917	1957	2032	42.50 %	46.77 %	17		$28,765.70	$61,500
G2040	Site Development	$4.36	S.F.	31,000	25	1917	1942	2040	100.00 %	80.25 %	25		$108,459.49	$135,160
G2050	Landscaping & Irrigation	$4.36	S.F.		15				0.00 %	0.00 %				$0
G4020	Site Lighting	$4.84	S.F.	31,000	30	1917	1947	2028	43.33 %	0.00 %	13			$150,040
G4030	Site Communications & Security	$0.97	S.F.	31,000	30	1917	1947	2028	43.33 %	0.00 %	13			$30,070
								Total	**63.53 %**	**36.42 %**			**$137,225.19**	**$376,770**

System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

No data found for this asset

Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

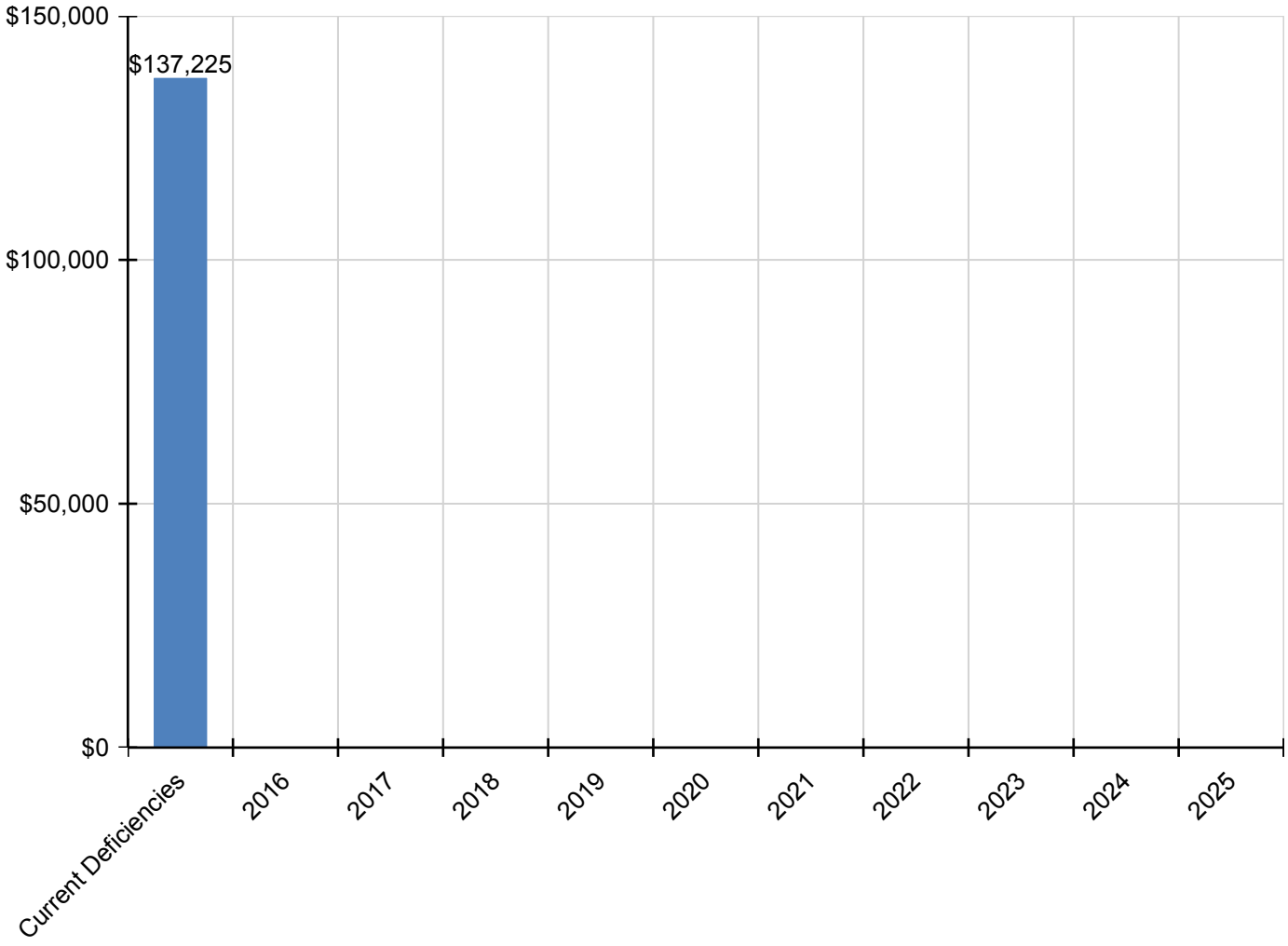
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$137,225**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$137,225**
G - Building Sitework	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G20 - Site Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2010 - Roadways	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2020 - Parking Lots	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2030 - Pedestrian Paving	$28,766	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$28,766**
G2040 - Site Development	$108,459	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$108,459**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

