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.

Arts and Sciences (Edmunds, HR) School

Governance	CHARTER	Report Type	Elementarymiddle
Address	1197 Haworth St.	Enrollment	964
	Philadelphia, Pa 19124	Grade Range	'00-08'
Phone/Fax	215-537-2520 / N/A	Admissions Category	Neighborhood
Website	Http://Stringtheoryschools.Com/	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	**24.46%**	**$16,382,054**	**$66,974,415**
Building	24.75 %	$16,321,516	$65,938,529
Grounds	05.84 %	$60,539	$1,035,886

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	89.59 %	$1,151,988	$1,285,880
Exterior Walls (Shows condition of the structural condition of the exterior facade)	27.89 %	$1,391,763	$4,990,527
Windows (Shows functionality of exterior windows)	51.39 %	$1,251,506	$2,435,096
Exterior Doors (Shows condition of exterior doors)	46.45 %	$91,073	$196,052
Interior Doors (Classroom doors)	49.04 %	$232,717	$474,580
Interior Walls (Paint and Finishes)	00.00 %	$0	$1,791,358
Plumbing Fixtures	22.90 %	$418,590	$1,828,012
Boilers	01.06 %	$26,678	$2,524,333
Chillers/Cooling Towers	33.96 %	$1,124,144	$3,309,892
Radiators/Unit Ventilators/HVAC	49.37 %	$2,869,835	$5,812,592
Heating/Cooling Controls	132.68 %	$2,421,767	$1,825,308
Electrical Service and Distribution	04.33 %	$56,809	$1,311,518
Lighting	27.58 %	$1,293,449	$4,689,013
Communications and Security (Cameras, Pa System and Fire Alarm)	10.24 %	$179,841	$1,756,352

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

S725001;Edmunds, H

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):	135,208
Year Built:	1924
Last Renovation:	
Replacement Value:	$66,974,415
Repair Cost:	$16,382,054.47
Total FCI:	24.46 %
Total RSLI:	66.00 %

Description:

Facility Assessment

July 2015

School District of Philadelphia

H.R. Edmunds School

1197 Hayworth Street

Philadelphia, PA 19124

135,208 SF / 775 Students / LN 07

GENERAL

String Theory Charter School for the Arts & Sciences (Edmunds Campus) or the H. R. Edmunds Philadelphia Charter School for the

Arts and Sciences Campus is identified as B725001 and was originally constructed in 1924 as the Henry R. Edmunds School. This facility recently re-opened its doors in September of 2012 and is located at 1197 Haworth St. in Philadelphia, PA. The design of the rectangle-shaped, concrete and steel-framed building includes brick facades with a concrete foundation, detailing, and ornamental molding.

The main entrance faces the northern exterior on Dyre Street. This School serves students in grades K-8. This school was originally constructed in 1924 and consists of a Basement level and three additional stories with a total gross square footage of 135,208 GSF.

This recent history of this school includes a minor remodeling effort prior to the 2012 reopening. There were no records to indicate the start date or date of completion. This school has several classrooms, a library, Ballet dance studio, science labs, creative writing labs, computer labs, Gym, cafeteria and student interior and exterior commons and auditorium, with supporting administrative spaces. The information for this report was collected during a site visit on July 15, 2015.

Mr. Thomas Corosanite, Director of Facilities, 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 masonry and concrete and appear to be in good condition. The superstructure is concrete and steel .Floor construction is concrete with steel support.

Roof construction is concrete and there are a number of roof sections and eight different roof elevations ranging from the main roof to the mechanical roof. Parapet heights, coping materials, and the height of the flashing also varies in different sections. The main roof is a built up application that was installed in the early 1990'S. The other built up roofs have not conclusive installation dates and have been seal coated several times to extend the life cycle of the application. Considering the age and condition of the roofing systems, universal upgrades are recommended. Remove and replace all roof sections.

The exterior concrete finish that is spalling and falling from the building is a serious concern to the safety of the students and staff of this school. During the time of the inspection it was reported that several sections have broken off falling to the ground around the entire school. Special consideration for high priority project to immediately address this issue is recommended. The school has an ongoing correction that partially address this issue a section in a time however considering the progression of the failure it is recommended that this issue receives the upmost priority in order to mitigate damage or injury to the students and staff. Prior to the issue of this report the response to this was received and is being addressed by the district. The district was aware of this issue and are already implementing measures to correct and repair this issue.

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.

The exterior windows are a mix of the original industrial metal framed single pane applications in the Gym and single pane applications in the classroom. Some of the windows are operable while others no longer function. The exterior windows have exceeded the expected life cycle for this type of application. It is recommended that the exterior window system 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 fair condition but are aging at a faster rate than expected based on traffic and condition. The exterior door system, store front and service doors are recommended for upgrade.

The loading dock is located just off the parking area between the dumpsters and the access point for students entering the school from Dyer Street. The existing recommendation to enclose and move the dumpsters to a new location is related to this effort. After the dumpster correction is complete it is recommended that the loading dock area be clearly marked and safety barriers be placed to protect pedestrian traffic and mitigate possible issues related to loading and unloading materials and supplies.

Special consideration for those that may be physically challenged was a main factor in the last re-construction effort for this school. The western entrance into the student commons 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 an elevator, Interior access ramps, some door hardware, hand rails and guard rails. The building has received limited upgrades and does not fully support a path of travel for those that may be physically challenged.

Interior partitions include wall tile, painted wood and plaster, gypsum wallboard, moveable partitions, and glazed openings. Interior partitions are in good condition.

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

Fittings include: chalkboards; marker boards; tack boards; interior signage; toilet accessories and plastic toilet partitions; fixed storage shelving.

The classroom chalk boards are original to the buildings construction. This system is beyond its expected life and universal upgrades are warranted. Remove and upgrade chalkboards to new marker board systems.

The interior directional and identification signage package consist of older signs hung over or besides the doors. This deficiency provides a budgetary consideration to install permeate directional and identification signage throughout the facility. Care should be taken to ensure that the signage incorporates the needs of the physically challenged and the system of placement is consistent thought out the facility.

Furnishings include fixed shelving for this school and is a mix of original construction or from isolated renovation efforts on a room by room basis. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades the fixed shelving of this school.

Stair construction is concrete. Stair treads and landings are finished with concrete and nosings are metal. Handrails are wooden or metal and do not have extensions and returns at landings.

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

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

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

Interior wall finishes are typically painted surfaces. Other wall finishes include: ceramic tile at restrooms, wood and drywall finishes. Wall finishes are generally in good condition considering the age of the applications. Interior floor finishes are typically VCT in classrooms while other floor finishes include: carpet; wood flooring; sealed concrete; and ceramic and clay tile. The interior carpet finish was installed approximately in 2000 and is in fair condition considering the age and high traffic conditions. This finish will exceed its expected life within the next five years and is recommended for removal and replacement. The ceramic tile, clay tile, and painted wall finishes are in good condition and there are no recommendations required at this time.

Interior ceilings are typically 2 x 4 acoustical tile in metal grid. Other ceiling finishes include: exposed/painted structure; plaster; gypsum wallboard. The ceiling surfaces are well maintained and in good condition. There are no recommendations for the ceiling finishes at this time.

There is a single elevator that serves this school.

Institutional equipment includes: library equipment; stage equipment; instrumental equipment; A/V equipment; and laboratory equipment; gym equipment – basketball backstops and scoreboards. Other equipment includes kitchen equipment with a limited

loading dock. The efforts of the latest renovation efforts have proven to be substantial and the institutional equipment with the exception of the loading dock is in very good condition and expected to have a lifecycle that extends beyond the outlook of this report.

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 wheel handle faucets and urinals and water closets have manual lever flush valves. Custodial closets have service sinks or mop sinks. There are stainless steel water coolers with integral refrigeration and china drinking fountains with no refrigeration. The kitchen waste is piped through an above floor grease trap.

There is a PVI two hundred fifty gallon gas water heater in the basement mechanical room, with a small circulating pump installed in 1998. There is an abandoned water heater, a duplex sump pump and water softener system in the mechanical room. There is no domestic booster pump system and no pressure problems are reported. Building domestic water piping is copper, which was probably replaced since the original construction and may have lead solder based on age. There is exposed horizontal cold water piping above water closets in original toilet rooms. Sanitary, waste, vent and rainwater piping is hub and spigot cast iron. Domestic water piping in the addition is insulated copper and sanitary, waste vent and rainwater is hubless cast iron with banded couplings. The water service is a four inch line and meter from Dyre St. entering in the boiler room with a backflow preventer assembly. The rainwater and gas services are also from Dyre St. Main sewer lines are connected at Dyre St. and Horrocks St.

The older plumbing fixtures, trim and fittings and the older domestic water system should be replaced, based on age and condition. The gas water heater should be in service at least ten more years. The original cast iron has exceeded the anticipated service life, and the sanitary should be examined for damage.

HVAC-An addition to the building in 1998 included a new mechanical system serving the addition and portions of the original building. Heating source is three Weil Mclain cast iron sectional low pressure steam boilers that are gas/oil fired located in the basement boiler room. The boilers are one hundred ninety five hp each, Weil Mclain model 94 series 3. Two are older and one was installed during the 1998 addition. The boilers have Powerflame fully modulating burners with separate oil pumps and Powerflame control panels. All three boilers are operated at part load for exercise, but only one at full capacity is required to heat the building after warmup. Original portions of the building are heated by exposed steam radiators. There is a duplex sump condensate receiver and pump system. An Alyan triplex boiler feed pump system with (3) one hp pumps and control panel serve the boilers. There is an automatic chemical treatment system. Three abandoned boilers are also in a portion of the boiler room. An original house fan system in the basement is inoperable.

The addition area of the building is heated by a hot water system and heating coils in air handling units. Hot water is generated by a three hundred fourteen gpm shell and tube steam to water heat exchanger in the boiler room.

Boilers are connected to a field fabricated metal vent system that has some exterior corrosion. There are (2) fifteen thousand gallon underground oil tanks, construction and condition unknown. Only one of the tanks is used. There is an inoperable duplex fuel oil pump system with strainer and control panel, located in the ballet studio mechanical room.

