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.

Pastorius School

Governance	CHARTER	Report Type	Elementarymiddle
Address	5650 Sprague St. Philadelphia, Pa 19138	Enrollment	569
		Grade Range	'00-08'
Phone/Fax	215-951-5689 / N/A	Admissions Category	Neighborhood
Website	Www.Masterycharter.Org/Schools/Elementary-Schools/Francis-D-Pastorius-Elementary/	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	**34.59%**	**$13,024,703**	**$37,650,787**
Building	35.13 %	$12,682,674	$36,104,668
Grounds	22.12 %	$342,029	$1,546,119

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	89.59 %	$847,050	$945,500
Exterior Walls (Shows condition of the structural condition of the exterior facade)	05.81 %	$161,447	$2,779,987
Windows (Shows functionality of exterior windows)	121.63 %	$1,649,822	$1,356,477
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$109,211
Interior Doors (Classroom doors)	00.00 %	$0	$264,366
Interior Walls (Paint and Finishes)	00.00 %	$0	$994,951
Plumbing Fixtures	00.00 %	$0	$1,018,299
Boilers	00.00 %	$0	$1,406,187
Chillers/Cooling Towers	65.60 %	$1,209,544	$1,843,785
Radiators/Unit Ventilators/HVAC	141.45 %	$4,580,133	$3,237,921
Heating/Cooling Controls	158.90 %	$1,615,727	$1,016,793
Electrical Service and Distribution	40.68 %	$297,226	$730,585
Lighting	00.00 %	$0	$2,612,028
Communications and Security (Cameras, Pa System and Fire Alarm)	00.56 %	$5,456	$978,381

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

S633001;Pastorius

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):	7,318
Year Built:	1964
Last Renovation:	
Replacement Value:	$37,650,787
Repair Cost:	$13,024,702.96
Total FCI:	34.59 %
Total RSLI:	70.40 %

Description:

Facility Assessment

July 2015

School District of Philadelphia

Francis P Pastorius School

5650 Sprague St.

Philadelphia, PA 19138

75,318 SF / 735 Students / LN 06

GENERAL

The Mastery Charter Schools Francis P Pastorius is identified as B633001 and was originally constructed in 1964 as the Francis P

Pastorius Public School. This facility is located in the Germantown area of Philadelphia, PA at 5650 Sprague St. The design of the rectangle-shaped, with cafeteria addition is a concrete and steel-framed building includes, brick facades with a concrete foundation, detailing, and concrete columns.

The main entrance faces the southern exterior towards the playground area. This School serves students in grades K-8. This school was originally constructed in 1964 and consists of a partial Basement level and three additional stories with a total gross square footage of 75,318 GSF.

This recent history of this school include a minor remodeling effort that took place in 2011 prior to reopening in 2012 and a previous effort assumed to have taken place in the early 1990's. There were no records to indicate the extent of the efforts. This school has several classrooms, a gym, cafeteria and student commons and auditorium, with supporting administrative spaces. The information for this report was collected during a site visit on July 17, 2015.

Mr. Bruce Johnson, Building Engineer, and Mr. Alfred E. Howard, Director of Facilities for Mastery Charter Schools, accompanied the assessment team on a tour of the school and provided detailed information on the building systems and maintenance history.

ARCHITECTURAL / STRUCTURAL SYSTEMS

Foundations are concrete and appear to be in good condition. Basement walls are concrete and appear to be in good condition.

There are a number of roof sections and different roof elevations ranging from the main roof, cafeteria roof to the mechanical roof sections. The built up application that was installed in the early 1990's is the primary application. Seal coat has been used several times to extend the life cycle of the application. However, considering the age and condition of the roofing systems, universal upgrades are recommended. Remove and replace all roof sections.

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 facade, the application of a spray sealant to the suspected exterior masonry surface is recommended.

Exterior windows have been upgraded from the original applications. The current system is estimated to have been installed in the early 2000's. Several windows no longer work and will require attention prior to an overall effort. Windows are in fair condition based on the year of installation or last renovation. The exterior window system is recommended to be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features.

The exterior doors are metal applications with metal frames. The exterior door system for this school is a very high traffic system. The doors are in good condition and are expected to have a life cycle that extends beyond the outlook of this report.

Special consideration for those that may be physically challenged was not a main factor in the last re-construction effort for this school. The southwestern entrance serves as the exterior ADA entrance. This is not an automated system and requires support for access. 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 some door hardware and guard rails that will require modifications to meet the needs of the physically challenged. The building has received limited upgrades and does not fully support a path of travel for those that may be physically challenged. Included in this report is the recommendation for the modification of an elevator to serve all floors.

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.

Current legislation regarding building accessibility by the handicapped requires that stairs 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 renovation efforts should include comprehensive stair railing upgrades.

Interior partitions include CMU, polished CMU and brick. Interior doors are typically wood in wood frames or wood in metal frames with no transom, sidelights and a few areas of wired glass glazing. Hollow metal doors and frames at the stairwells and exit ways, access doors, and folding 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.

The Fittings include: marker and chalkboards; tack boards; toilet accessories and a mix of wooden and marble toilet partitions; fixed storage wooden shelving and cabinets. Most of the systems are in good condition and were reported to have been a part of the renovation effort prior to occupation.

Stair construction is concrete with concrete treads and landings are finished with concrete and nosings are metal. Current legislation regarding building accessibility by the handicapped requires that stairs 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 renovation efforts should include comprehensive stair railing upgrades.

Interior wall finishes are typically painted CUM or brick in good condition. This school is on a cyclical program of renewal and each painted surface is renewed at year's end. It was reported that a major effort to repaint and repair minor issues occurred in 2012. With this in mind there are no recommendations required at this time.

Interior floor finishes are typically a mix of vinyl tile in classrooms and sealed concrete in mechanical areas and stairways. The vinyl floor finish in most of this school is in very good condition and appears to have part of an isolated upgrade reported to have taken place in the early 2000's. 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.

Interior ceilings are typically 2 x 4 acoustical tile in metal grid in the hallways and a few support rooms. Other ceiling finishes include: exposed or painted structure plaster or Gipson board. The ceiling finish is in good condition and there are no projects or recommendations required at this time.

Institutional equipment includes: library equipment such as wooden shelving and tables, auditorium and stage equipment A/V equipment and minor laboratory equipment, gym equipment such as basketball backstops and a kitchen with kitchen equipment. The institutional equipment is expected to have a life cycle that extends beyond the outlook of this report.

Furnishings include: fixed casework, window blinds and fixed auditorium seating. 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.

MECHANICAL SYSTEMS

PLUMBING- Plumbing fixtures are standard china commercial quality with wall mounted lavatories and urinals and both floor and wall mounted water closets. Lavatories have dual handle lever or wheel handle faucets and urinals and water closets have manual flush valves with lever operators or recessed flush valves with push button operators. Water coolers are stainless steel single level type and a few china drinking fountains with no refrigeration. There are some counter top stainless steel sinks, and service sinks exposed in corridors.

Hot water is provided by one Paloma gas water heater in the mechanical room connected to an A O Smith one hundred twenty gallon vertical storage tank with a small circulating pump. There is also an abandoned horizontal storage tank. A newer duplex booster pump system maintains building water pressure. The system includes pumps, control panel and pressure tank. A duplex sump pump adjacent to the boilers runs continuously, but cannot control the ground water problem in the room.

Sanitary, waste and vent piping is hubless cast iron with banded couplings. Domestic hot and cold water is insulated rigid copper piping. There is a four inch water service and meter from Sprague St. The service includes a backflow preventer. The six inch gas service is also from Sprague St. entering into the mechanical room.

The plumbing system is from original installation and no significant alterations have been made. All components are in good condition and should have remaining service life from ten to twenty years.

HVAC- The building is heated by hot water generated by three Burderus GE 615 cast iron sectional gas boilers in the mechanical room. The boilers are one hundred twelve hp installed in 2002, with modulating burners. Reportedly one boiler will heat the building after warmup. Hot water is circulated to unit ventilator heating coils and cabinet radiation units throughout the building. Boilers are connected to a stainless steel double wall factory manufactured vent system through the building to a roof cap. Combustion air louvers have motorized dampers.

There is no central air conditioning. Some spaces have window units and there are two ductless split systems for IT areas. Classrooms and some other spaces have Nesbitt unit ventilators with outside air damper, hot water heating coil, filter, control valve, blower and motor. There is an old horizontal heating and ventilating unit in the mechanical room that serves the auditorium. Supply air is ducted to egg crate type ceiling grills for low velocity distribution. The unit is operational.

Four end suction hot water pumps in the mechanical room circulate heating water through the building. Two pumps were replaced in 2005 and one is currently being repaired. The pumps are all B&G model 1510. Hot water piping is insulated welded black steel. The toilet rooms have mechanical toilet exhaust with six centrifugal roof ventilators.

There is no central control system. An older duplex air compressor in the mechanical room powers the pneumatic controls.

The boilers, pumps, and boiler room piping are newer and should have fifteen to twenty years of remaining service life. The equipment and mechanical room in general have been well maintained. The unit ventilators and distribution piping have exceeded anticipated service life, and should be replaced.

FIRE PROTECTION- There are no standpipes nor sprinkler system.

ECTRICAL SYSTEMS

Electrical Service-- The building is served by PECO Energy Company from a utility-owned 300 kVA pad mounted transformer located within the fenced property on the northeast side of the site. Secondary service is routed underground to a Siemens Main Switchboard located in the Main Electrical Room in the Basement. The Main Switchboard has a 3000A, 208/120V, 3 phase, 4 wire incoming section, a 2000A main circuit breaker section with Sentron PAC4200 power monitoring device and transient voltage surge suppressor, and one distribution section. The distribution section feeds automatic transfer switches (ATS) ATS-1 and ATS-2 and all panelboards throughout the building. All electrical distribution system equipment, including panelboards on each floor, was replaced in a 2011 electrical system upgrade project.

The existing electrical service capacity is not adequate to serve a central air conditioning system for the school. One option is for PECO to replace the 300 kVA transformer with a larger transformer. The existing service entrance would remain, but a second underground service would be required from the utility transformer to a new 1200A, 208/120V, 3 phase, 4 wire main switchboard with 1200A main circuit breaker located adjacent to the existing Main Switchboard.

Panelboards that serve each floor are surface mounted in the corridors and near each stairwell. There are also a few flush mounted panelboards in the corridor and two on the platform in the auditorium.

The school was completely upgraded in 2011, including all lighting, communication and security systems, fire alarm, and standby power system.

Receptacles-- Classrooms are typically supplied with an adequate quantity of receptacles. A surface raceway system with duplex and/or quadruplex receptacles was installed in classrooms in the 2011 upgrade project.