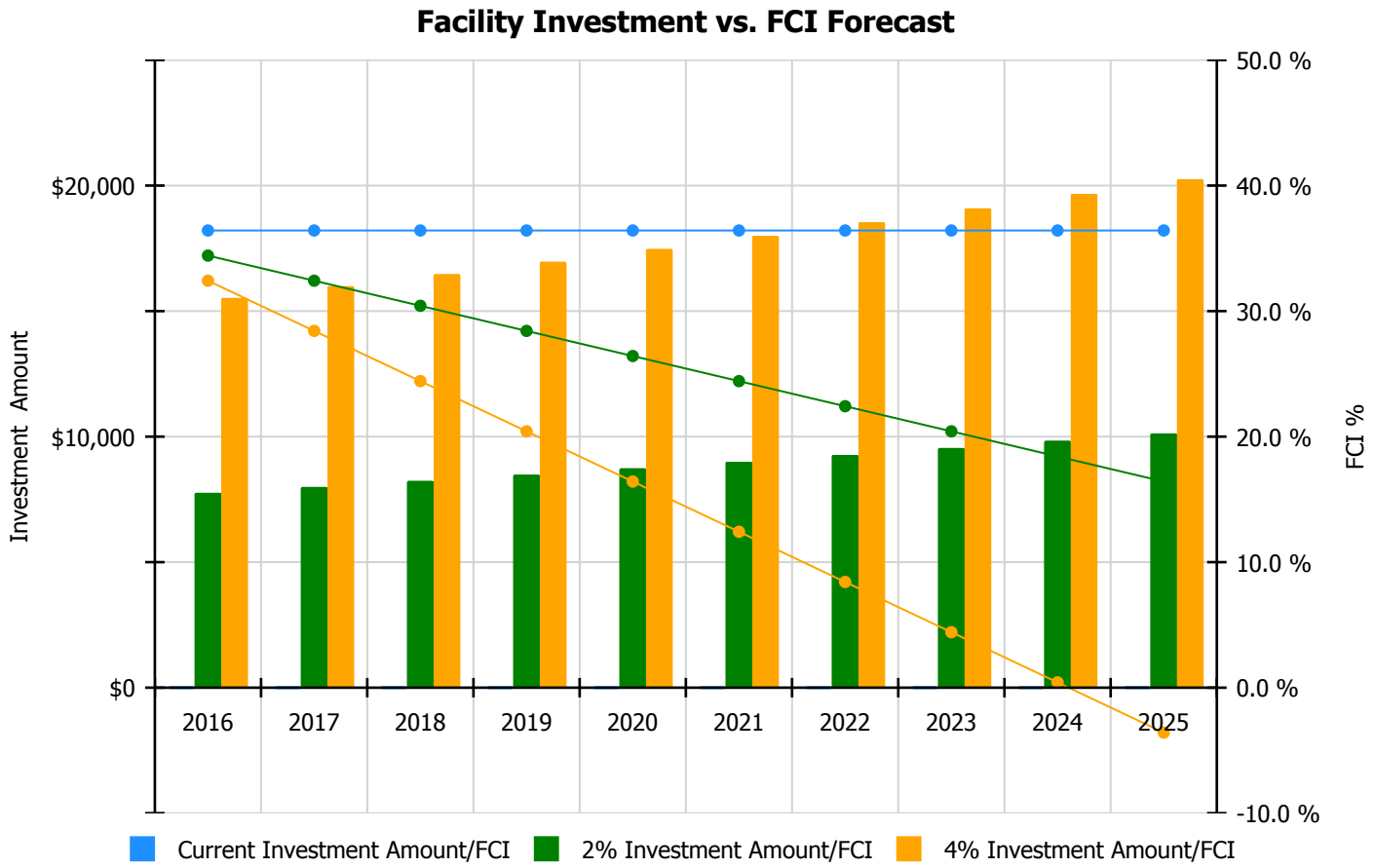
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