As part of the addition, a water cooled chilled water system was installed including two cooling towers, two chillers, pumps, piping, air handling units and controls. The two chillers are dual screw compressor machines, located in the chiller room. Reportedly only one of the four compressors is operational and two new chillers are on order by the District for fall 2015 installation and spring 2016 startup. Two Evapco forced draft cooling towers are on the roof. The chillers and cooling towers are one hundred tons each which is reportedly the design cooling load. There is a refrigerant recovery system in the room. Some original building spaces have window air conditioners. The auditorium is cooled by five ductless split systems with four in the main room and one on the stage, which do not provide any ventilation air.

There are ten air handling units installed in 1998 in various areas with five heating only and five heating and cooling with zoning as follows.

AHU-1 Classrooms, heating and cooling, VAV with return air fan and variable frequency drive

AHU-2 Cafeteria, heating and cooling, VAV with return air fan

AHU-3 Kitchen, heating only

AHU-4 Kitchen hood makeup air, heating only

AHU-5 Administration, heating and cooling

AHU-6 Ballet studio, heating and cooling

AHU-7,8,9 Gymnasium, heating only

AHU-10 Computer lab, heating and cooling

Units have hydronic coils and control valves, filter sections, outside and return air dampers as required, blowers and motors. AHU-1, 2, 3 and 4 are floor mounted in the chiller room. AHU-5 is floor mounted in the boiler room. AHU-6 is floor mounted in the ballet studio mechanical room. AHU-7, 8 and 9 are suspended below the gymnasium ceiling with individual roof outside air intakes. AHU-10 is floor mounted in a mechanical room adjacent to the gym.

Three centrifugal roof ventilators from 1998 provide toilet and custodial closet exhaust. An upblast centrifugal fan is connected to the kitchen hood. In the original building corridors, one small propeller fan has been installed in a window panel at each level for general ventilation. The kitchen hood is a double wall make up air hood with fire suppression system and interlocked gas solenoid valve.

Steam, hot, chilled and condenser water piping are welded black steel. There are nine pumps consisting of five chilled water, two condenser water and two hot water. All are Thrush base mounted end suction pumps. Pumps are between five and fifteen hp, installed in 1998. Fuel oil piping is screwed black steel. Ductwork is sheet metal with insulation for cooling systems, and spiral construction exposed in the gymnasium.

Controls are pneumatic and there is no building automation system. There is a duplex controls air compressor in the boiler room. Boilers have individual Powerflame control units.

The steam radiators and distribution system are original and should be replaced with a new system. The chillers and cooling towers should be serviceable for ten to fifteen more years, but as recorded, the District is replacing the chillers in fall 2015. The pumps and air handling units should last ten to fifteen more years. The newer piping systems should be in service twenty more years. The boilers should be in service twenty more years.

FIRE PROTECTION- The addition is partially sprinklered and has standpipes. The fire service is an eight inch line supplying a Patterson one hundred fifty hp fire pump and small jockey pump, with a free standing fire pump controller. The pump is rated at thirteen hundred gpm. The original portion of the building has standpipes only, with fire department connections. There are no problems with the fire protection system.

ELECTRICAL SYSTEMS

Electrical Service--The building is served by a 13.2 kV underground service from PECO Energy Company to a substation located in the basement of the 1998 building addition, consisting of a 600A load interrupter switch and 1000/1500 kVA, AA/FA 480/277V, 3 phase, 4 wire ABB transformer section that feeds Siemens 1600A Main Switchboard MDS with a 1600A main circuit breaker and 400A service disconnect for the fire pump. The switchboard feeds 480/277V distribution panels, and step-down transformers to feed 208/120V panelboards and equipment in the 1998 addition. The service entrance equipment was installed in 1998 and has a remaining useful life that extends beyond this report.

Main Switchboard MDS also backfeeds 480/277V Distribution Panelboards DP-1 and DP-2, located in the basement of the original 1924 building, which feed 208/120V Distribution Panelboards RDP-1 and RDP-2, via 150 kVA step-down transformers. Except for two panelboards on the platform in the auditorium, all of the distribution equipment serving the original 1924 building was also replaced in 1998.

Panelboards serving the 1998 addition are located in electrical closets on each floor. The original 1924 building is served by three (3) recessed panelboards in the corridors on Floors G, 1 and 2 and 3 and two (2) panelboards on Floor 3. All panelboards were replaced in 1998.

Receptacles-- Classrooms are typically supplied with only two or three duplex receptacles and are not adequate. At least three duplex receptacles should be added in each classroom using surface metal raceway and spaced along all walls to eliminate the use of extension cords to connect equipment. There are approximately 10 duplex receptacles in the kitchen that need to be replaced with ground-fault circuit-interrupting type to comply with National Electrical Code (NEC) Article 210.8.

Lighting-- Fixtures in corridors and classrooms the 1998 addition are generally 2x4 lay-in grid fluorescent troffers with T8 lamps and

acrylic prismatic lenses. Classrooms without lay-in ceilings have continuous rows of 4 foot fluorescent wraparound fixtures with acrylic lenses. Most classrooms have two switches for lighting control. Illumination levels in classrooms were measured at 48 footcandles. Lighting fixtures in the corridors and classrooms in the 1924 building are typically surface mounted 4 foot fluorescent wraparounds with T12 lamps and acrylic lenses. Measured illumination levels in classrooms and corridors do not meet the Illuminating Engineering Society (IES) recommended footcandle levels; classrooms range from 22 to 24 footcandles, and corridors from 4 to 18 footcandles. Lighting fixtures in approximately 57,000 SF of the original 1924 building are beyond their useful life and need to be replaced.

The gymnasium has stem mounted industrial 400W metal halide fixtures with quartz re-strike and lay-in grid fluorescent troffers with acrylic lenses in the office and restrooms. The auditorium is illuminated with stem mounted opal bowl shaped fixtures with 55 watt, compact fluorescent lamps above the house floor and theatrical lighting fixtures and worklights above the platform. The cafeteria and kitchen have 4x4 lay-in grid fluorescent troffers. Fixtures in restrooms are typically surface mounted, 4 foot vaportight fluorescent. Fixtures in storage rooms and mechanical type spaces are 4 foot industrial fixtures; surface or stem mounted fluorescent wraparounds with T12 lamps are located in stairwells.

An allowance for replacement of damaged lighting fixtures and lenses in the 1998 addition is included in this report.

Wall mounted lighting fixtures are located above the doors at exit discharges and high intensity discharge (HID) lighting fixtures provide area illumination of the site.

Fire Alarm System-- The fire alarm system is an addressable type by Siemens, Model ID-SP. The fire alarm control panel (FACP) is located in the basement of the 1998 addition, with a remote annunciator panel located in the Main Office. The system includes smoke detectors throughout the corridors and in elevator lobbies and machine room, and manual pull stations in the Main Office, Kitchen, 1998 Mechanical Room and Boiler Room. Manual pull stations are not located at any of the exits from the floors because of a variance that was granted to the School District before the school was acquired by String Theory Schools. Pull stations need to be provided at all exits to comply with current code. Audible and visual notification appliances are provided in corridors and restrooms, auditorium, gymnasium, cafeteria and kitchen. There are no fire alarm notification appliances in classrooms.

Telephone/LAN-- A telephone and data outlet is provided in each classroom. Wireless access points are provided in classrooms, corridors, auditorium, gymnasium and cafeteria for Wi-Fi service throughout the entire school. The Main IT Room is located in Room 200.

Public Address/Paging/Sound Systems-- The paging system is accessed through the telephone system. Each classroom has a paging speaker. There are also flush mounted paging speakers in corridor ceilings. This system is estimated to have 10 years of useful life remaining. A separate sound system with 275W amplifier is provided for the auditorium. The Simplex sound system in the gymnasium has been abandoned. A portable sound system is used and is acceptable.

Clock and Program System--The original combination clock/speaker assembly in classrooms is obsolete and was replaced with ceiling speakers. The clock/speaker assemblies and obsolete speakers in the corridors have been abandoned in place. The program bells function properly. A new clock system is needed.

Television System-- There are television outlets in each classroom, but no televisions located within the classrooms.

Video Surveillance and Security Systems-- Interior video surveillance cameras provide coverage of all corridors, auditorium, gymnasium, cafeteria and stairwells. Exterior cameras are building mounted and provide coverage of the site and entrances. There are a total of 70 surveillance cameras that are monitored on three monitors in the Security Room on Floor 2. Motion sensors are provided at all entrances to monitor ingress/egress.

Emergency Power System--There is a Kohler 105 kW/131 kVA kW, 480/277V, 3 phase, 4 wire standby generator with Kohler 150A automatic transfer switch (ATS) located in the basement of the 1998 building addition that powers 480/277V Panelboard EMP and Emergency Lighting Panelboard ELP and Panelboard ERP, via a 45 kVA transformer.

Emergency Lighting System / Exit Lighting-- Selected lighting fixtures are connected to the standby power system. No emergency lighting is provided in the classrooms. Exit signs in the 1924 building are incandescent type and several exit signs are missing at the corridor intersections. Exit signs should be added and replaced with LED type.

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

Conveying Systems--There is one 30 HP hydraulic Dover 4500 pound capacity elevator that is located in the 1998 addition and serves all floors. The elevator machine room on the Ground Floor complies with current elevator codes. There is a Porch-Lift wheelchair lift

with 750 pound rated capacity on Floor 1 of the 1998 addition.

GROUNDS

The paved driveway on the western parking area appears to have been a part of the renovation effort to reopen the school. This drive and parking area is in good condition and there are no recommendations required at this time.

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

The perimeter Fencing is good condition and was recently repainted to extend the life of the system.

The landscaping is in good condition and well maintained but with no irrigation system. The landscaping is generally located near the parking / play area of the site with limited turf sections around the general exterior of the school. This deficiency provides a budgetary consideration for the installation of an irrigation system for this site.

The trash dumpster is located in the parking lot 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.

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.

As part of the building exterior envelop there is a recommendation to upgrade the loading dock. Care should be taken to undergo this effort only after the dumpster deficiency has been completed.