Lighting--The lighting systems in the school consists mainly of recessed fluorescent troffers with acrylic lenses in grid ceilings, stem mounted fluorescent wraparound fixtures in rooms without ceilings and metal halide lighting fixtures in the auditorium and gymnasium. Fluorescent lamps are mainly T8, with T5 lamps in recessed indirect fluorescent troffers installed in some classrooms. Other classrooms have either stem mounted wraparound fixtures or 2x4 recessed troffers. Classroom lighting is controlled by two switches and occupancy sensors.

Fixtures in the corridors are 1x4, 2 lamp grid troffers. Office areas have either 1x4 or 2x4 grid fixtures. Restrooms are provided with 1x4 surface mounted vapor-tight fluorescent fixtures. Occupancy sensors are provided in offices and restrooms for controlling lighting.

The auditorium has recessed metal halide fixtures and (10) adjustable directional fixtures across the front of the platform and (24) recessed metal halide fixtures above the house floor. The platform has (7), 2 lamp industrial fluorescent fixtures for worklights.

The gymnasium is illuminated with (12) industrial type, surface mounted metal halide fixtures with quartz re-strike for emergency lighting.

Exterior lighting fixtures are mounted above the doors at exit discharges.

Fire Alarm System-- The fire alarm system is a Simplex 4100U system. The main fire alarm control panel (FACP), which was recently replaced, is located in the Building Engineer's Office in the Mechanical Room. The fire alarm system includes manual pull stations, smoke detectors in the elevator lobby and mechanical rooms, and audible and visual notification appliances throughout the building, including classrooms and restrooms. There is a Simplex remote fire alarm annunciator panel located at the main entrance. The fire alarm system devices were replaced between 2008 and 2010. The elevator machine room did not have a smoke and heat detectors.

Telephone/LAN-- The incoming telephone demarcation is in Room 116, adjacent to the Main Office. A telephone and data outlet is provided in all classrooms. Wireless access points are provided in classrooms, corridors, auditorium, gymnasium and offices for Wi-Fi coverage throughout the school. The main IT room is located on Floor 2. A satellite data hub is located in Room 312.

Public Address/Paging/Sound Systems-- The paging system is accessed through the telephone system. Classrooms use the speaker in the clock/speaker assembly for announcements. Speakers in the corridors are recessed in the ceiling grid. The auditorium has a separate sound system cabinet with speakers mounted on each side of the platform.

Clock and Program System--There is a wall mounted Sapling synchronized master clock located at the Main Office with wireless analog clocks located in clock/speaker assemblies in the classrooms and in offices.

Video Surveillance and Security Systems—video surveillance cameras are located in corridors near stairwells to provide surveillance of the corridors. Exterior cameras are building mounted to provide coverage at entrances, playground and parking areas. Magnetic door contacts are also provided on stairwell doors to monitor ingress/egress.

Emergency Power System--There is a Cummins 40 kW/50 kVA standby generator with 140 gallon sub-base fuel oil tank and 175A main circuit breaker located in the Main Electrical Room. The generator feeds Panelboards EPP and EPP-1 via automatic transfer switches ATS-1 and ATS-2. Panel ELP is also served by the standby power system, which serves mainly emergency lighting loads.

Emergency Lighting System / Exit Lighting-- Emergency lighting is provided by selected lighting fixtures powered from the standby generator. Exit signs are LED type with vandal-resistant housings and also wired on the standby generator.

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

Conveying Systems--There is one electric traction elevator that appears to be original. The elevator nameplate was not readable. The elevator controller is a relay type that has served its useful life. A complete upgrade of the elevator cab, machine room and hoist is needed to renew the system and meet current ADA requirements.

GROUNDS

The parking area located at the southeastern section of the site is in very good condition and the fence for this section of the school was recently upgraded and is also in very good condition. There are no projects required for the parking area at this time.

There is a concrete paver system that surrounds this school that is on a consistent program of renewal. There were no issues that surfaced during the time of the inspection therefore no projects are warranted at this time.

The asphalt play area is developing cracks that may turn into tripping hazards. It is recommended that the cracks be filled and the play area be resealed with proper area markers to support the sports activities of the schools physical education requirements.

This school has a perimeter fence surrounding the parking / playground area. The fence has several areas of repairs and the mounting post are damaged in several areas, overall the fence is in fair condition. This fence system is recommended to be removed and replaced with a new system within the next five to ten years.

The limited landscaping is in good condition and well maintained, this is such a small area with no direct ownership to the school thus there are no projects or recommendations required at this time.

The trash dumpster is located near the southwestern fence open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area are recommended.

Special note: during a previous effort to clear an area for the school a portion of abandoned property was consumed. This is obvious by the landscape of the play area from the dips that outline the foundations of the previous homes. Also, the road that ran between the main entrance and play area no longer exists. Care should be taken to ensure that this area is carefully observed to prevent any safety issues from surfacing as a result of the changing conditions.

Site Lighting-- The parking lot and playground areas are illuminated by wall mounted HID floodlights along the perimeter of the building. There are no pole mounted site lighting fixtures in the paved areas. The area under the elevated gymnasium is not illuminated. It is recommended that surface mounted HID lighting fixtures be mounted to the underside of the gymnasium for safety and security reasons.

Site Video Surveillance-- There are video surveillance cameras mounted on the exterior of the building to provide coverage of parking and playground areas.

Site Paging-- There are exterior horn type speakers on the south and east sides of the building.

RECOMMENDATIONS

- Replace missing or damaged signage
- Replace auditorium seating
- Replace inadequate or install proper stair railing
- Remove VAT and replace with VCT
- Repair cracks in masonry
- Remove and replace aluminum windows
- Remove and Replace Built Up Roof
- Replace chain link fence
- Resurface parking lot / Play area
- Secure trash dumpster
- 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 one hundred ninety 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 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.
- Provide a second underground service to the building from the utility company transformer to serve a central air conditioning system. Provide a 1200A, 208/120V, 3 phase, 4 wire main switchboard with 1200A main circuit breaker and all feeder circuit breakers and feeders to serve the air conditioning equipment.
- Provide smoke and heat detectors and audible/visual notification appliance in elevator machine room for elevator recall.
- Upgrade and modernize elevator hoist system, machine room and cab.
- Provide three (3) surface mounted HID lighting fixtures on the underside of the gymnasium to illuminate the site below the elevated building.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 1 / Tm 1
Status:	Accepted by SDP	Team:	Tm 1
Site ID:	S633001		

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.

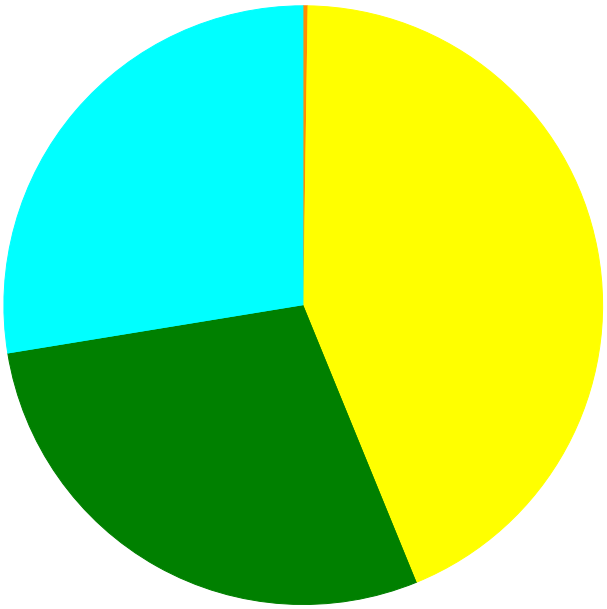
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	49.00 %	0.00 %	$0.00
A20 - Basement Construction	49.00 %	0.00 %	$0.00
B10 - Superstructure	49.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	66.66 %	42.66 %	$1,811,269.84
B30 - Roofing	110.00 %	89.59 %	$847,050.27
C10 - Interior Construction	42.32 %	4.21 %	$77,842.94
C20 - Stairs	49.00 %	14.66 %	$15,569.46
C30 - Interior Finishes	71.62 %	13.08 %	$455,000.04
D10 - Conveying	105.71 %	166.51 %	$191,880.83
D20 - Plumbing	43.22 %	26.02 %	$400,177.20
D30 - HVAC	103.19 %	88.39 %	$7,405,403.92
D40 - Fire Protection	105.71 %	141.39 %	$858,326.79
D50 - Electrical	79.79 %	6.84 %	$302,682.00
E10 - Equipment	18.87 %	0.00 %	$0.00
E20 - Furnishings	105.00 %	197.89 %	$317,470.74
G20 - Site Improvements	47.66 %	27.23 %	$326,102.30
G40 - Site Electrical Utilities	86.67 %	4.57 %	$15,926.63
Totals:	**70.40 %**	**34.59 %**	**$13,024,702.96**

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)
B633001;Pastorius	75,318	35.13	$0.00	$30,685.95	$5,677,214.10	$3,670,584.68	$3,304,189.30
G633001;Grounds	81,000	22.12	$0.00	$0.00	$0.00	$54,022.27	$288,006.66
Total:		**34.59**	**$0.00**	**$30,685.95**	**$5,677,214.10**	**$3,724,606.95**	**$3,592,195.96**

Deficiencies By Priority



1 - Response Time (< 2 yr)
2 - Response Time (2-3 yrs) - $30,685.95
3 - Response Time (3-4 yrs) - $5,677,214.10
4 - Response Time (4-5 yrs) - $3,724,606.95
5 - Response Time (> 5 yrs) - $3,592,195.96

Budget Estimate Total: $13,024,702.96

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:	Elementary School
Gross Area (SF):	75,318
Year Built:	1964
Last Renovation:	
Replacement Value:	$36,104,668
Repair Cost:	$12,682,674.03
Total FCI:	35.13 %
Total RSLI:	71.00 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B633001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S633001		

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	49.00 %	0.00 %	$0.00
A20 - Basement Construction	49.00 %	0.00 %	$0.00
B10 - Superstructure	49.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	66.66 %	42.66 %	$1,811,269.84
B30 - Roofing	110.00 %	89.59 %	$847,050.27
C10 - Interior Construction	42.32 %	4.21 %	$77,842.94
C20 - Stairs	49.00 %	14.66 %	$15,569.46
C30 - Interior Finishes	71.62 %	13.08 %	$455,000.04
D10 - Conveying	105.71 %	166.51 %	$191,880.83
D20 - Plumbing	43.22 %	26.02 %	$400,177.20
D30 - HVAC	103.19 %	88.39 %	$7,405,403.92
D40 - Fire Protection	105.71 %	141.39 %	$858,326.79
D50 - Electrical	79.79 %	6.84 %	$302,682.00
E10 - Equipment	18.87 %	0.00 %	$0.00
E20 - Furnishings	105.00 %	197.89 %	$317,470.74
Totals:	**71.00 %**	**35.13 %**	**$12,682,674.03**

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.