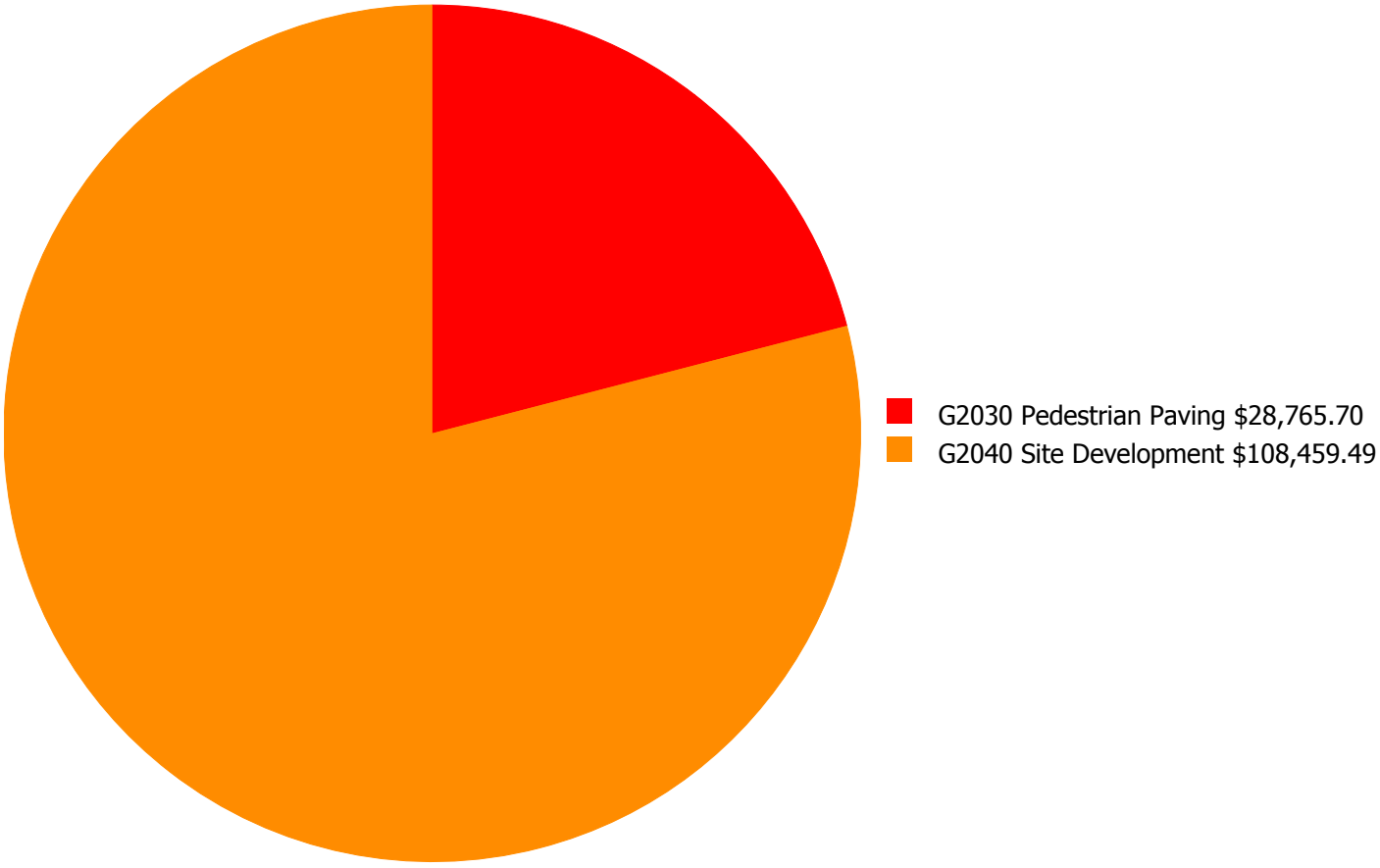
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation



Year	Investment Amount Current FCI - 36.42%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$7,761.00	34.42 %	$15,523.00	32.42 %
2017	$0	$7,994.00	32.42 %	$15,989.00	28.42 %
2018	$0	$8,234.00	30.42 %	$16,468.00	24.42 %
2019	$0	$8,481.00	28.42 %	$16,962.00	20.42 %
2020	$0	$8,736.00	26.42 %	$17,471.00	16.42 %
2021	$0	$8,998.00	24.42 %	$17,995.00	12.42 %
2022	$0	$9,268.00	22.42 %	$18,535.00	8.42 %
2023	$0	$9,546.00	20.42 %	$19,091.00	4.42 %
2024	$0	$9,832.00	18.42 %	$19,664.00	0.42 %
2025	$0	$10,127.00	16.42 %	$20,254.00	-3.58 %
Total:	**$0**	**$88,977.00**		**$177,952.00**	