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

RECOMMENDATIONS

- Fill cracks in AC paving
- Build secure trash dumpster enclosure
- Remove and replace defective irrigation system - pop up spray system
- Remove and replace concrete sidewalk or paving
- Repair spalled concrete wall structure
- Replace book cases
- Loading dock equipment
- Remove and replace carpet
- Replace inadequate or install proper stair railing
- Replace missing or damaged signage
- Replace blackboards with marker boards
- Remove and replace tackboards
- Remove and Replace Built Up Roof
- Remove and replace exterior doors
- Remove and replace aluminum windows
- Repair exterior walls
- For areas of the original building with no central air conditioning provide a four pipe fan coil system with roof mounted outside air system ducted to each fan coil unit. Provide a fan coil unit for each classroom and separate area. Include new heat exchanger and pump for hot water, piping, control valves and controls.
- Provide a one hundred seventy five ton air cooled package chiller on the roof with pumps, piping and controls. Connect to new fan coil units.
- Replace inoperable duplex fuel oil pump system.
- Install NFPA wet pipe automatic sprinkler system in original and addition portions of building not currently protected.
- Inspect old cast iron sanitary piping including camera observation and replace damaged sections.
- Replace domestic hot and cold water pipe, fittings, valves, hangars and insulation.
- Replace older plumbing fixtures, including water closets, lavatories, urinals, service sinks, and water coolers. Include fittings and trim.
- 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.
- Modify pneumatic control valves and VAV dampers with digital control devices. Provide building automation system to control all components with remote computer based control console.
- Replace two panelboards on the platform in the auditorium.
- Add surface raceway system with three duplex receptacles each in approximately 40 classrooms.
- Replace approximately 10 duplex receptacles in the kitchen with ground-fault circuit-interrupting type receptacle to comply with current code.
- Replace lighting in approximately 57,000 SF of the original 1924 building that are beyond their useful life.
- Provide an allowance for 30 lighting fixtures in the 1998 addition for replacement of damaged lighting fixtures and lenses.
- Provide manual fire alarm pull stations at all means of egress. Estimate 25 manual pull stations are needed.
- Provide fire alarm system notification appliances in all classrooms. Estimate 40 appliances are needed.
- Replace obsolete clock system with a wireless clock system.
- Replace all exit signs in the original 1924 building with LED type, wired on emergency power. Estimate 25 exit signs.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 1 / Tm 1
Status:	Accepted by SDP	Team:	Tm 1
Site ID:	S725001		

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	59.00 %	0.00 %	$0.00
A20 - Basement Construction	59.00 %	0.00 %	$0.00
B10 - Superstructure	59.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	48.04 %	35.88 %	$2,734,342.04
B30 - Roofing	25.00 %	89.59 %	$1,151,988.37
C10 - Interior Construction	49.81 %	22.11 %	$733,446.15
C20 - Stairs	59.00 %	52.06 %	$99,241.83
C30 - Interior Finishes	49.63 %	0.48 %	$27,976.91
D10 - Conveying	51.43 %	0.00 %	$0.00
D20 - Plumbing	98.00 %	56.27 %	$1,553,482.10
D30 - HVAC	97.43 %	42.83 %	$6,442,423.14
D40 - Fire Protection	51.43 %	177.49 %	$1,934,212.22
D50 - Electrical	71.60 %	19.52 %	$1,551,294.40
E10 - Equipment	28.57 %	2.87 %	$61,763.04
E20 - Furnishings	37.50 %	10.88 %	$31,345.72
G20 - Site Improvements	36.73 %	6.73 %	$60,538.55
G40 - Site Electrical Utilities	40.00 %	0.00 %	$0.00
Totals:	**66.00 %**	**24.46 %**	**$16,382,054.47**

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)
B725001;Edmunds, H	135,208	24.75	$880,511.84	$2,474,953.38	$7,265,067.74	$2,000,501.90	$3,700,481.06
G725001;Grounds	74,300	5.84	$0.00	$0.00	$47,618.22	$2,207.61	$10,712.72
Total:		**24.46**	**$880,511.84**	**$2,474,953.38**	**$7,312,685.96**	**$2,002,709.51**	**$3,711,193.78**

Deficiencies By Priority

Budget Estimate Total: $16,382,054.47

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):	135,208
Year Built:	1924
Last Renovation:	
Replacement Value:	$65,938,529
Repair Cost:	$16,321,515.92
Total FCI:	24.75 %
Total RSLI:	66.46 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B725001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S725001		

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	59.00 %	0.00 %	$0.00
A20 - Basement Construction	59.00 %	0.00 %	$0.00
B10 - Superstructure	59.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	48.04 %	35.88 %	$2,734,342.04
B30 - Roofing	25.00 %	89.59 %	$1,151,988.37
C10 - Interior Construction	49.81 %	22.11 %	$733,446.15
C20 - Stairs	59.00 %	52.06 %	$99,241.83
C30 - Interior Finishes	49.63 %	0.48 %	$27,976.91
D10 - Conveying	51.43 %	0.00 %	$0.00
D20 - Plumbing	98.00 %	56.27 %	$1,553,482.10
D30 - HVAC	97.43 %	42.83 %	$6,442,423.14
D40 - Fire Protection	51.43 %	177.49 %	$1,934,212.22
D50 - Electrical	71.60 %	19.52 %	$1,551,294.40
E10 - Equipment	28.57 %	2.87 %	$61,763.04
E20 - Furnishings	37.50 %	10.88 %	$31,345.72
Totals:	**66.46 %**	**24.75 %**	**$16,321,515.92**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$18.40	S.F.	135,208	100	1924	2024	2074	59.00 %	0.00 %	59			$2,487,827
A1030	Slab on Grade	$7.73	S.F.	135,208	100	1924	2024	2074	59.00 %	0.00 %	59			$1,045,158
A2010	Basement Excavation	$6.55	S.F.	135,208	100	1924	2024	2074	59.00 %	0.00 %	59			$885,612
A2020	Basement Walls	$12.70	S.F.	135,208	100	1924	2024	2074	59.00 %	0.00 %	59			$1,717,142
B1010	Floor Construction	$75.10	S.F.	135,208	100	1924	2024	2074	59.00 %	0.00 %	59			$10,154,121
B1020	Roof Construction	$13.88	S.F.	135,208	100	1924	2024	2074	59.00 %	0.00 %	59			$1,876,687
B2010	Exterior Walls	$36.91	S.F.	135,208	100	1924	2024	2074	59.00 %	27.89 %	59		$1,391,763.10	$4,990,527
B2020	Exterior Windows	$18.01	S.F.	135,208	40	1986	2026		27.50 %	51.39 %	11		$1,251,505.73	$2,435,096
B2030	Exterior Doors	$1.45	S.F.	135,208	25	1996	2021		24.00 %	46.45 %	6		$91,073.21	$196,052
B3010105	Built-Up	$37.76	S.F.	34,000	20	1990	2010	2020	25.00 %	89.73 %	5		$1,151,988.37	$1,283,840
B3020	Roof Openings	$0.06	S.F.	34,000	20	1990	2010	2020	25.00 %	0.00 %	5			$2,040
C1010	Partitions	$17.91	S.F.	135,208	100	1924	2024	2074	59.00 %	11.26 %	59		$272,667.32	$2,421,575
C1020	Interior Doors	$3.51	S.F.	135,208	40	1990	2030	2025	25.00 %	49.04 %	10		$232,716.95	$474,580
C1030	Fittings	$3.12	S.F.	135,208	40	1990	2030	2025	25.00 %	54.06 %	10		$228,061.88	$421,849
C2010	Stair Construction	$1.41	S.F.	135,208	100	1924	2024	2074	59.00 %	52.06 %	59		$99,241.83	$190,643
C3010230	Paint & Covering	$13.21	S.F.	135,208	10	2011	2021		60.00 %	0.00 %	6			$1,786,098
C3010232	Wall Tile	$2.63	S.F.	2,000	30	1924	1954	2025	33.33 %	0.00 %	10			$5,260
C3020411	Carpet	$7.30	S.F.	2,500	10	1990	2000	2020	50.00 %	153.30 %	5		$27,976.91	$18,250

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System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
C3020412	Terrazzo & Tile	$75.52	S.F.	2,500	50	1924	1974	2020	10.00 %	0.00 %	5			$188,800
C3020413	Vinyl Flooring	$9.68	S.F.	80,000	20	2012	2032	2030	75.00 %	0.00 %	15			$774,400
C3020414	Wood Flooring	$22.27	S.F.	10,000	25	1924	1949	2025	40.00 %	0.00 %	10			$222,700
C3020415	Concrete Floor Finishes	$0.97	S.F.	40,000	50	1924	1974	2025	20.00 %	0.00 %	10			$38,800
C3030	Ceiling Finishes	$20.97	S.F.	135,208	25	1924	1949	2025	40.00 %	0.00 %	10			$2,835,312
D1010	Elevators and Lifts	$1.53	S.F.	135,208	35	1998	2033		51.43 %	0.00 %	18			$206,868
D2010	Plumbing Fixtures	$13.52	S.F.	135,208	35	1960	1995	2052	105.71 %	22.90 %	37		$418,589.77	$1,828,012
D2020	Domestic Water Distribution	$1.68	S.F.	135,208	25	1960	1985	2042	108.00 %	246.85 %	27		$560,717.08	$227,149
D2030	Sanitary Waste	$2.90	S.F.	135,208	25	1924	1949	2042	108.00 %	146.43 %	27		$574,175.25	$392,103
D2040	Rain Water Drainage	$2.32	S.F.	135,208	30	1924	1954	2025	33.33 %	0.00 %	10			$313,683
D3020	Heat Generating Systems	$18.67	S.F.	135,208	35	1980	2015	2025	28.57 %	1.06 %	10		$26,678.08	$2,524,333
D3030	Cooling Generating Systems	$24.48	S.F.	135,208	30	1998	2028	2047	106.67 %	33.96 %	32		$1,124,143.85	$3,309,892
D3040	Distribution Systems	$42.99	S.F.	135,208	25			2042	108.00 %	49.37 %	27		$2,869,834.64	$5,812,592
D3050	Terminal & Package Units	$11.60	S.F.	135,208	20			2042	135.00 %	0.00 %	27			$1,568,413
D3060	Controls & Instrumentation	$13.50	S.F.	135,208	20			2037	110.00 %	132.68 %	22		$2,421,766.57	$1,825,308
D4010	Sprinklers	$7.05	S.F.	135,208	35	1998	2033		51.43 %	202.91 %	18		$1,934,212.22	$953,216
D4020	Standpipes	$1.01	S.F.	135,208	35	1998	2033		51.43 %	0.00 %	18			$136,560
D5010	Electrical Service/Distribution	$9.70	S.F.	135,208	30	1998	2028		43.33 %	4.33 %	13		$56,809.24	$1,311,518
D5020	Lighting and Branch Wiring	$34.68	S.F.	135,208	20	2011	2031		80.00 %	27.58 %	16		$1,293,448.74	$4,689,013
D5030	Communications and Security	$12.99	S.F.	135,208	15	2011	2026		73.33 %	10.24 %	11		$179,840.94	$1,756,352
D5090	Other Electrical Systems	$1.41	S.F.	135,208	30	1998	2028		43.33 %	11.12 %	13		$21,195.48	$190,643
E1020	Institutional Equipment	$4.82	S.F.	135,208	35	1990	2025		28.57 %	0.00 %	10			$651,703
E1090	Other Equipment	$11.10	S.F.	135,208	35	1990	2025		28.57 %	4.12 %	10		$61,763.04	$1,500,809
E2010	Fixed Furnishings	$2.13	S.F.	135,208	40	1990	2030		37.50 %	10.88 %	15		$31,345.72	$287,993
								Total	**66.46 %**	**24.75 %**			**$16,321,515.92**	**$65,938,529**