Site Assessment Report - B633001;Pastorius

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	$18.40	S.F.	75,318	100	1964	2064		49.00 %	0.00 %	49			$1,385,851
A1030	Slab on Grade	$7.73	S.F.	75,318	100	1964	2064		49.00 %	0.00 %	49			$582,208
A2010	Basement Excavation	$6.55	S.F.	20,000	100	1964	2064		49.00 %	0.00 %	49			$131,000
A2020	Basement Walls	$12.70	S.F.	20,000	100	1964	2064		49.00 %	0.00 %	49			$254,000
B1010	Floor Construction	$75.10	S.F.	75,318	100	1964	2064		49.00 %	0.00 %	49			$5,656,382
B1020	Roof Construction	$13.88	S.F.	75,318	100	1964	2064		49.00 %	0.00 %	49			$1,045,414
B2010	Exterior Walls	$36.91	S.F.	75,318	100	1964	2064		49.00 %	5.81 %	49		$161,447.36	$2,779,987
B2020	Exterior Windows	$18.01	S.F.	75,318	40	2000	2040	2057	105.00 %	121.63 %	42		$1,649,822.48	$1,356,477
B2030	Exterior Doors	$1.45	S.F.	75,318	25	2000	2025		40.00 %	0.00 %	10			$109,211
B3010105	Built-Up	$37.76	S.F.	25,000	20	1990	2010	2037	110.00 %	89.73 %	22		$847,050.27	$944,000
B3020	Roof Openings	$0.06	S.F.	25,000	20	1990	2010	2037	110.00 %	0.00 %	22			$1,500
C1010	Partitions	$17.91	S.F.	75,318	100	1964	2064		49.00 %	0.00 %	49			$1,348,945
C1020	Interior Doors	$3.51	S.F.	75,318	40	1964	2004	2020	12.50 %	0.00 %	5			$264,366
C1030	Fittings	$3.12	S.F.	75,318	40	1964	2004	2030	37.50 %	33.13 %	15		$77,842.94	$234,992
C2010	Stair Construction	$1.41	S.F.	75,318	100	1964	2064		49.00 %	14.66 %	49		$15,569.46	$106,198
C3010230	Paint & Covering	$13.21	S.F.	75,318	10	1990	2000	2020	50.00 %	0.00 %	5			$994,951
C3020411	Carpet	$7.30	S.F.	2,000	10	2012	2022		70.00 %	0.00 %	7			$14,600
C3020412	Terrazzo & Tile	$75.52	S.F.	3,000	50	1964	2014	2022	14.00 %	0.00 %	7			$226,560
C3020413	Vinyl Flooring	$9.68	S.F.	68,318	20	2012	2032		85.00 %	68.80 %	17		$455,000.04	$661,318
C3020415	Concrete Floor Finishes	$0.97	S.F.	2,000	50	1964	2014	2021	12.00 %	0.00 %	6			$1,940
C3030	Ceiling Finishes	$20.97	S.F.	75,318	25	2012	2037		88.00 %	0.00 %	22			$1,579,418
D1010	Elevators and Lifts	$1.53	S.F.	75,318	35	1964	1999	2052	105.71 %	166.51 %	37		$191,880.83	$115,237
D2010	Plumbing Fixtures	$13.52	S.F.	75,318	35	1964	1999	2026	31.43 %	0.00 %	11			$1,018,299
D2020	Domestic Water Distribution	$1.68	S.F.	75,318	25	1964	1989	2025	40.00 %	0.00 %	10			$126,534
D2030	Sanitary Waste	$2.90	S.F.	75,318	25	1964	1989	2042	108.00 %	183.21 %	27		$400,177.20	$218,422
D2040	Rain Water Drainage	$2.32	S.F.	75,318	30	1964	1994	2025	33.33 %	0.00 %	10			$174,738
D3020	Heat Generating Systems	$18.67	S.F.	75,318	35	2002	2037		62.86 %	0.00 %	22			$1,406,187
D3030	Cooling Generating Systems	$24.48	S.F.	75,318	30			2047	106.67 %	65.60 %	32		$1,209,544.43	$1,843,785
D3040	Distribution Systems	$42.99	S.F.	75,318	25			2042	108.00 %	141.45 %	27		$4,580,132.72	$3,237,921
D3050	Terminal & Package Units	$11.60	S.F.	75,318	20			2042	135.00 %	0.00 %	27			$873,689
D3060	Controls & Instrumentation	$13.50	S.F.	75,318	20			2037	110.00 %	158.90 %	22		$1,615,726.77	$1,016,793
D4010	Sprinklers	$7.05	S.F.	75,318	35			2052	105.71 %	161.65 %	37		$858,326.79	$530,992
D4020	Standpipes	$1.01	S.F.	75,318	35			2052	105.71 %	0.00 %	37			$76,071
D5010	Electrical Service/Distribution	$9.70	S.F.	75,318	30	2011	2041		86.67 %	40.68 %	26		$297,225.97	$730,585
D5020	Lighting and Branch Wiring	$34.68	S.F.	75,318	20	2011	2031		80.00 %	0.00 %	16			$2,612,028
D5030	Communications and Security	$12.99	S.F.	75,318	15	2011	2026		73.33 %	0.56 %	11		$5,456.03	$978,381
D5090	Other Electrical Systems	$1.41	S.F.	75,318	30	2011	2041		86.67 %	0.00 %	26			$106,198
E1020	Institutional Equipment	$4.82	S.F.	75,318	35	1964	1999	2023	22.86 %	0.00 %	8			$363,033
E1090	Other Equipment	$11.10	S.F.	75,318	35	1964	1999	2021	17.14 %	0.00 %	6			$836,030
E2010	Fixed Furnishings	$2.13	S.F.	75,318	40	1964	2004	2057	105.00 %	197.89 %	42		$317,470.74	$160,427
								Total	**71.00 %**	**35.13 %**			**$12,682,674.03**	**$36,104,668**

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: Painted Finish plaster drywall 20%
Painted CMU 80%

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

Note: Carpet 2%
Tile Terrazzo 3K
Vinyl 92%
Concrete 2%

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

Note: There are no secondary 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:	**$12,682,674**	**$0**	**$0**	**$0**	**$0**	**$1,605,883**	**$1,100,638**	**$326,256**	**$505,867**	**$0**	**$606,821**	**$16,828,139**
*** 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	$161,447	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$161,447**
B2020 - Exterior Windows	$1,649,822	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,649,822**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$161,447	**$161,447**
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	$847,050	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$847,050**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1020 - Interior Doors	$0	$0	$0	$0	$0	$337,120	$0	$0	$0	$0	$0	**$337,120**
C1030 - Fittings	$77,843	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$77,843**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

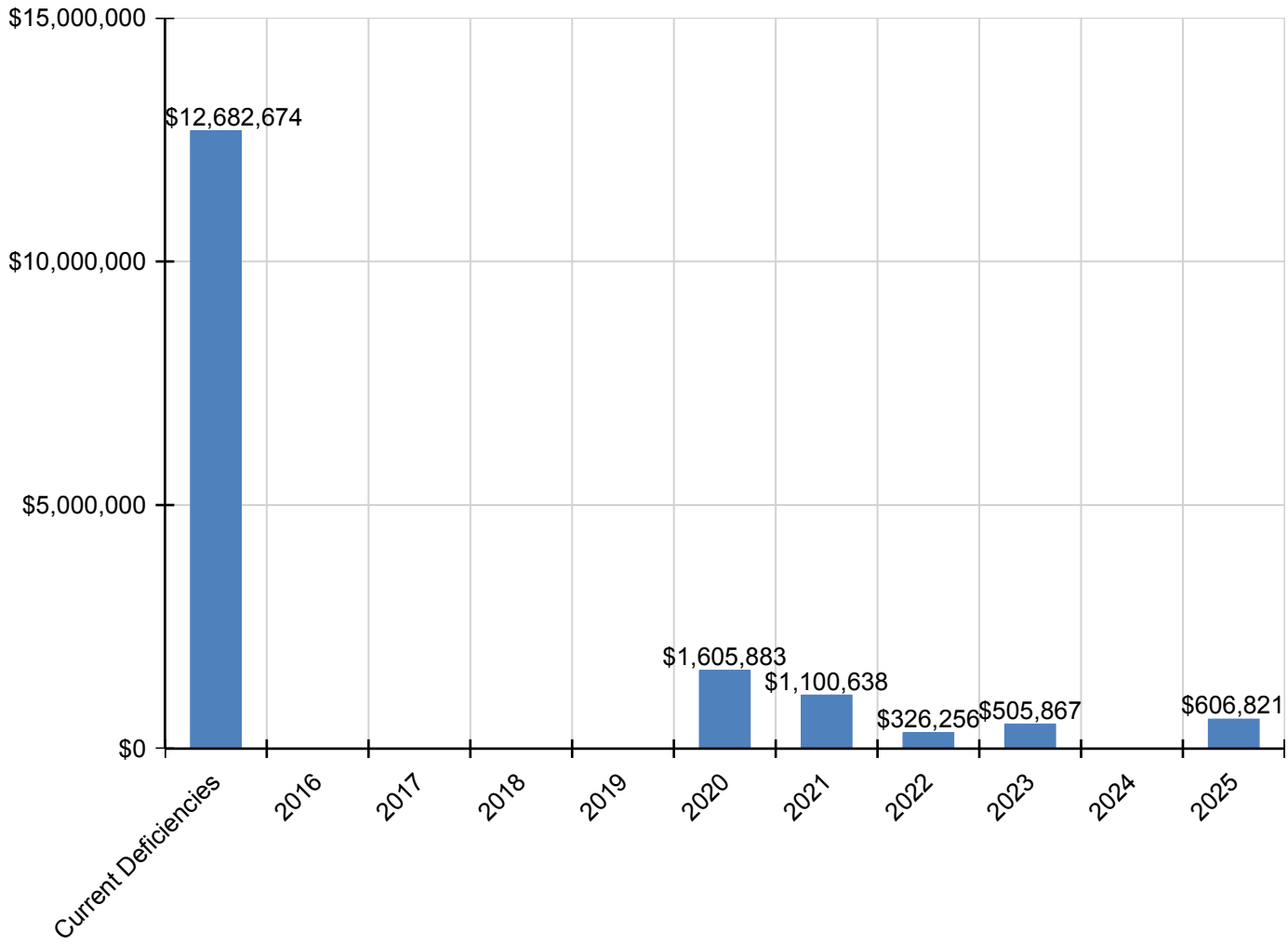
C2010 - Stair Construction	$15,569	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$15,569**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$1,268,763	$0	$0	$0	$0	$0	**$1,268,763**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$0	$19,752	$0	$0	$0	**$19,752**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$306,504	$0	$0	$0	**$306,504**
C3020413 - Vinyl Flooring	$455,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$455,000**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$2,548	$0	$0	$0	$0	**$2,548**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$187,057	**$187,057**
D2030 - Sanitary Waste	$400,177	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$400,177**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$258,317	**$258,317**
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	$1,209,544	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,209,544**
D3040 - Distribution Systems	$4,580,133	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,580,133**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,615,727	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,615,727**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$858,327	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$858,327**
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	$297,226	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$297,226**
D5020 - Lighting and Branch Wiring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5030 - Communications and Security	$5,456	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,456**
D5090 - Other Electrical Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$505,867	$0	$0	**$505,867**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$1,098,090	$0	$0	$0	$0	**$1,098,090**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$317,471	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$317,471**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