Deficiency Summary by System

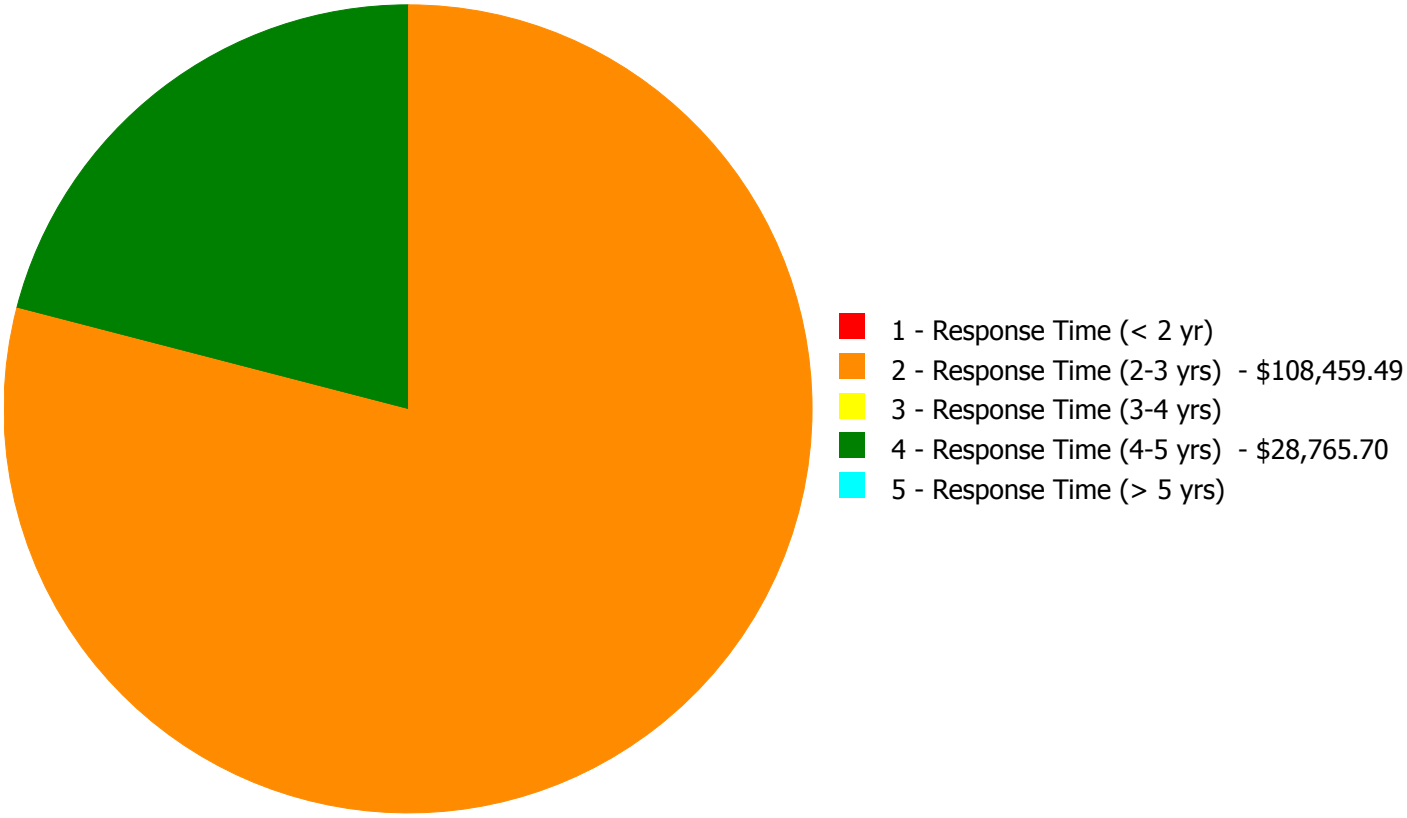
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