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 brick 25
Painted CMU 40
Painted Drywall plaster 30
unfinished CMU 5
Ceramic wall 5

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

Note:
Carpet 2%
Clay Tile Kitchen Finish 2%
Vinyl floor tile 58%
Wood flooring 8%
Concrete floor finish 30%

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

Note: There are four (4) dry-type, 480-208//120V step-down transformers: (3) 150 kVA and (1) 45 kVA.

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:	**$16,321,516**	**$0**	**$0**	**$0**	**$0**	**$1,903,787**	**$2,603,469**	**$0**	**$0**	**$0**	**$13,288,554**	**$34,117,325**
*** 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	$1,391,763	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,391,763**
B2020 - Exterior Windows	$1,251,506	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,251,506**
B2030 - Exterior Doors	$91,073	$0	$0	$0	$0	$0	$257,506	$0	$0	$0	$0	**$348,579**
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	$1,151,988	$0	$0	$0	$0	$1,637,155	$0	$0	$0	$0	$0	**$2,789,143**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$2,601	$0	$0	$0	$0	$0	**$2,601**
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	$272,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$272,667**
C1020 - Interior Doors	$232,717	$0	$0	$0	$0	$0	$0	$0	$0	$0	$701,575	**$934,292**
C1030 - Fittings	$228,062	$0	$0	$0	$0	$0	$0	$0	$0	$0	$623,623	**$851,685**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

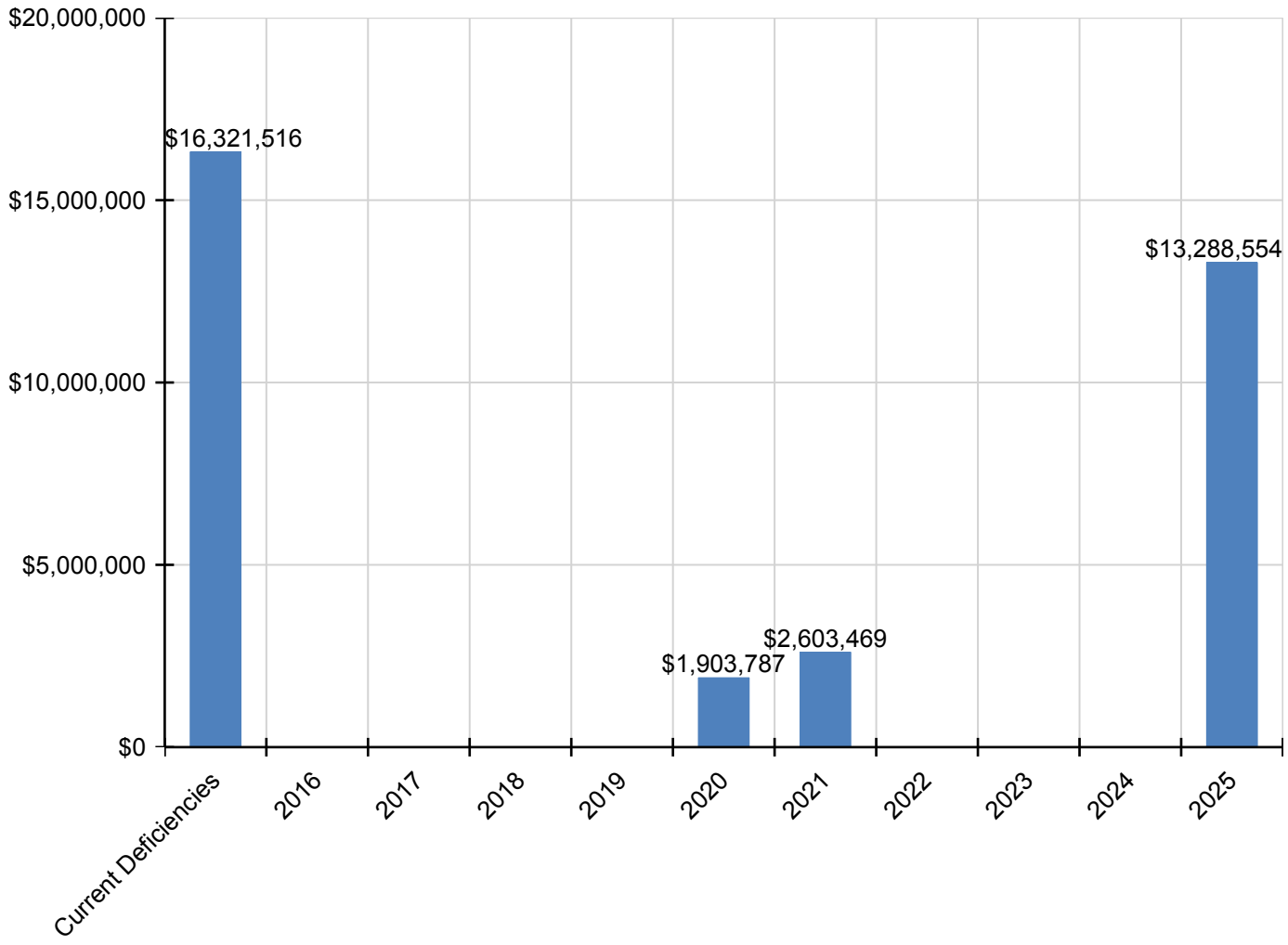
C2010 - Stair Construction	$99,242	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$99,242**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$2,345,963	$0	$0	$0	$0	**$2,345,963**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,776	**$7,776**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$27,977	$0	$0	$0	$0	$23,272	$0	$0	$0	$0	$0	**$51,249**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$240,758	$0	$0	$0	$0	$0	**$240,758**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$329,219	**$329,219**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$57,358	**$57,358**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,191,464	**$4,191,464**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$418,590	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$418,590**
D2020 - Domestic Water Distribution	$560,717	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$560,717**
D2030 - Sanitary Waste	$574,175	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$574,175**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$463,720	**$463,720**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$26,678	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,731,743	**$3,758,421**
D3030 - Cooling Generating Systems	$1,124,144	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,124,144**
D3040 - Distribution Systems	$2,869,835	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,869,835**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$2,421,767	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,421,767**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$1,934,212	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,934,212**
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	$56,809	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$56,809**
D5020 - Lighting and Branch Wiring	$1,293,449	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,293,449**
D5030 - Communications and Security	$179,841	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$179,841**

D5090 - Other Electrical Systems	$21,195	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$21,195**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$963,417	**$963,417**
E1090 - Other Equipment	$61,763	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,218,658	**$2,280,421**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$31,346	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$31,346**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

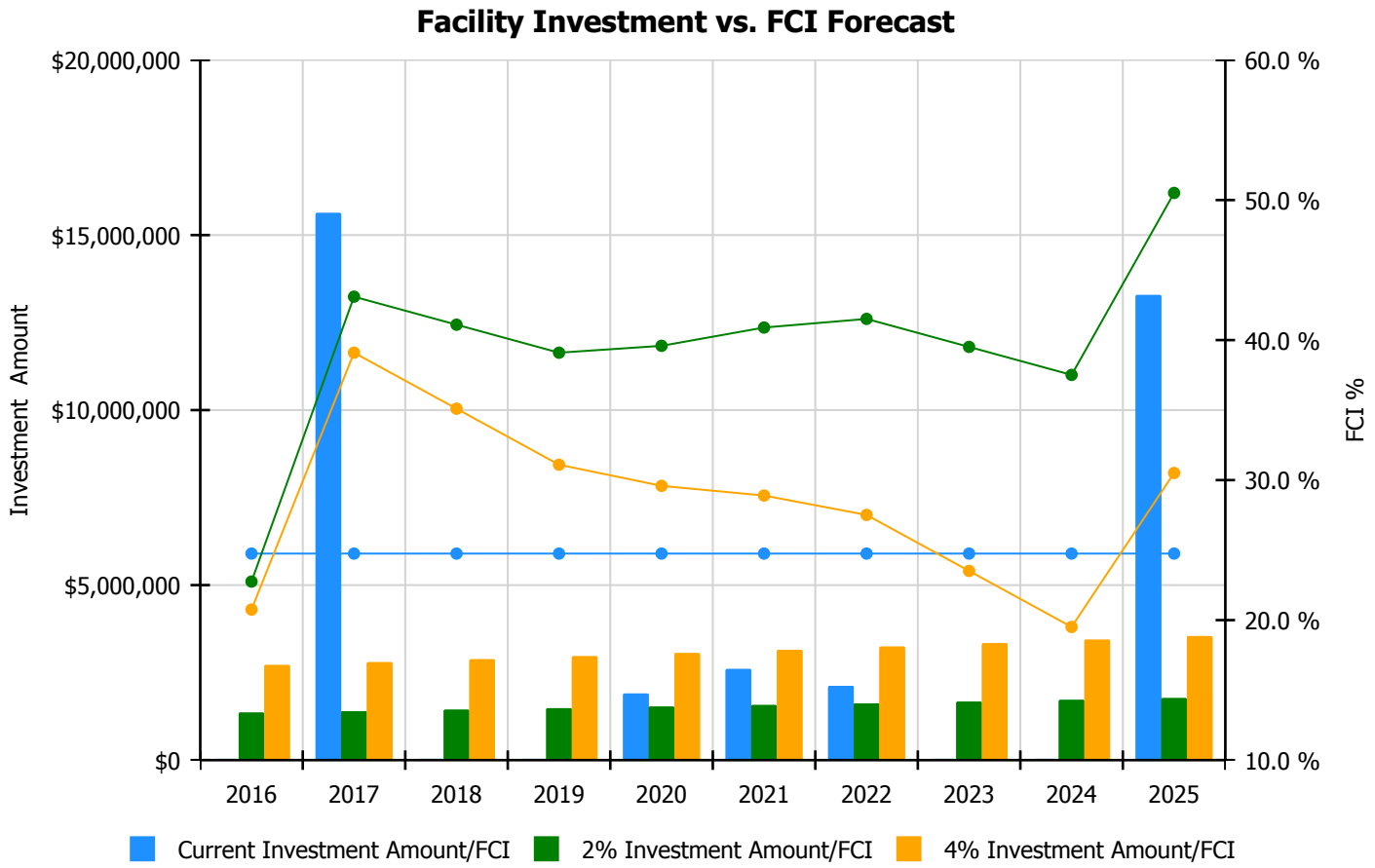
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