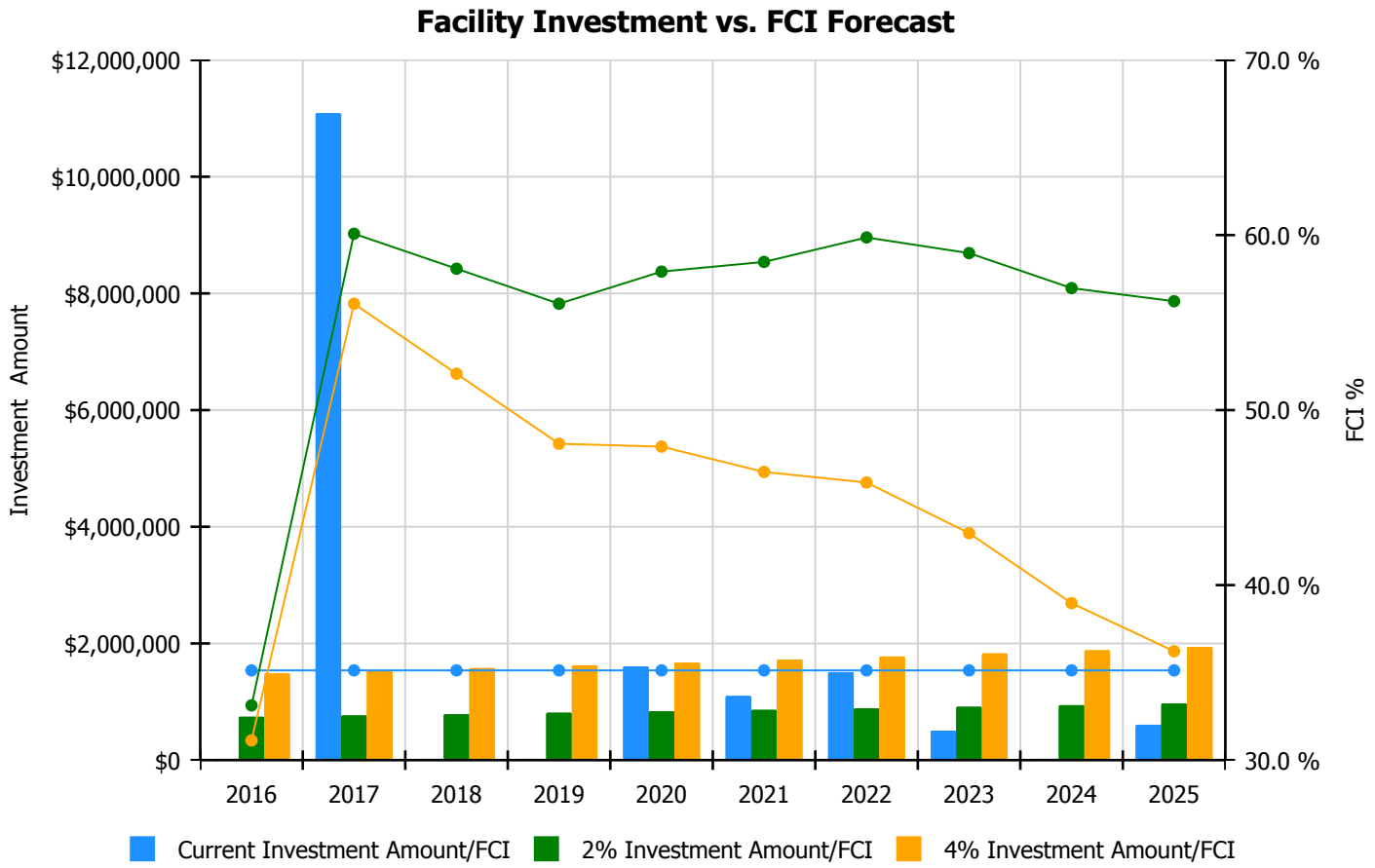
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

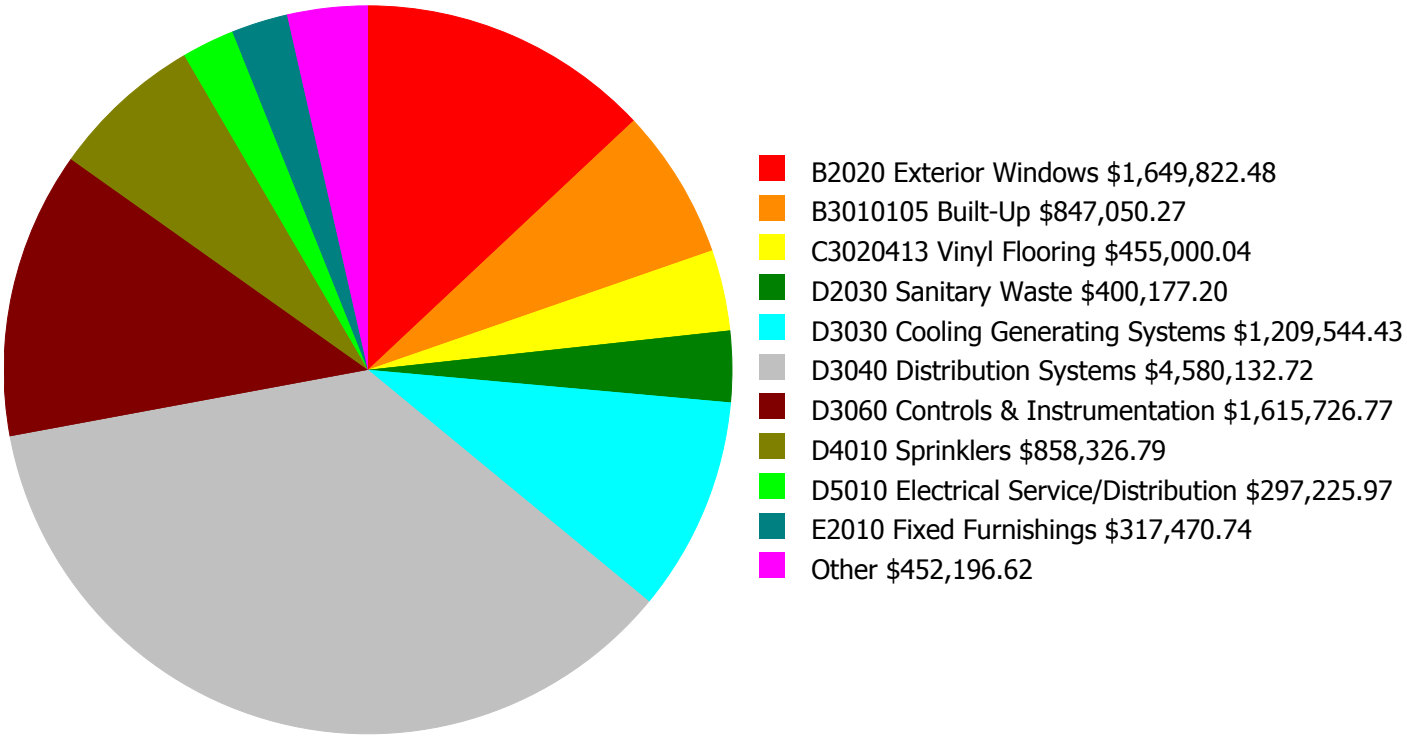
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 35.13%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$743,756.00	33.13 %	$1,487,512.00	31.13 %
2017	$11,088,300	$766,069.00	60.08 %	$1,532,138.00	56.08 %
2018	$0	$789,051.00	58.08 %	$1,578,102.00	52.08 %
2019	$0	$812,722.00	56.08 %	$1,625,445.00	48.08 %
2020	$1,605,883	$837,104.00	57.91 %	$1,674,208.00	47.91 %
2021	$1,100,638	$862,217.00	58.47 %	$1,724,434.00	46.47 %
2022	$1,508,236	$888,084.00	59.86 %	$1,776,168.00	45.86 %
2023	$505,867	$914,726.00	58.97 %	$1,829,453.00	42.97 %
2024	$0	$942,168.00	56.97 %	$1,884,336.00	38.97 %
2025	$606,821	$970,433.00	56.22 %	$1,940,866.00	36.22 %
Total:	**$16,415,745**	**$8,526,330.00**		**$17,052,662.00**	