Budget Estimate Total: $137,225.19

Deficiency Summary by Priority

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



Budget Estimate Total: $137,225.19

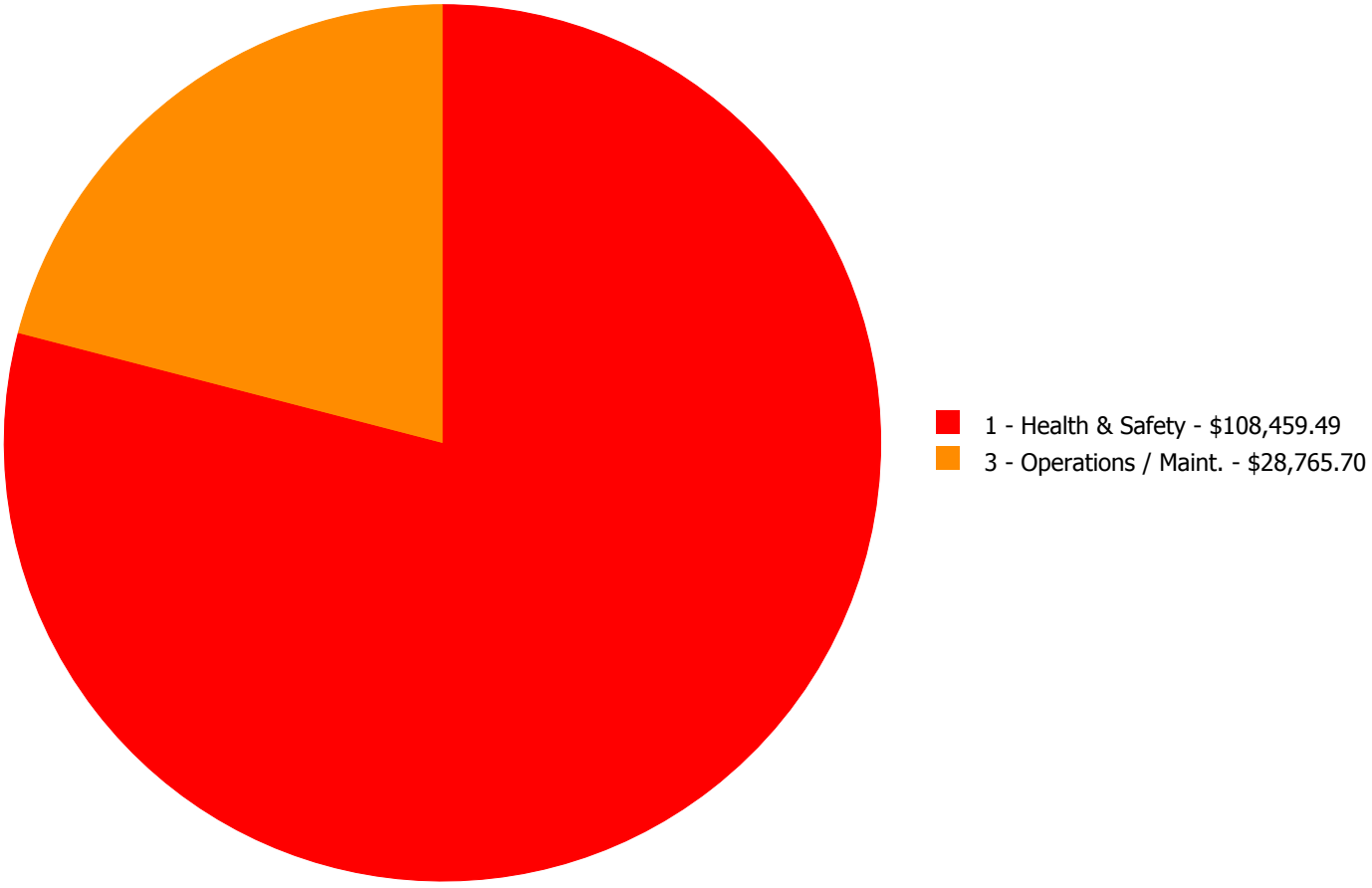
Deficiency By Priority Investment Table

The table below shows the current investment cost grouped by deficiency priority and building system.