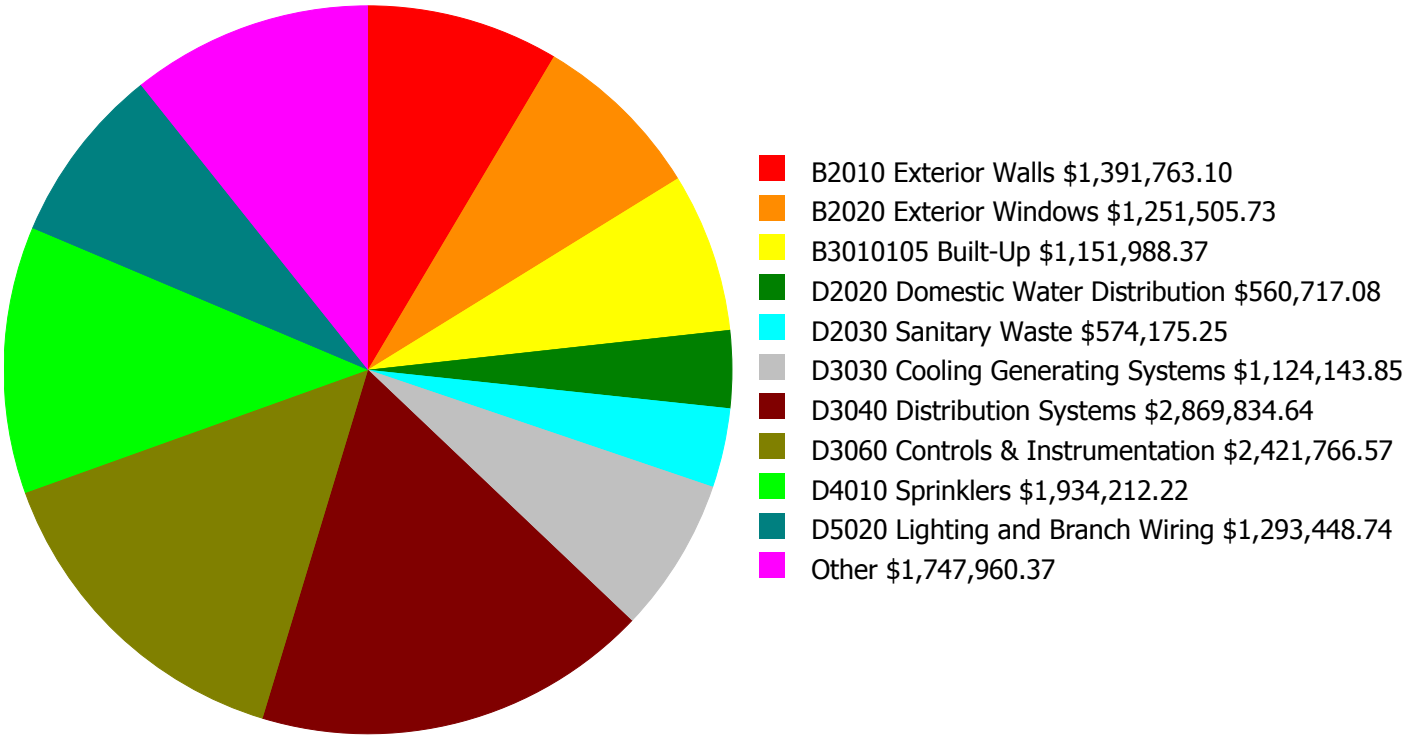
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 24.75%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$1,358,334.00	22.75 %	$2,716,667.00	20.75 %
2017	$15,631,897	$1,399,084.00	43.10 %	$2,798,167.00	39.10 %
2018	$0	$1,441,056.00	41.10 %	$2,882,112.00	35.10 %
2019	$0	$1,484,288.00	39.10 %	$2,968,576.00	31.10 %
2020	$1,903,787	$1,528,817.00	39.59 %	$3,057,633.00	29.59 %
2021	$2,603,469	$1,574,681.00	40.90 %	$3,149,362.00	28.90 %
2022	$2,121,845	$1,621,921.00	41.51 %	$3,243,843.00	27.51 %
2023	$0	$1,670,579.00	39.51 %	$3,341,158.00	23.51 %
2024	$0	$1,720,696.00	37.51 %	$3,441,393.00	19.51 %
2025	$13,288,554	$1,772,317.00	50.51 %	$3,544,635.00	30.51 %
Total:	**$35,549,551**	**$15,571,773.00**		**$31,143,546.00**	

Deficiency Summary by System

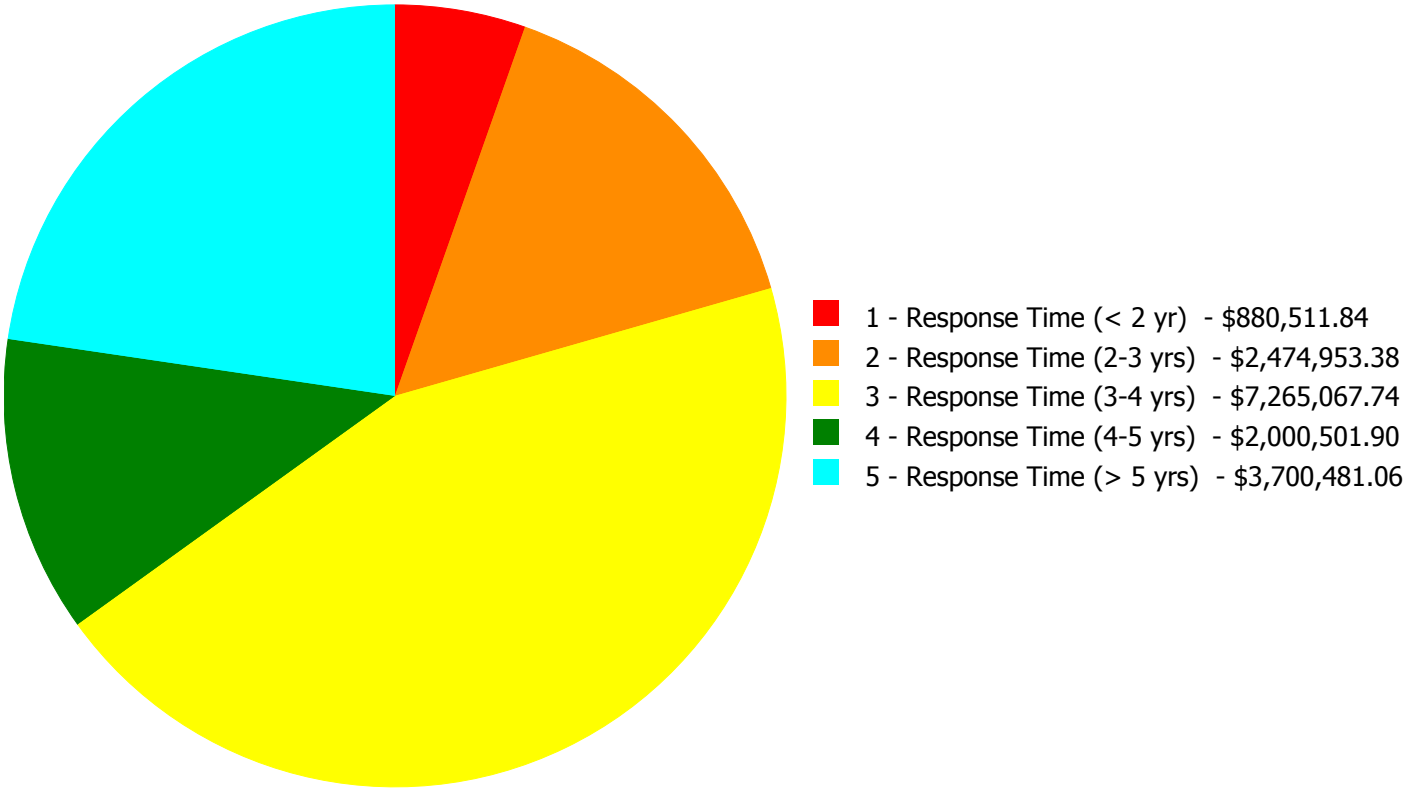
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $16,321,515.92