Deficiency Summary by System

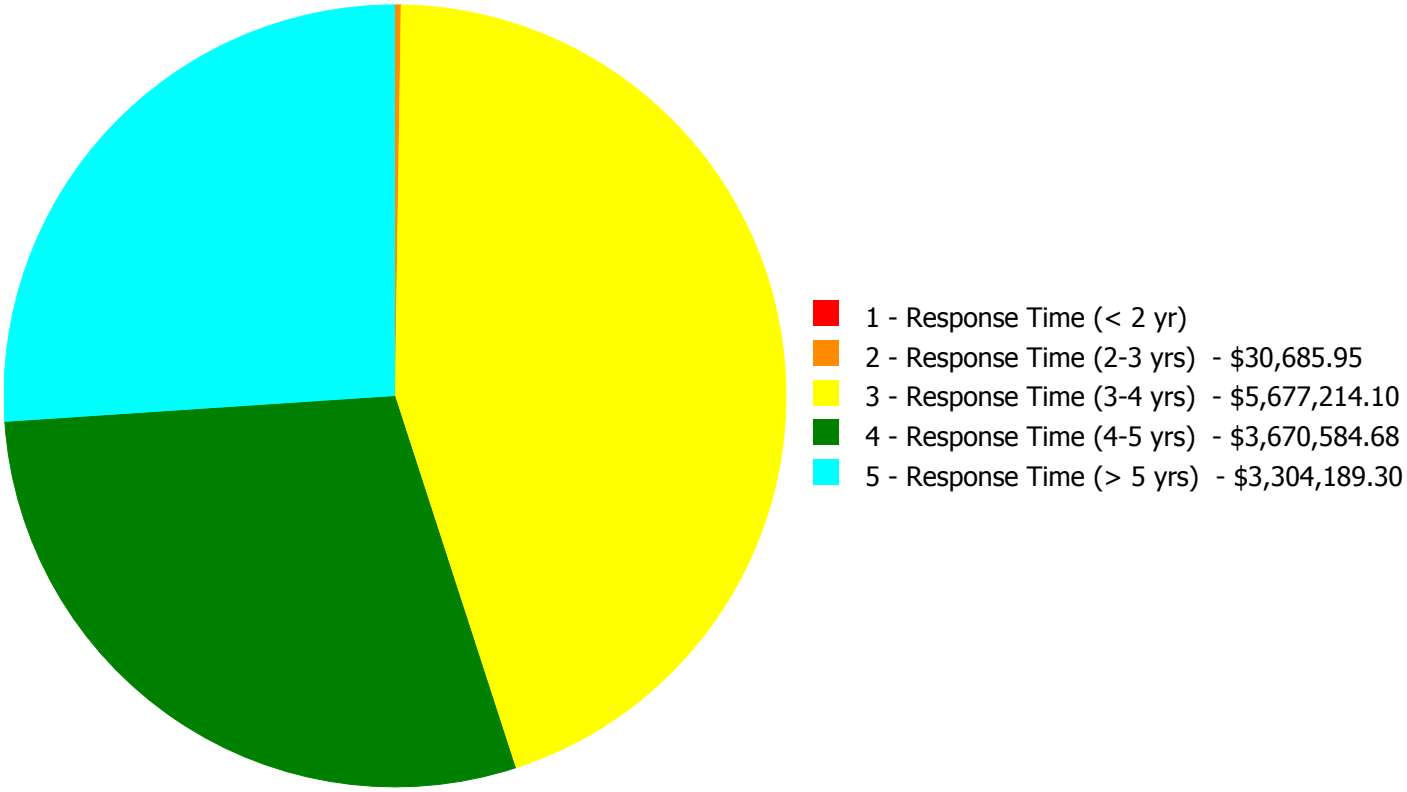
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $12,682,674.03

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: $12,682,674.03

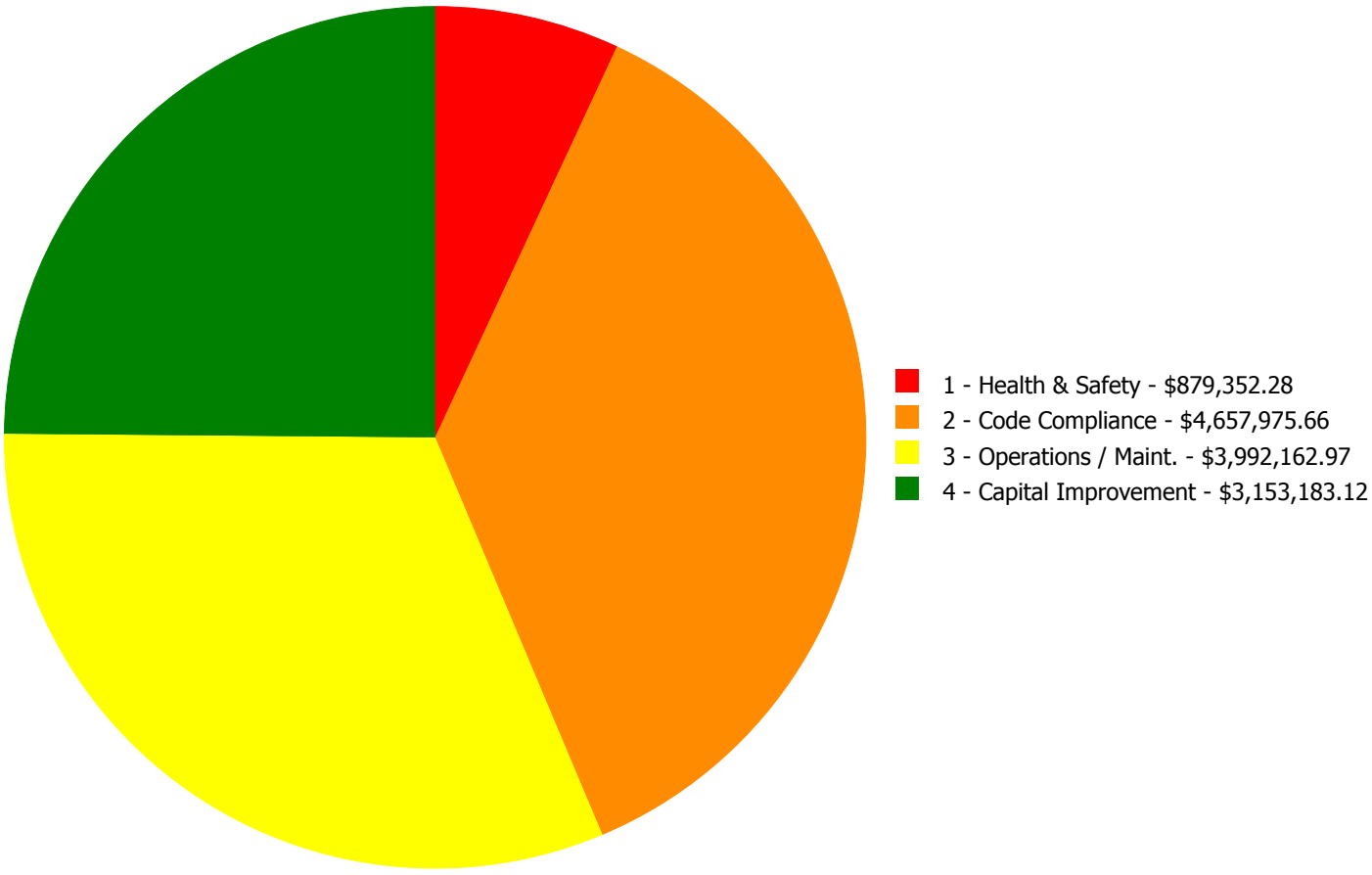
Deficiency By Priority Investment Table

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	$0.00	$161,447.36	$161,447.36
B2020	Exterior Windows	$0.00	$0.00	$0.00	$1,649,822.48	$0.00	$1,649,822.48
B3010105	Built-Up	$0.00	$0.00	$0.00	$847,050.27	$0.00	$847,050.27
C1030	Fittings	$0.00	$0.00	$0.00	$77,842.94	$0.00	$77,842.94
C2010	Stair Construction	$0.00	$0.00	$15,569.46	$0.00	$0.00	$15,569.46
C3020413	Vinyl Flooring	$0.00	$0.00	$0.00	$455,000.04	$0.00	$455,000.04
D1010	Elevators and Lifts	$0.00	$0.00	$191,880.83	$0.00	$0.00	$191,880.83
D2030	Sanitary Waste	$0.00	$30,685.95	$369,491.25	$0.00	$0.00	$400,177.20
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,209,544.43	$1,209,544.43
D3040	Distribution Systems	$0.00	$0.00	$4,236,489.74	$343,642.98	$0.00	$4,580,132.72
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$0.00	$1,615,726.77	$1,615,726.77
D4010	Sprinklers	$0.00	$0.00	$858,326.79	$0.00	$0.00	$858,326.79
D5010	Electrical Service/Distribution	$0.00	$0.00	$0.00	$297,225.97	$0.00	$297,225.97
D5030	Communications and Security	$0.00	$0.00	$5,456.03	$0.00	$0.00	$5,456.03
E2010	Fixed Furnishings	$0.00	$0.00	$0.00	$0.00	$317,470.74	$317,470.74
	Total:	$0.00	$30,685.95	$5,677,214.10	$3,670,584.68	$3,304,189.30	$12,682,674.03

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: $12,682,674.03

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: D2030 - Sanitary Waste

Location: mechanical room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace sanitary sewage ejector pit and pumps. (48" dia.)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $30,685.95

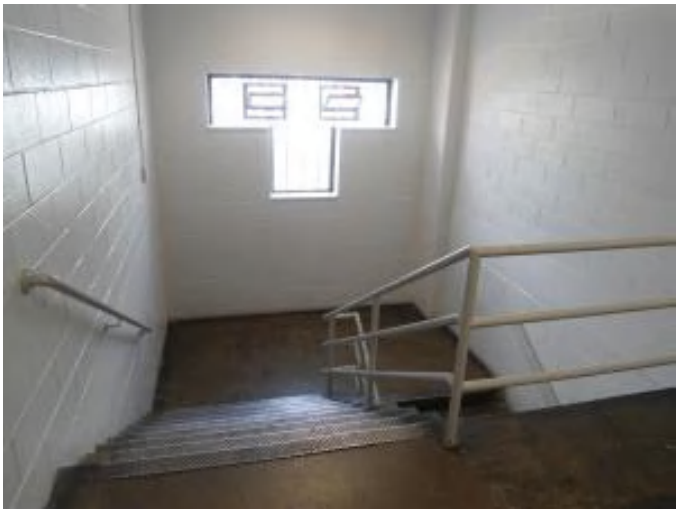
Assessor Name: System

Date Created: 09/01/2015

Notes: Replace existing duplex sump pump in mechanical room to alleviate chronic water ponding problem.

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

System: C2010 - Stair Construction



Location: Stair

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 1,000.00

Unit of Measure: L.F.

Estimate: $15,569.46

Assessor Name: System

Date Created: 09/01/2015

Notes: Current legislation regarding building accessibility by the handicapped requires that stairs 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 renovation efforts should include comprehensive stair railing upgrades.

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.

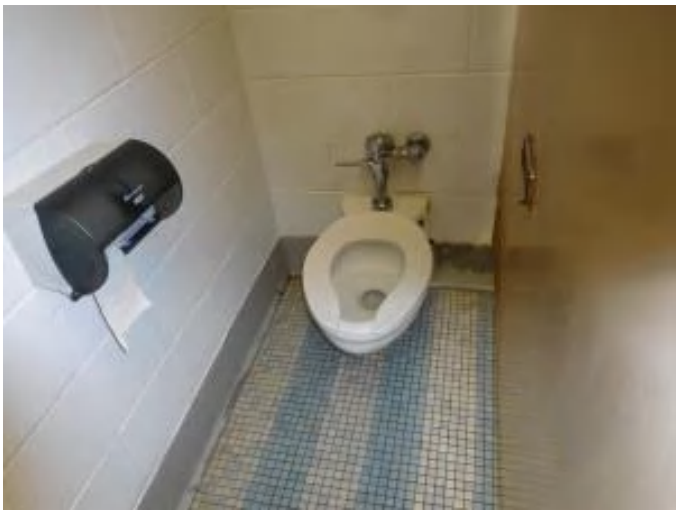
Estimate: $191,880.83

Assessor Name: System

Date Created: 08/09/2015

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

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. (+50KSF)

Qty: 75,318.00

Unit of Measure: S.F.

Estimate: $369,491.25

Assessor Name: System

Date Created: 08/15/2015

Notes: Inspect existing sanitary piping and replace damaged sections.