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G2030	Pedestrian Paving	$0.00	$0.00	$0.00	$28,765.70	$0.00	$28,765.70
G2040	Site Development	$0.00	$108,459.49	$0.00	$0.00	$0.00	$108,459.49
	Total:	$0.00	$108,459.49	$0.00	$28,765.70	$0.00	$137,225.19

Deficiency Summary by Category

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



Budget Estimate Total: $137,225.19

Deficiency Details by Priority

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

Priority 2 - Response Time (2-3 yrs):

System: G2040 - Site Development

Location: Low Level Roof

Distress: Security Issue

Category: 1 - Health & Safety

Priority: 2 - Response Time (2-3 yrs)

Correction: Repair rusted or damaged chain link fence

Qty: 800.00

Unit of Measure: L.F.

Estimate: $108,459.49

Assessor Name: Craig Anding

Date Created: 08/13/2015

Notes: This school has a perimeter fence surrounding the front of the school only and several areas where fencing is used as a security measure on the lower section of the roof and retaining wall. The fence has several areas of repairs and the mounting post are damaged in several areas, overall the securing fence is in poor condition. This fence system is recommended to be removed and replaced with a new system.

Priority 4 - Response Time (4-5 yrs):

System: G2030 - Pedestrian Paving

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Remove and replace concrete sidewalk or concrete paving - 4" concrete thickness

Qty: 2,000.00

Unit of Measure: S.F.

Estimate: $28,765.70

Assessor Name: Craig Anding

Date Created: 08/13/2015

Notes: The sidewalk system is original to the buildings construction. There are a several areas of cracking concrete but no tripping hazards. The sidewalk system is expected to expire in the near future. Removal of the entire system is recommended. Universal upgrades are required.

Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

No data found for this asset

Glossary

ABMA	American Boiler Manufacturers Association http://www.abma.com/
ACEEE	American Council for an Energy-Efficient Economy
ACGIH	American Council of Governmental and Industrial Hygienists
AEE	Association of Energy Engineers
AFD	Adjustable Frequency Drive
AFTC	After Tax Cash Flow
AGA	American Gas Association
AHU	Air Handling Unit
Amp	Ampere
ANSI	American National Standards Institute
ARI	Air Conditioning and Refrigeration Institute
ASD	Adjustable Speed Drive
ASHRAE	American Society of Heating Refrigerating and Air-Conditioning Engineers Inc.
ASME	American Society of Mechanical Engineers
Assessment	Visual survey of a facility to determine its condition. It involves looking at the age of systems reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality.
ATS	After Tax Savings
AW	Annual worth
BACNET	Building Automation Control Network
BAS	Building Automation System
BCR	Benefit Cost Ratio
BEP	Business Energy Professional (AEE)
BF	Ballast Factor
BHP	Boiler Horsepower (boilers)
BHP	Brake Horsepower (motors)
BLCC	Building Life Cycle Cost analysis program (FEMP)
BOCA	Building Officials and Code Administrators
BTCF	Before Tax Cash Flow

BTS	Before Tax Savings
Btu	British thermal unit
Building Addition	An area space or component of a building added to a building after the original building's year built date.
CAA	Clean Air Act
CAAA-90	Clean Air Act Amendments of 1990
CABO	Council of American Building Officials
CAC	Conventional Air Conditioning
CADDET	Center for the Analysis and Dissemination of Demonstrated Energy Technologies
Calculated Next Renewal	The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system.
Capital Renewal	Capital renewal is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection.
CDD	Cooling Degree Days
CDGP	Certified Distributed Generation Professional
CEC	California Energy Commission
CEM	Certified Energy Manager
CEP	Certified Energy Procurement Professional
CFC	Chlorofluorocarbon
CFD	Cash Flow Diagram
CFL	Compact Fluorescent Light
CFM cfm	Cubic Feet per Minute
CHP	Combined Heat and Power (a.k.a. cogeneration)
CHW	Chilled Water
Condition	Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use.
COP	Coefficient of Performance
Cp	Heat Capacity of Material
CPUC	California Public Utility Commission
CRI	Color Rendering Index
CRT	Cathode Ray Tube VDT HMI

CTC	Competitive Transition Charge
Cu	Coefficient of Utilization
Current Replacement Value (CRV)	CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards.
Cv	Value Coefficient
CWS	Chilled Water System
D d	Distance (usually feet)
DB	Dry Bulb
DCV	Demand Control Ventilation
DD	Degree Day
DDB	Double Declining Balance
DDC	Direct Digital Controls
Deferred maintenance	Deferred maintenance is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available.
Deficiency	A deficiency is a repair item that is damaged missing inadequate or insufficient for an intended purpose.
Delta	Difference
Delta P	Pressure Difference
Delta T	Temperature Difference
DG	Distributed Generation
DOE	Department of Energy
DP	Dew Point
DR	Demand Response
DX	Direct Expansion Air Conditioner
EA	Energy Audit
EBITDA	Earnings before Interest Taxes Depreciation and Amortization
ECI	Energy Cost Index
ECM	Energy Conservation Measure
ECO	Energy Conservation Opportunity
ECPA	Energy Conservation and Production Act
ECR	Energy Conservation Recommendation
ECS	Energy Control System