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: $16,321,515.92

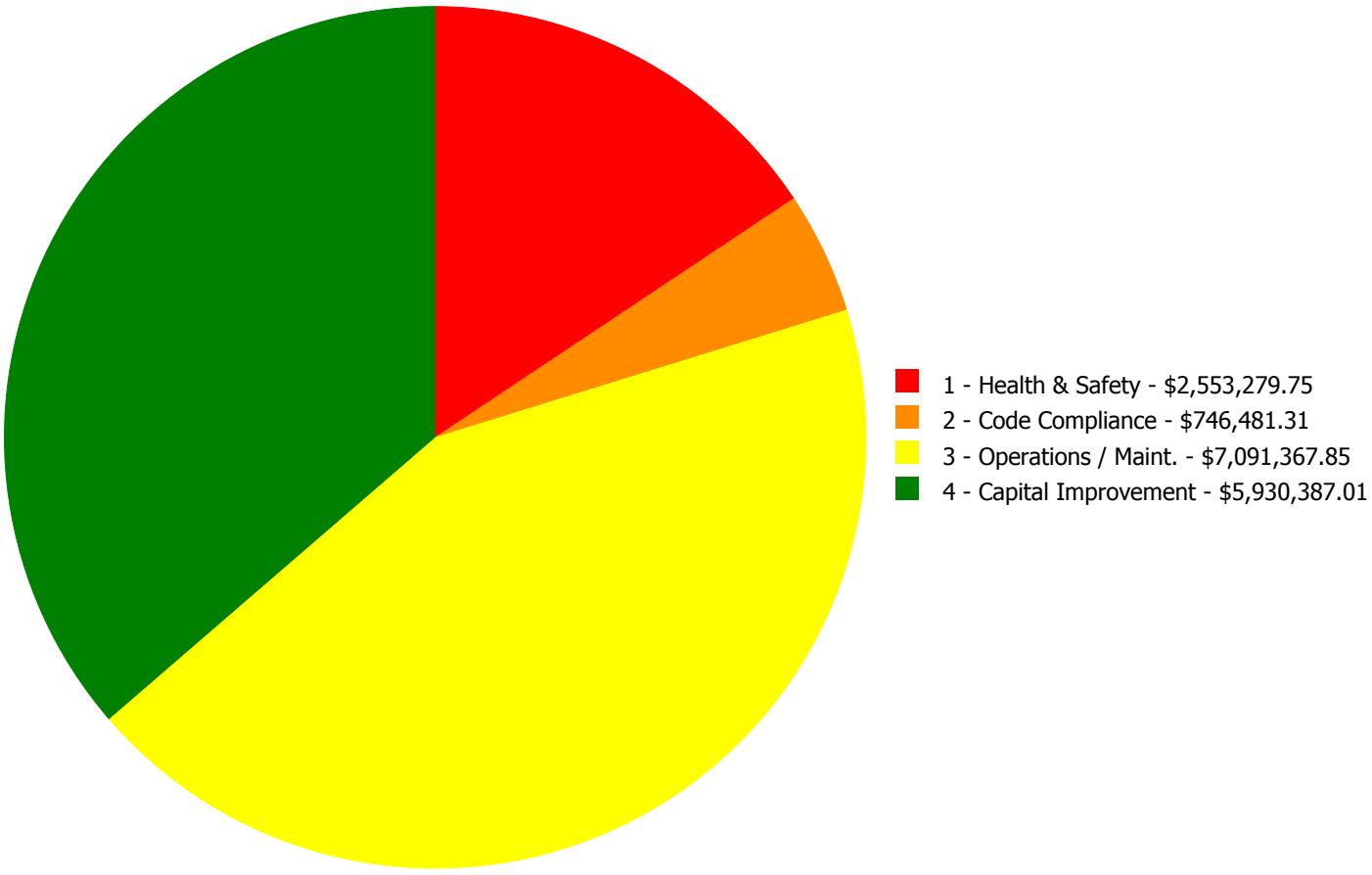
Deficiency By Priority Investment Table

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	$681,394.71	$0.00	$0.00	$710,368.39	$0.00	$1,391,763.10
B2020	Exterior Windows	$0.00	$0.00	$0.00	$0.00	$1,251,505.73	$1,251,505.73
B2030	Exterior Doors	$0.00	$0.00	$0.00	$91,073.21	$0.00	$91,073.21
B3010105	Built-Up	$0.00	$0.00	$0.00	$0.00	$1,151,988.37	$1,151,988.37
C1010	Partitions	$199,117.13	$0.00	$73,550.19	$0.00	$0.00	$272,667.32
C1020	Interior Doors	$0.00	$0.00	$0.00	$232,716.95	$0.00	$232,716.95
C1030	Fittings	$0.00	$18,421.23	$0.00	$137,646.42	$71,994.23	$228,061.88
C2010	Stair Construction	$0.00	$0.00	$99,241.83	$0.00	$0.00	$99,241.83
C3020411	Carpet	$0.00	$0.00	$0.00	$0.00	$27,976.91	$27,976.91
D2010	Plumbing Fixtures	$0.00	$0.00	$368,643.87	$49,945.90	$0.00	$418,589.77
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$560,717.08	$0.00	$560,717.08
D2030	Sanitary Waste	$0.00	$0.00	$574,175.25	$0.00	$0.00	$574,175.25
D3020	Heat Generating Systems	$0.00	$0.00	$0.00	$26,678.08	$0.00	$26,678.08
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,124,143.85	$1,124,143.85
D3040	Distribution Systems	$0.00	$0.00	$2,869,834.64	$0.00	$0.00	$2,869,834.64
D3060	Controls & Instrumentation	$0.00	$2,421,766.57	$0.00	$0.00	$0.00	$2,421,766.57
D4010	Sprinklers	$0.00	$0.00	$1,934,212.22	$0.00	$0.00	$1,934,212.22
D5010	Electrical Service/Distribution	$0.00	$0.00	$56,809.24	$0.00	$0.00	$56,809.24
D5020	Lighting and Branch Wiring	$0.00	$3,419.86	$1,137,090.07	$141,829.88	$11,108.93	$1,293,448.74
D5030	Communications and Security	$0.00	$0.00	$130,314.95	$49,525.99	$0.00	$179,840.94
D5090	Other Electrical Systems	$0.00	$0.00	$21,195.48	$0.00	$0.00	$21,195.48
E1090	Other Equipment	$0.00	$0.00	$0.00	$0.00	$61,763.04	$61,763.04
E2010	Fixed Furnishings	$0.00	$31,345.72	$0.00	$0.00	$0.00	$31,345.72
	Total:	$880,511.84	$2,474,953.38	$7,265,067.74	$2,000,501.90	$3,700,481.06	$16,321,515.92

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: $16,321,515.92

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: B2010 - Exterior Walls

Location: Exterior Elevation

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and replace precast concrete wall features - SF of surface

Qty: 2,000.00

Unit of Measure: S.F.

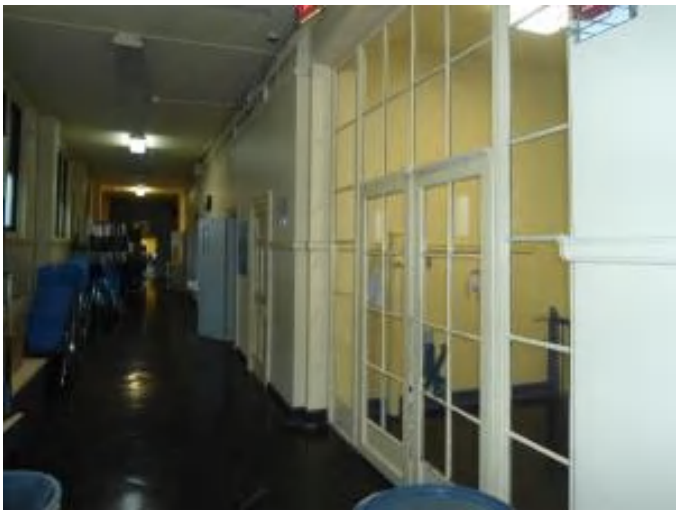
Estimate: $681,394.71

Assessor Name: System

Date Created: 08/07/2015

Notes: Prior to the issue of this report the response to this issue was received and is being addressed by the district. The district was aware of this issue and are already implementing measures to correct and repair this issue. The exterior concrete finish that is spalling and falling from the building is a serious concern to the safety of the students and staff of this school. During the time of the inspection it was reported that several sections have broken off falling to the ground around the entire school. Special consideration for high priority project to immediately address this issue is recommended. The school has an ongoing correction that partially address this issue a section in a time however considering the progression of the failure it is recommended that this issue receives the upmost priority in order to mitigate damage or injury to the students and staff.

System: C1010 - Partitions



Location: Building Wide

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

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

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $199,117.13

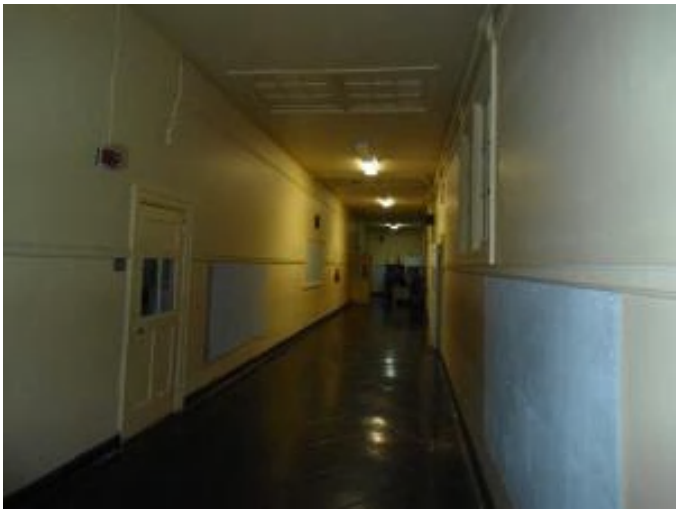
Assessor Name: System

Date Created: 08/07/2015

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

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

System: C1030 - Fittings



Location: Building Wide
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace tackboards - select size
Qty: 20.00
Unit of Measure: Ea.
Estimate: $18,421.23
Assessor Name: System
Date Created: 08/07/2015

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

System: D3060 - Controls & Instrumentation

Location: entire building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace pneumatic controls with DDC (150KSF)
Qty: 135,208.00
Unit of Measure: S.F.
Estimate: $2,421,766.57
Assessor Name: System
Date Created: 08/08/2015

Notes: Modify pneumatic control valves and VAV dampers with digital control devices. Provide building automation system to control all components with remote computer based control console

System: D5020 - Lighting and Branch Wiring

Location: Kitchen

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Replace Wiring Device

Qty: 10.00

Unit of Measure: Ea.