System: D3040 - Distribution Systems

Location: entire building

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: 75,318.00

Unit of Measure: S.F.

Estimate: $3,633,278.96

Assessor Name: System

Date Created: 08/15/2015

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: office

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 735.00

Unit of Measure: Pr.

Estimate: $318,125.37

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: auditorium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Install HVAC unit for Auditorium (200 seat).

Qty: 200.00

Unit of Measure: Seat

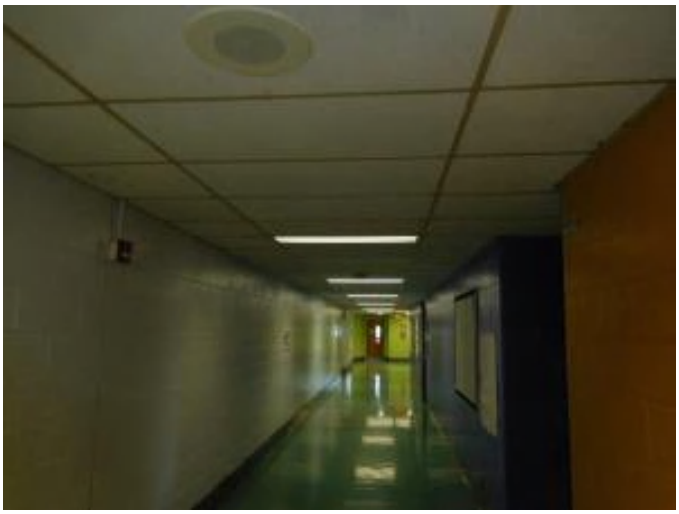
Estimate: $285,085.41

Assessor Name: System

Date Created: 08/15/2015

Notes: • Install new single zone horizontal central station air handling unit in auditorium mechanical room to serve cafeteria. Connect to existing ductwork. Provide adequate outside air louver and ductwork to furnish code required fresh air. Unit to have hot and chilled water coils, filters, blower and motor. Include hydronic control valves with digital controls. Connect to building automation control system and hot and chilled water piping 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: 60,000.00

Unit of Measure: S.F.

Estimate: $858,326.79

Assessor Name: System

Date Created: 08/15/2015

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

System: D5030 - Communications and Security

Location: Elevator Machine Room

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Add fire alarm device

Qty: 2.00

Unit of Measure: Ea.

Estimate: $5,456.03

Assessor Name: System

Date Created: 08/09/2015

Notes: Provide smoke and heat detectors and audible/visual notification appliance in elevator machine room for elevator recall.

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

System: B2020 - Exterior Windows

Location: Exterior Elevation

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace aluminum windows - pick the appropriate size and style and insert the number of units

Qty: 300.00

Unit of Measure: Ea.

Estimate: $1,649,822.48

Assessor Name: System

Date Created: 09/01/2015

Notes: Exterior windows have been upgraded from the original applications. The current system is estimated to have been installed in the early 2000's. Several windows no longer work and will require attention prior to an overall effort. Windows are in fair condition based on the year of installation or last renovation. The exterior window system is recommended to be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features.

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: 25,000.00

Unit of Measure: S.F.

Estimate: $847,050.27

Assessor Name: System

Date Created: 09/01/2015

Notes: There are a number of roof sections and different roof elevations ranging from the main roof, cafeteria roof to the mechanical roof sections. The built up application that was installed in the early 1990'S is the primary application. Seal coat has been used several times to extend the life cycle of the application. However, considering the age and condition of the roofing systems, universal upgrades are recommended. Remove and replace all roof sections.

System: C1030 - Fittings

Location: Building Wide Signage

Distress: Accessibility

Category: 2 - Code Compliance

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

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

Qty: 300.00

Unit of Measure: Ea.

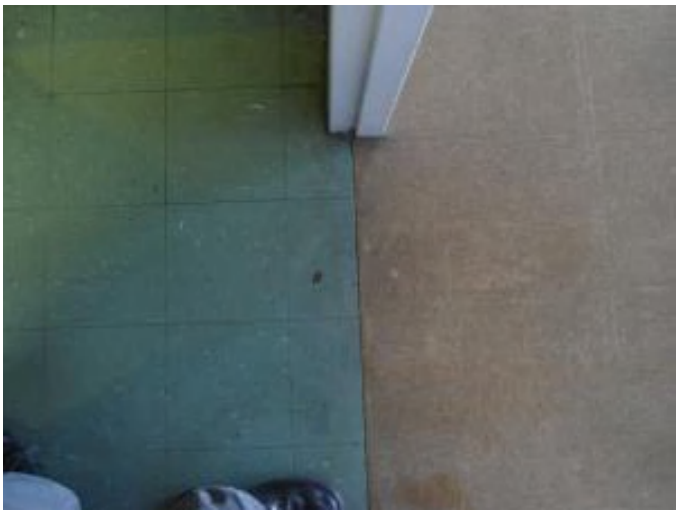
Estimate: $77,842.94

Assessor Name: System

Date Created: 09/01/2015

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: C3020413 - Vinyl Flooring



Location: Building Wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 30,000.00

Unit of Measure: S.F.

Estimate: $455,000.04

Assessor Name: System

Date Created: 09/01/2015

Notes: The vinyl floor finish in most of this school is in very good condition and appears to have part of an isolated upgrade reported to have taken place in the early 2000's. 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: 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: 735.00

Unit of Measure: Pr.

Estimate: $343,642.98

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: D5010 - Electrical Service/Distribution

Location: Main Electrical Room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add Electrical Switchgear and Distribution System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $297,225.97

Assessor Name: System

Date Created: 08/08/2015

Notes: Provide a second underground service to the building from the utility company transformer to serve a central air conditioning system. Provide a 1200A, 208/120V, 3 phase, 4 wire main switchboard with 1200A main circuit breaker and all feeder circuit breakers and feeders to serve the air conditioning equipment.

Priority 5 - Response Time (> 5 yrs):

System: B2010 - Exterior Walls

Location: Exterior Elevation

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $161,447.36

Assessor Name: System

Date Created: 09/01/2015

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 facade, the application of a spray sealant to the suspected exterior masonry surface is recommended.

System: D3030 - Cooling Generating Systems

Location: roof, mechanical room

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Install chilled water system with distribution piping and pumps. (+75KSF)

Qty: 75,318.00

Unit of Measure: S.F.

Estimate: $1,209,544.43

Assessor Name: System

Date Created: 08/15/2015

Notes: Remove the existing window air conditioning units and install a one hundred ninety 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: D3060 - Controls & Instrumentation

Location: entire building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 75,318.00

Unit of Measure: S.F.

Estimate: $1,615,726.77

Assessor Name: System

Date Created: 08/15/2015

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

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: 352.00

Unit of Measure: Ea.

Estimate: $317,470.74

Assessor Name: System

Date Created: 09/01/2015

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.	Main Entrance Lobby	NA	NA	NA		30			$181,650.00	$199,815.00
D2020 Domestic Water Distribution	Pump, pressure booster system, 5 HP pump, includes diaphragm tank, control and pressure switch	1.00	Ea.	mechanical room	qpump	p1000			25	2005	2030	$10,972.50	$12,069.75
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 2000 MBH, includes standard controls and insulated jacket, packaged	1.00	Ea.	mechanical room	borderus	ge 615			35	2002	2037	$38,201.40	$42,021.54
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 2000 MBH, includes standard controls and insulated jacket, packaged	1.00	Ea.	mechanical room	borderus	ge 615			35	2002	2037	$38,201.40	$42,021.54
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 2000 MBH, includes standard controls and insulated jacket, packaged	1.00	Ea.	mechanical room	borderus	ge 615			35	2002	2037	$38,201.40	$42,021.54
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 400 A, 5 stories, 50' horizontal	1.00	Ea.	Main Electricfal Room	Siemens	P2	Cat. No. P2C30ML400 FBS		30	2011	2041	$20,524.05	$22,576.46
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 2000 A	2.00	Ea.	Main Electrical Room	Siemens	SB1 Rev. A	S.O. 3003277860-003700-01		30	2011	2041	$47,537.55	$104,582.61
												Total:	**$465,108.44**

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):	81,000
Year Built:	1964
Last Renovation:	
Replacement Value:	$1,546,119
Repair Cost:	$342,028.93
Total FCI:	22.12 %
Total RSLI:	56.45 %

Description:

Attributes:

General Attributes:

Bldg ID:	S633001	Site ID:	S633001

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	47.66 %	27.23 %	$326,102.30
G40 - Site Electrical Utilities	86.67 %	4.57 %	$15,926.63
Totals:	**56.45 %**	**22.12 %**	**$342,028.93**

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 $
G2020	Parking Lots	$7.65	S.F.	15,000	30	1983	2013	2027	40.00 %	33.20 %	12		$38,095.64	$114,750
G2030	Pedestrian Paving	$11.52	S.F.	63,000	40	1983	2023		20.00 %	0.00 %	8			$725,760
G2040	Site Development	$4.36	S.F.	80,100	25	1983	2008	2042	108.00 %	82.47 %	27		$288,006.66	$349,236
G2050	Landscaping & Irrigation	$3.78	S.F.	2,100	15	1990	2005	2020	33.33 %	0.00 %	5			$7,938
G4020	Site Lighting	$3.58	S.F.	80,100	30	2011	2041		86.67 %	5.55 %	26		$15,926.63	$286,758
G4030	Site Communications & Security	$0.77	S.F.	80,100	30	2011	2041		86.67 %	0.00 %	26			$61,677
								Total	**56.45 %**	**22.12 %**			**$342,028.93**	**$1,546,119**

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.