EER	Energy Efficiency Ratio
EERE	Energy Efficiency and Renewable Energy division of US DOE
EIA	Energy Information Agency
EIS	Energy Information System
EMCS	Energy Management Computer System
EMO	Energy Management Opportunity
EMP	Energy Management Project
EMR	Energy Management Recommendation
EMS	Energy Management System
Energy Utilization Index (EUI)	EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot.
EO	Executive Order
EPA	Environmental Protection Agency
EPACT	Energy Policy Act of 1992
EPCA	Energy Production and Conservation Act of 1975
EPRI	Electric Power Research Institute
EREN	Efficiency and Renewable Energy (Division of USDOE)
ERV	Energy Recovery Ventilator
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
EUI	Energy Use Index
EWG	Exempt Wholesale Generators
Extended Facility Condition Index (EFCI)	EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value.
f	Frequency
F	Fahrenheit
Facility	A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service.
Facility Condition Assessment (FCA)	FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process.
Facility Condition Index (FCI)	FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

FC	Footcandle
FCA	Fuel Cost Adjustment
FEMIA	Federal Energy Management Improvement Act of 1988
FEMP	Federal Energy Management Program
FERC	Federal Energy Regulatory Commission
FESR	Fuel Energy Savings Ratio
FLA	Full Load Amps
FLF	Facility Load Factor (usually monthly)
FLRPM	Full Load Revolutions per Minute
FMS	Facility Management System
FPM fpm	Feet per Minute (velocity)
FSEC	Florida Solar Energy Center
Ft	Foot
GPM gpm	Gallons per Minute
GRI	Gas Research Institute
Gross Square Feet (GSF)	The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall.
GUI	Graphical User Interface
H h	Enthalpy Btu/lb
HCFC	Hydrochlorofluorocarbons
HDD	Heating Degree days
HFC	Hydrofluorocarbons
HHV	Higher Heating Value
HID	High Intensity Discharge (lamp)
HMI	Human Machine Interface
HMMI	Human Man Machine Interface
HO	High Output (lamp)
HP Hp hp	Horsepower
HPS	High Pressure Sodium (lamp)
HR	Humidity Ratio
Hr hr	Hour

HRU	Heat Recovery Unit
HVAC	Heating Ventilation and Air-Conditioning
Hz	Hertz
I	Intensity (lumen output of lamp)
I i	Interest rate or Discount rate
IAQ	Indoor Air Quality
ICA	International Cogeneration Alliance
ICBO	International Conference of Buildings Officials
ICC	International Code Council
ICP	Institutional Conservation Program
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronic Engineers
IESNA	Illuminating Engineering Society of North America
Install year	The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system?s Current Replacement Value (CRV) was replaced).
IRP	Integrated Resource Planning
IRR	Internal Rate of Return
ISO	Independent System Operator
ITA	Independent Tariff Administrator
k	Kilo multiple of thousands in SI system
K	Kelvins (color temperature of lamp)
K k	Thermal Conductivity of Material
KVA	Kilovolt Ampere
KVAR	Kilovolt Ampere Reactive
kW	kiloWatt
kWh	kiloWatt hour
L	Length (usually feet)
LCC	Life Cycle Costing
LDC	Local Distribution Company
LEED	Leadership in Energy and Environmental Design
LEED EB	LEED for Existing Buildings