Estimate: $3,419.86

Assessor Name: System

Date Created: 08/11/2015

Notes: Replace approximately 10 duplex receptacles in the kitchen with ground-fault circuit-interrupting type receptacle to comply with current code.

System: E2010 - Fixed Furnishings

Location: Building Wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace book cases - pick the closest book case size and number

Qty: 1.00

Unit of Measure: Ea.

Estimate: $31,345.72

Assessor Name: System

Date Created: 08/07/2015

Notes: The fixed shelving for this school is a mix of original construction or from isolated renovation efforts on a room by room basis. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades the fixed shelving of this school.

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

System: C1010 - Partitions

Location: Building Wide

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 2,000.00

Unit of Measure: S.F.

Estimate: $53,498.64

Assessor Name: System

Date Created: 08/07/2015

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

System: C1010 - Partitions

Location: Building Wide

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Remove folding wood partitions; replace with metal studs and gypsum board painted

Qty: 900.00

Unit of Measure: S.F.

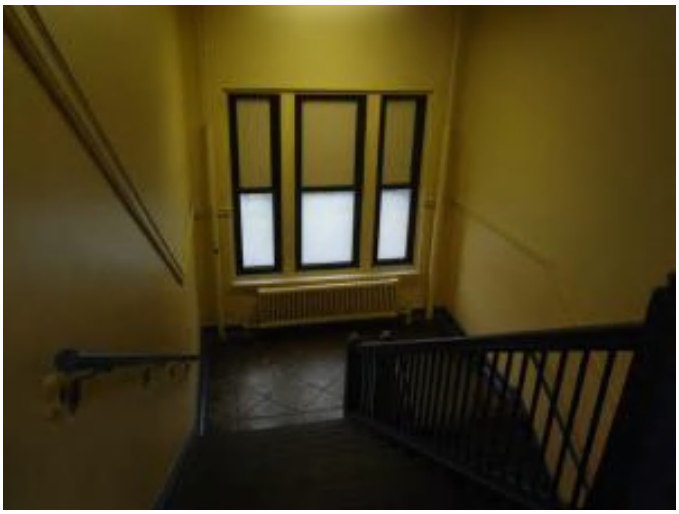
Estimate: $20,051.55

Assessor Name: System

Date Created: 08/07/2015

Notes: The movable partition that has been modified and no longer functions as originally designed in room 300 and is a good example for a universal correction. This wall has been modified to suite the classroom needs however does not reflect the most recent code requirements. This deficiency recommends universal removal of the existing movable partitions and upgrades to a permeate wall systems.

System: C2010 - Stair Construction



Location: Stairs

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 1.00

Unit of Measure: L.F.

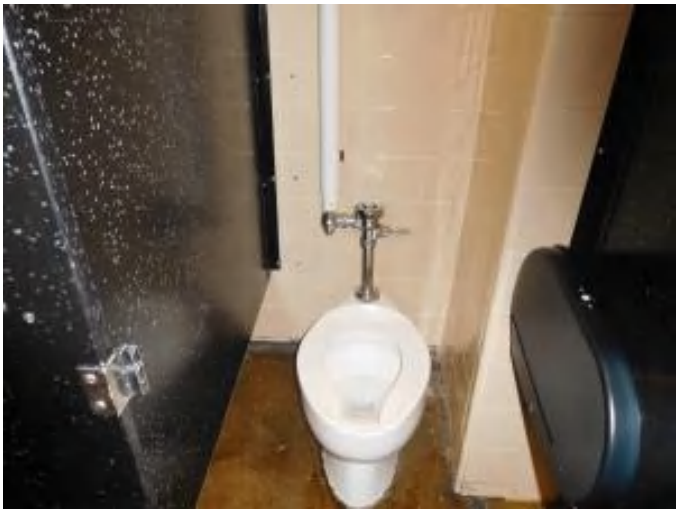
Estimate: $99,241.83

Assessor Name: System

Date Created: 08/07/2015

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

System: D2010 - Plumbing Fixtures



Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace water closet - quantify additional units

Qty: 30.00

Unit of Measure: Ea.

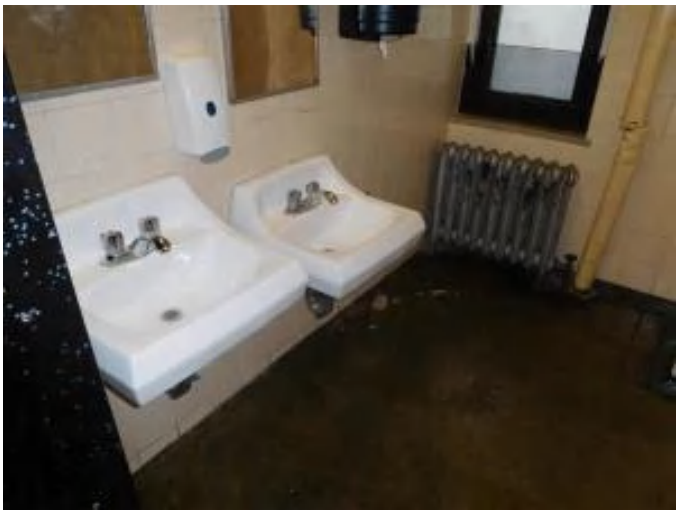
Estimate: $223,864.43

Assessor Name: System

Date Created: 08/08/2015

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

System: D2010 - Plumbing Fixtures



Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 26.00

Unit of Measure: Ea.

Estimate: $99,304.30

Assessor Name: System

Date Created: 08/08/2015

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

System: D2010 - Plumbing Fixtures

Location: corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 6.00

Unit of Measure: Ea.

Estimate: $45,475.14

Assessor Name: System

Date Created: 08/08/2015

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

System: D2030 - Sanitary Waste

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 135,208.00

Unit of Measure: S.F.

Estimate: $574,175.25

Assessor Name: System

Date Created: 08/08/2015

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

System: D3040 - Distribution Systems

Location: original building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Provide classroom FC units and dedicated OA ventilation system. (20 clsrms)

Qty: 27.00

Unit of Measure: C

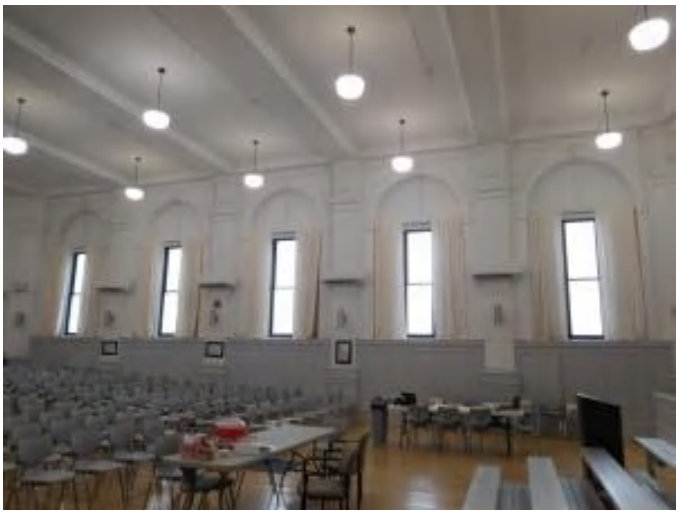
Estimate: $2,242,646.71

Assessor Name: System

Date Created: 08/08/2015

Notes: For areas of the original building with no central air conditioning provide a four pipe fan coil system with roof mounted outside air system ducted to each fan coil unit. Provide a fan coil unit for each classroom and separate area. Include new heat exchanger and pump for hot water, piping, control valves and controls.

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: 440.00

Unit of Measure: Seat

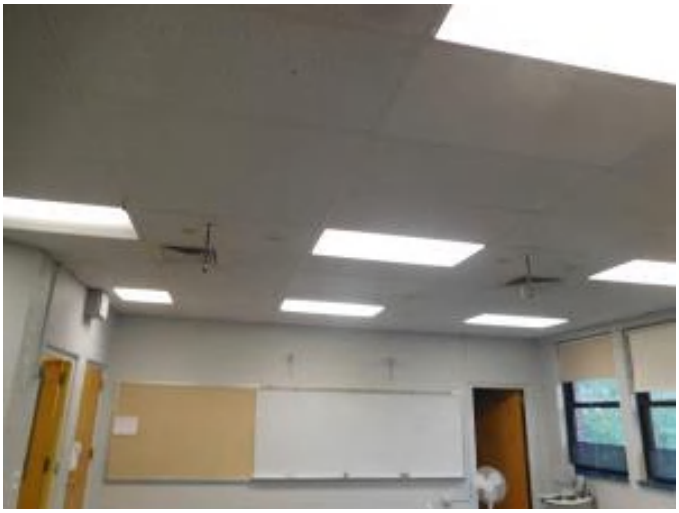
Estimate: $627,187.93

Assessor Name: System

Date Created: 08/08/2015

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

System: D4010 - Sprinklers



Location: entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Install a fire protection sprinkler system

Qty: 135,208.00

Unit of Measure: S.F.

Estimate: $1,934,212.22

Assessor Name: System

Date Created: 08/08/2015

Notes: Install NFPA wet pipe automatic sprinkler system in original and addition portions of building not currently protected.