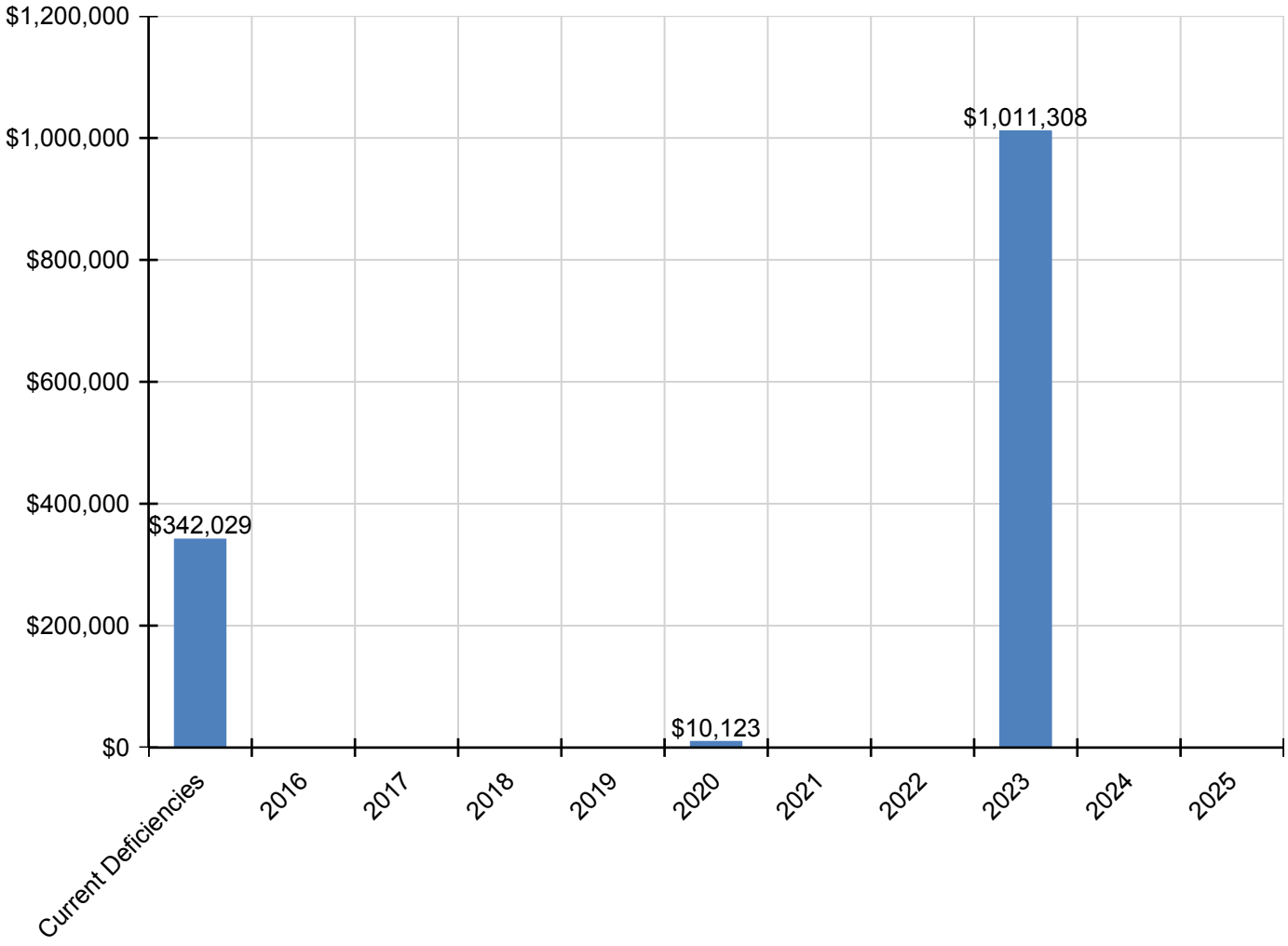
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$342,029**	**$0**	**$0**	**$0**	**$0**	**$10,123**	**$0**	**$0**	**$1,011,308**	**$0**	**$0**	**$1,363,460**
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**
G2020 - Parking Lots	$38,096	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$38,096**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$1,011,308	$0	$0	**$1,011,308**
G2040 - Site Development	$288,007	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$288,007**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$10,123	$0	$0	$0	$0	$0	**$10,123**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$15,927	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$15,927**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

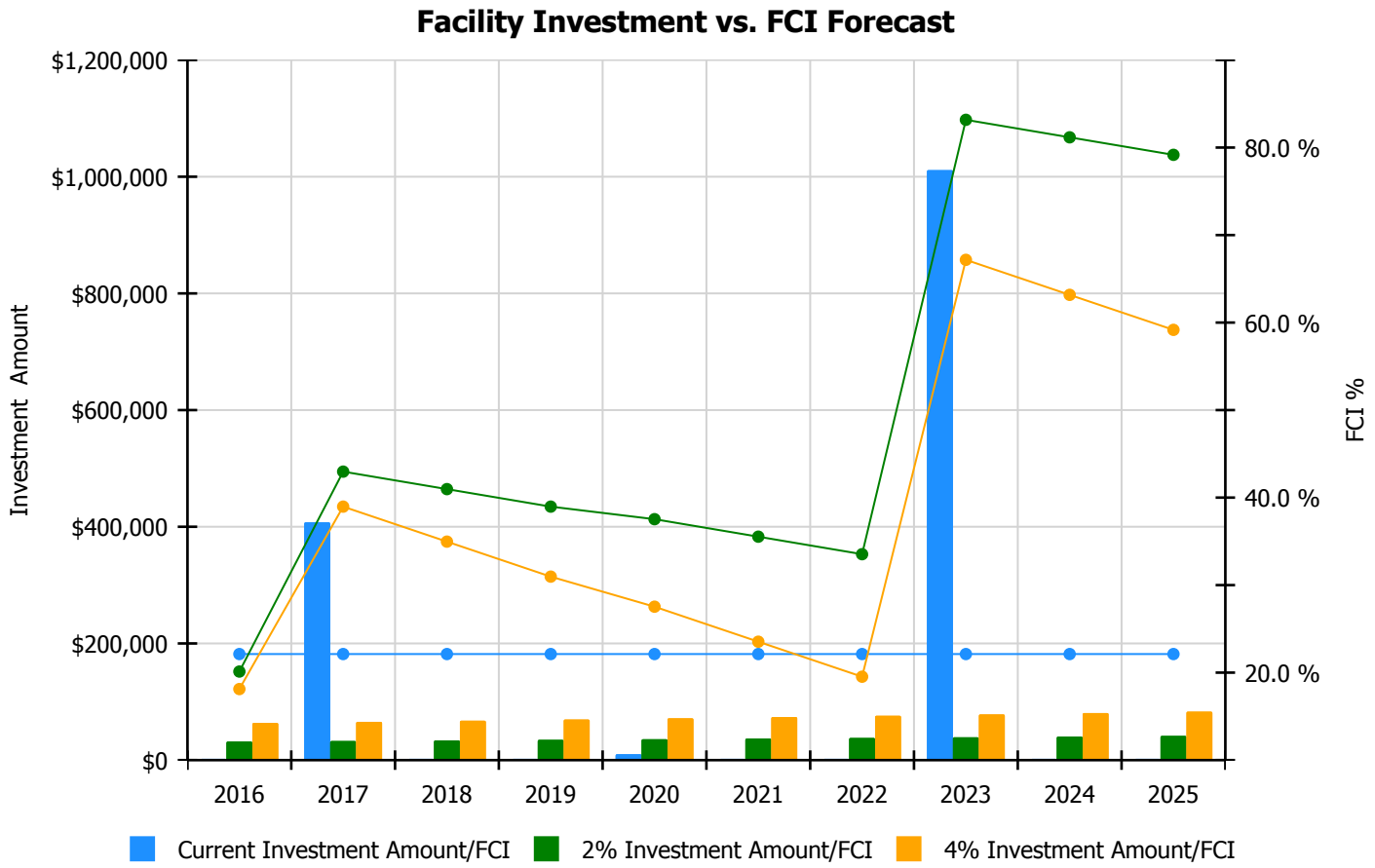
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

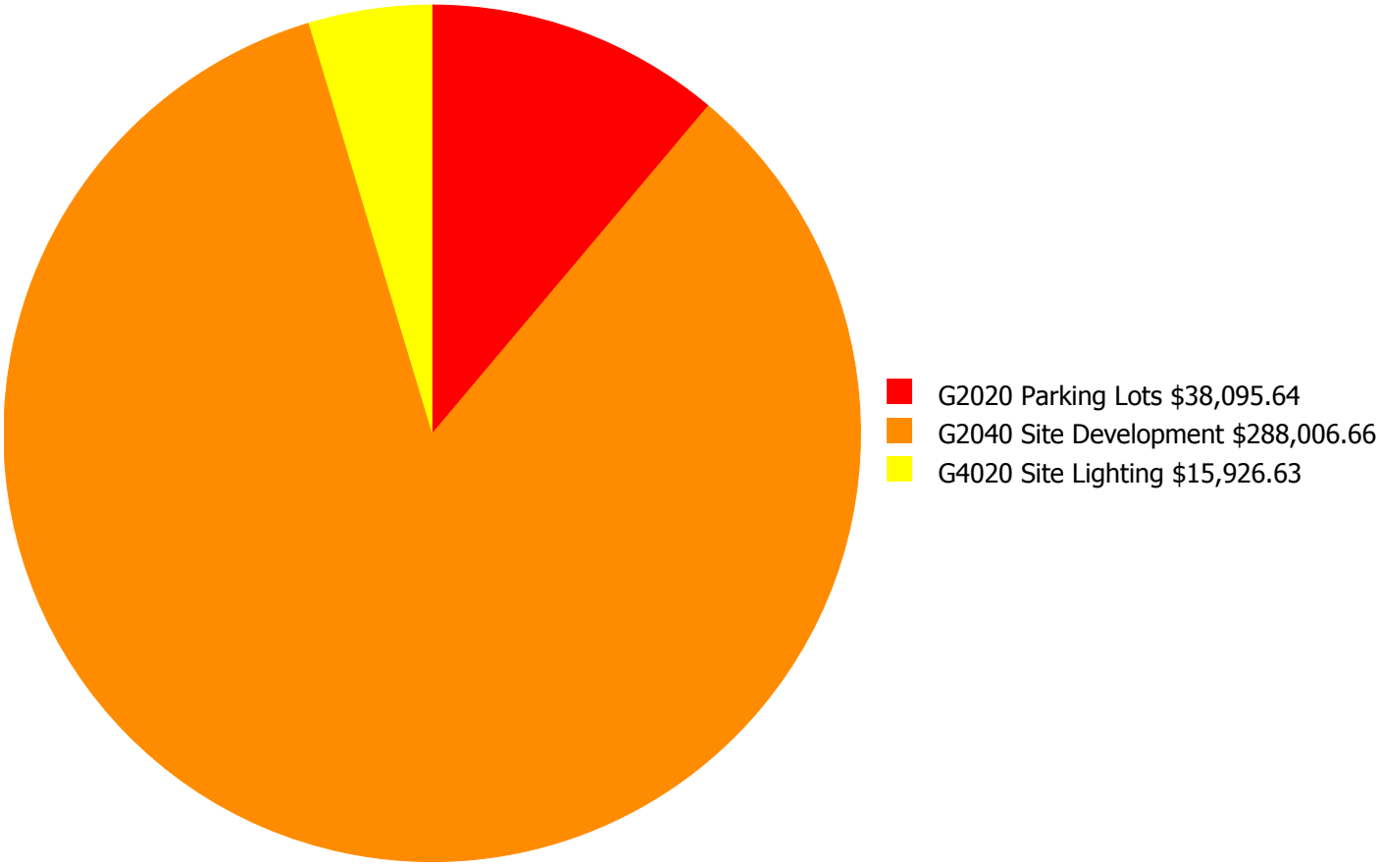
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 22.12%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$31,850.00	20.12 %	$63,700.00	18.12 %
2017	$407,555	$32,806.00	42.97 %	$65,611.00	38.97 %
2018	$0	$33,790.00	40.97 %	$67,579.00	34.97 %
2019	$0	$34,803.00	38.97 %	$69,607.00	30.97 %
2020	$10,123	$35,848.00	37.53 %	$71,695.00	27.53 %
2021	$0	$36,923.00	35.53 %	$73,846.00	23.53 %
2022	$0	$38,031.00	33.53 %	$76,061.00	19.53 %
2023	$1,011,308	$39,172.00	83.17 %	$78,343.00	67.17 %
2024	$0	$40,347.00	81.17 %	$80,693.00	63.17 %
2025	$0	$41,557.00	79.17 %	$83,114.00	59.17 %
Total:	**$1,428,986**	**$365,127.00**		**$730,249.00**	