LEED NC	LEED for new construction
LF	Load Factor
LHV	Lower Heating Value
Life cycle	The period of time that a building or site system or element can be expected to adequately serve its intended function.
LPS	Low Pressure Sodium (lamp)
Lu	Lumen Output of a Lamp or Fixture
M	Mega multiple of millions in SI system
M&V	Measurement and Verification
MACRS	Modified Accelerated Cost Recovery System
MARR	Minimum Attractive Rate of Return
Mbtu	Thousand Btu
MCF	Thousand Cubic Feet (usually of gas)
MEC	Model Energy Code
Mm	Multiple of Thousands in I/P System
MMBtu	Million Btu
MMCS	Maintenance Management Computer System
MMI	Man Machine Interface
MMS	Maintenance Management System
MSE 2000	Management System for Energy 2000 (ANSI Georgia Tech Univ)
MW	MegaWatt
MWH MWh	MegaWatt hour
NAAQS	National Ambient Air Quality Standards
NAESCO	National Association of Energy Service Companies
NAIMA	North American Insulation Manufacturers Association
NEA	National Energy Act of 1978
NECPA	National Energy Conservation Policy Act
NEMA	National Electrical Manufacturer's Association
NERC	North American Electric Reliability Council
Next Renewal	The Next Renewal date is an override of the 'Calculated Next Renewal' date and is based upon the assessor?s visual inspection.

NFPA	National Fire Protection Association
NGPA	National Gas Policy Act of 1978
NLRPM	No Load Revolutions per Minute (speed)
Nn	Equipment or Project lifetime in economic analysis
NOPR	Notice of Proposed Rule Making from FERC
NOx	Nitrogen Oxide Compounds
NPV	Net present value in economic analysis
NREL	National Renewable Energy Laboratory
NUG	Non-Utility Generator
O&M	Operation and Maintenance
OA	Outside Air
ODP	Ozone Depletion Potential
OPAC	Off-Peak Air Conditioning
P	Present value in economic analysis
PBR	Performance Based Rates
PEA	Preliminary Energy Audit
PF	Power Factor
PID	Proportional plus integral plus derivative (control system)
PM	Portfolio Manager in Energy Star rating system
PM	Preventive Maintenance
PoolCo	Power Pool Company or Organization
POU	Point of Use
PQ	Power Quality
PSC	Public Service Commission
PSIA psia	Pounds per square inch absolute (pressure)
PSIG psig	Pounds per square inch gauge (pressure)
PUC	Public Utility Commission
PUHCA	Public Utilities Holding Company Act of 1935
PURPA	Public Utilities Regulatory Policies of 1978
PV	Photovotaic system

PV	Present Value
PW	Present Worth
PX	Power Exchange
q	Rate of heat flow in Btu per hour
Q	Heat load due to conduction using degree days
QF	Qualifying Facility
R	Electrical resistance
R	Thermal Resistance
RC	Remote controller
RCR	Room Cavity Ratio
RCRA	Resource Conservation and Recovery Act
Remaining Service Life (RSL)	RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the 'Calculated Next Renewal' date or the 'Next Renewal' date whichever one is the later date.
Remaining Service Life Index (RSLI)	RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100
REMR	Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition
Renewal Schedule	A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal.
RH	Relative Humidity
RLA	Running Load Amps
RMS	Root Mean Square
RO	Reverse Osmosis
ROI	Return on Investment
RPM	Revolutions Per Minute
RTG	Regional Transmission Group
RTO	Regional Transmission Organization
RTP	Real Time Pricing
SBCCI	Southern Building Code Congress International
SC	Scheduling Coordinator
SC	Shading Coefficient
SCADA	Supervisory Control and Data Acquisition Systems

SEER	Seasonal Energy Efficiency Ratio
SHR	Sensible Heat Ratio
Site	The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility.
Soft Cost	An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses.
SOx	Sulfur Oxide Compounds
SP	Static Pressure
SP SPB	Simple Payback
SPP	Simple Payback Period
SPP	Small Power Producers
STR	Stack Temperature Rise
SV	Specific Volume
System	System refers to building and related site work elements as described by ASTM Uniformat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Uniformat II.
T	Temperature
T	Tubular (lamps)
TAA	Technical Assistance Audit
TCP/IP	Transmission Control Protocol/Internet Protocol
TES	Thermal Energy Storage
THD	Total Harmonic Distortion
TOD	Time of Day
TOU	Time of Use
TQM	Total Quality Management
TransCo	Transmission Company
U	Thermal Conductance
UDC	Utility Distribution Company
UL	Underwriters Laboratories
UNIFORMAT II	The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings.
USGBC	US Green Building Council
v	Specific Volume

V	Volts Voltage
V	Volume
VAV	Variable Air Volume
VDT	Video Display Terminal
VFD	Variable Frequency Drive
VHO	Very High Output
VSD	Variable Speed Drive
W	Watts
W	Width
WB	Wet bulb
WH Wh	Watt Hours
Year built	The year that a building or addition was originally built based on substantial completion or occupancy.
Z	Electrical Impedance