Deficiency Summary by System

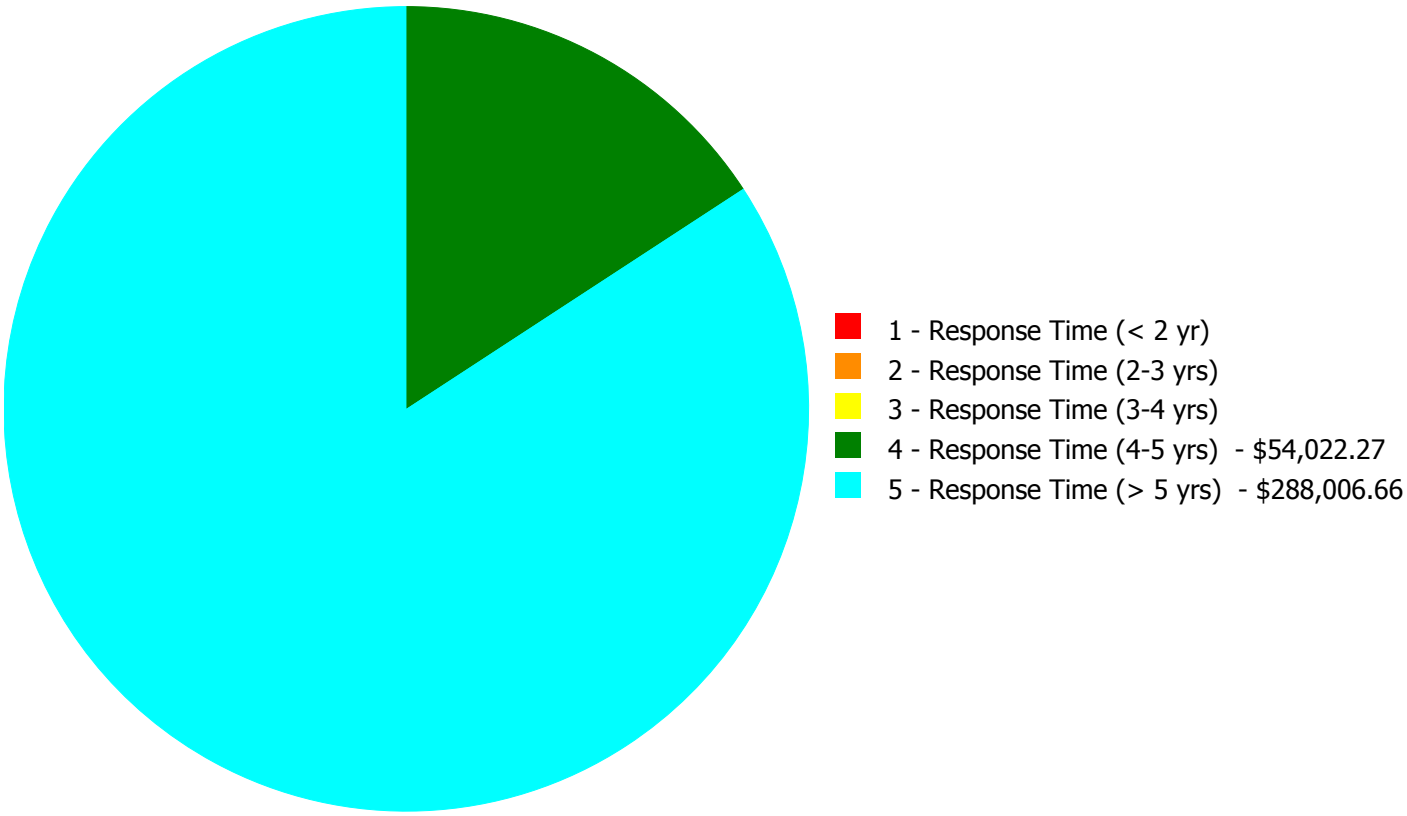
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $342,028.93

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: $342,028.93

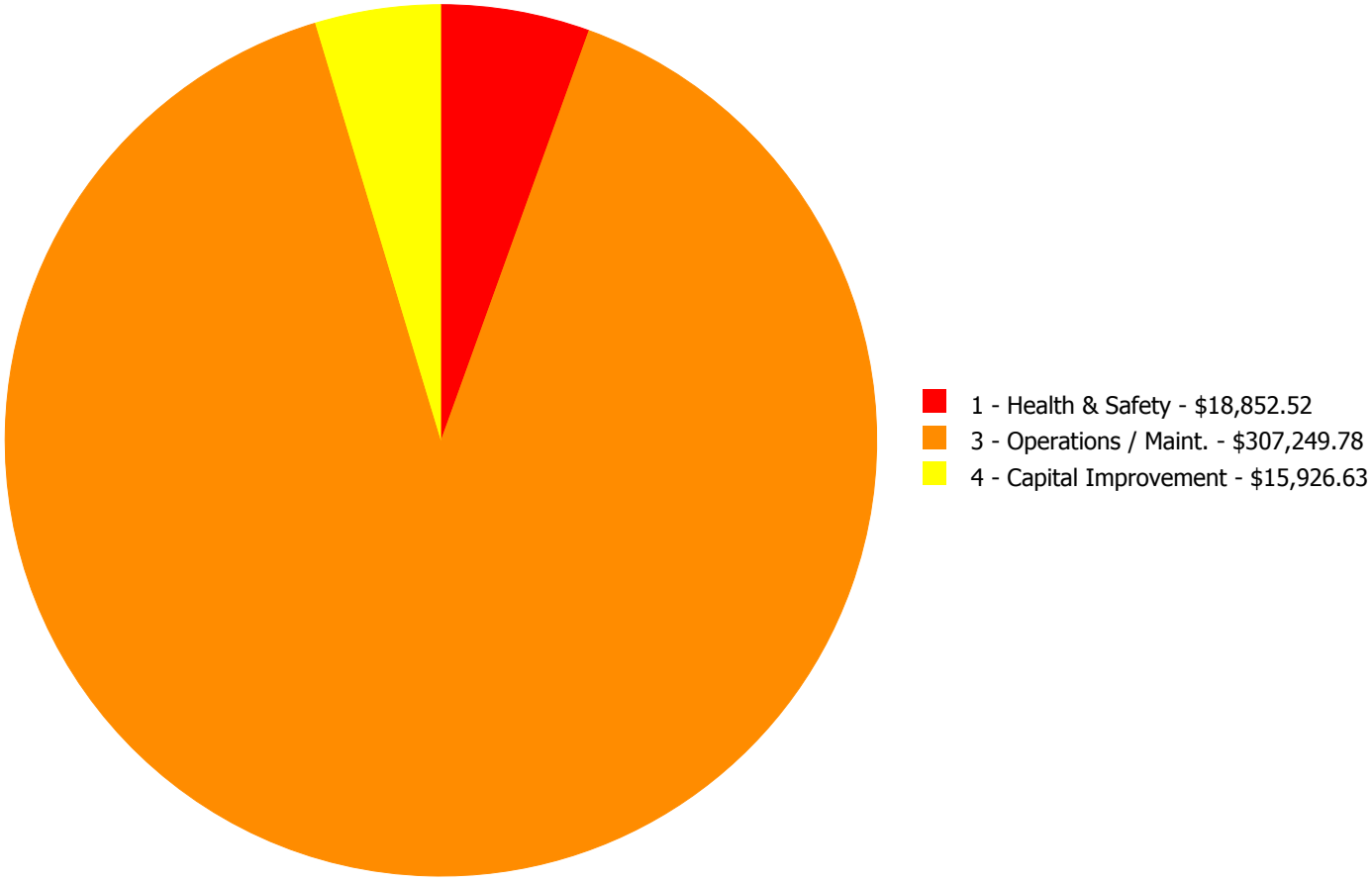
Deficiency By Priority Investment Table

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
G2020	Parking Lots	$0.00	$0.00	$0.00	$38,095.64	$0.00	$38,095.64
G2040	Site Development	$0.00	$0.00	$0.00	$0.00	$288,006.66	$288,006.66
G4020	Site Lighting	$0.00	$0.00	$0.00	$15,926.63	$0.00	$15,926.63
	Total:	$0.00	$0.00	$0.00	$54,022.27	$288,006.66	$342,028.93

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: $342,028.93

Deficiency Details by Priority

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

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

System: G2020 - Parking Lots

Location: Southern Site

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Resurface parking lot - grind and resurface including striping

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $38,095.64

Assessor Name: Ben Nixon

Date Created: 09/01/2015

Notes: The asphalt play area is developing cracks that may turn into tripping hazards. It is recommended that the cracks be filled and the play area be resealed with proper area markers to support the sports activities of the schools physical education requirements.

System: G4020 - Site Lighting

Location: Underside of gymnasium

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add site lighting fixtures

Qty: 0.00

Unit of Measure: Ea.

Estimate: $15,926.63

Assessor Name: Ben Nixon

Date Created: 08/08/2015

Notes: Provide three (3) surface mounted HID lighting fixtures on the underside of the gymnasium to illuminate the site below the elevated building.

Priority 5 - Response Time (> 5 yrs):

System: G2040 - Site Development

Location: Site

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace chain link fence - 6' high

Qty: 3,000.00

Unit of Measure: L.F.

Estimate: $269,154.14

Assessor Name: Ben Nixon

Date Created: 09/01/2015

Notes: This school has a perimeter fence surrounding the parking / playground area. The fence has several areas of repairs and the mounting post are damaged in several areas, overall the fence is in fair condition. This fence system is recommended to be removed and replaced with a new system within the next five to ten years.

System: G2040 - Site Development

Location: Site

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Build secure trash dumpster enclosure

Qty: 1.00

Unit of Measure: Ea.

Estimate: $18,852.52

Assessor Name: Ben Nixon

Date Created: 09/01/2015

Notes: The trash dumpster is located near the southwestern fence open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area are recommended.

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