System: D5010 - Electrical Service/Distribution

Location: Auditorium platform
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Panelboard
Qty: 2.00
Unit of Measure: Ea.
Estimate: $56,809.24
Assessor Name: System
Date Created: 08/11/2015

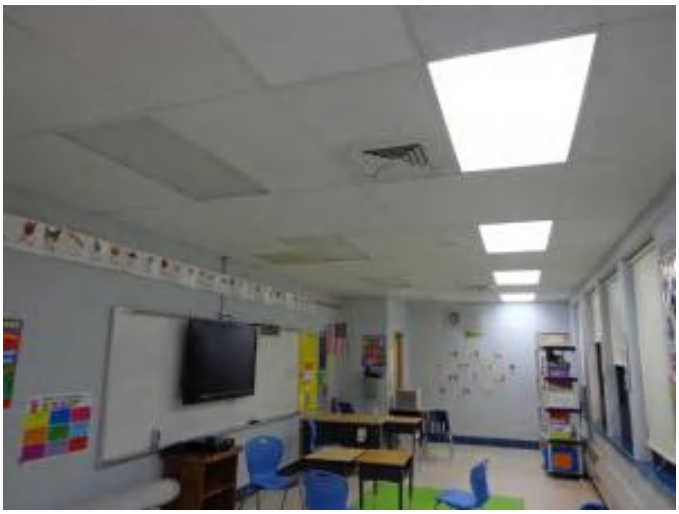
Notes: Replace two panelboards on the platform in the auditorium.

System: D5020 - Lighting and Branch Wiring

Location: 1924 Building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Lighting Fixtures (SF)
Qty: 57,000.00
Unit of Measure: S.F.
Estimate: $1,137,090.07
Assessor Name: System
Date Created: 08/11/2015

Notes: Replace lighting fixtures in approximately 57,000 SF of the original 1924 building that are beyond their useful life.

System: D5030 - Communications and Security



Location: Classrooms

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Add fire alarm device

Qty: 40.00

Unit of Measure: Ea.

Estimate: $88,155.99

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide fire alarm system notification appliances in all classrooms. Estimate 40 appliances are needed.

System: D5030 - Communications and Security

Location: Entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Add fire alarm device

Qty: 25.00

Unit of Measure: Ea.

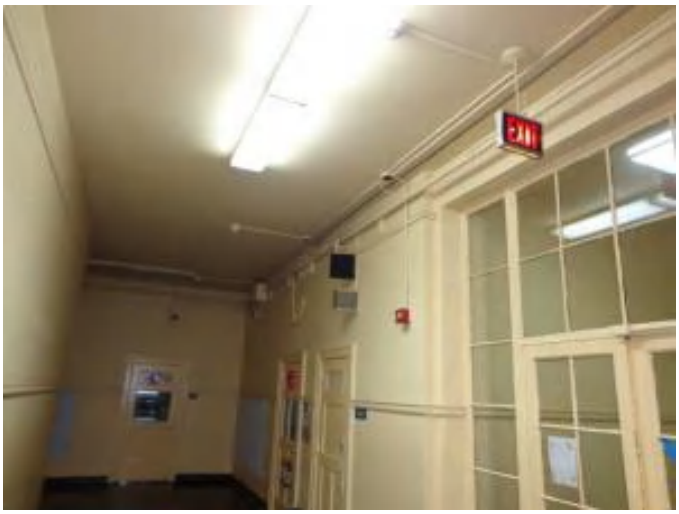
Estimate: $42,158.96

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide manual fire alarm pull stations at all means of egress. Estimate 25 manual pull stations are needed.

System: D5090 - Other Electrical Systems



Location: 1924 Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Emergency/Exit Lighting

Qty: 25.00

Unit of Measure: Ea.

Estimate: $21,195.48

Assessor Name: System

Date Created: 08/11/2015

Notes: Replace all exit signs in the original 1924 building with LED type, wired on emergency power. Estimate 25 exit signs.

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

System: B2010 - Exterior Walls

Location: Exterior Elevation

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 22,000.00

Unit of Measure: S.F.

Estimate: $710,368.39

Assessor Name: System

Date Created: 08/07/2015

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: B2030 - Exterior Doors

Location: Exterior Elevation

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace exterior doors - per leaf

Qty: 10.00

Unit of Measure: Ea.

Estimate: $91,073.21

Assessor Name: System

Date Created: 08/07/2015

Notes: 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 fair condition but are aging at a faster rate than expected based on traffic and condition. The exterior door system, store front and service doors are recommended for upgrade.

System: C1020 - Interior Doors

Location: Building Wide

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 50.00

Unit of Measure: Ea.

Estimate: $232,716.95

Assessor Name: System

Date Created: 08/07/2015

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

System: C1030 - Fittings

Location: Building Wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace blackboards with marker boards - pick the appropriate size and insert the quantities

Qty: 200.00

Unit of Measure: Ea.

Estimate: $137,646.42

Assessor Name: System

Date Created: 08/07/2015

Notes: The classroom chalk boards are original to the buildings construction. This system is beyond its expected life and universal upgrades are warranted. Remove and upgrade chalkboards to new marker board systems.

System: D2010 - Plumbing Fixtures

Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace wall hung urinals

Qty: 16.00

Unit of Measure: Ea.

Estimate: $49,945.90

Assessor Name: System

Date Created: 08/08/2015

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

System: D2020 - Domestic Water Distribution

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace domestic water piping (150 KSF)

Qty: 135,208.00

Unit of Measure: S.F.

Estimate: $560,717.08

Assessor Name: System

Date Created: 08/08/2015

Notes: Replace domestic hot and cold water pipe, fittings, valves, hangers and insulation.

System: D3020 - Heat Generating Systems

Location: ballet mechanical room

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace fuel oil pumps

Qty: 1.00

Unit of Measure: Ea.

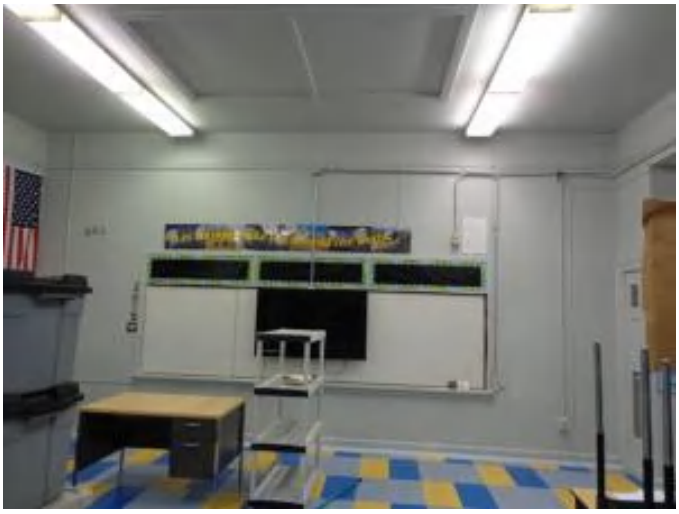
Estimate: $26,678.08

Assessor Name: System

Date Created: 08/08/2015

Notes: Replace inoperable duplex fuel oil pump system.

System: D5020 - Lighting and Branch Wiring



Location: Classrooms

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Provide surface raceway system and wiring devices

Qty: 1,600.00

Unit of Measure: L.F.

Estimate: $141,829.88

Assessor Name: System

Date Created: 08/11/2015

Notes: Add surface raceway system with three duplex receptacles each in approximately 40 classrooms.

System: D5030 - Communications and Security

Location: Classsrooms, offices

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace clock/program system

Qty: 60.00

Unit of Measure: Ea.

Estimate: $49,525.99

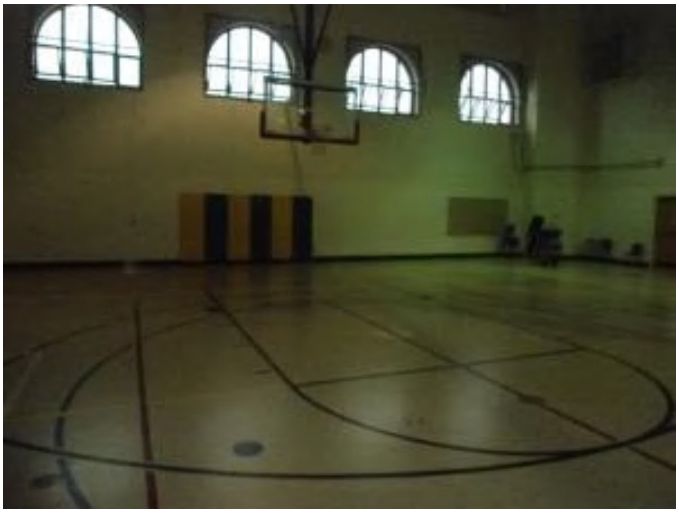
Assessor Name: System

Date Created: 08/11/2015

Notes: Replace obsolete clock system with a wireless clock system.

Priority 5 - Response Time (> 5 yrs):

System: B2020 - Exterior Windows



Location: Exterior Elevation

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 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: $1,251,505.73

Assessor Name: System

Date Created: 08/07/2015

Notes: The exterior windows are a mix of the original industrial metal framed single pane applications in the Gym and single pane applications in the classroom. Some of the windows are operable while others no longer function. The exterior windows have exceeded the expected life cycle for this type of application. It is recommended that the exterior window system 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: 5 - Response Time (> 5 yrs)

Correction: Remove and Replace Built Up Roof

Qty: 34,000.00

Unit of Measure: S.F.

Estimate: $1,151,988.37

Assessor Name: System

Date Created: 08/07/2015

Notes: There are a number of roof sections and eight different roof elevations ranging from the main roof to the mechanical roof. Parapet heights, coping materials, and the height of the flashing also varies in different sections. The main roof is a built up application that was installed in the early 1990'S. The other built up roofs have not conclusive installation dates and have been seal coated several times to extend the life cycle of the application. 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: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 250.00

Unit of Measure: Ea.

Estimate: $71,994.23

Assessor Name: System

Date Created: 08/07/2015

Notes: The interior directional and identification signage package consist of older signs hung over or besides the doors. This deficiency provides a budgetary consideration to install permeate directional and identification signage throughout the facility. Care should be taken to ensure that the signage incorporates the needs of the physically challenged and the system of placement is consistent thought out the facility.

System: C3020411 - Carpet

Location: Admin and Library

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace carpet

Qty: 2,500.00

Unit of Measure: S.F.

Estimate: $27,976.91

Assessor Name: System

Date Created: 08/07/2015

Notes: The interior carpet finish was installed approximately in 2000 and is in fair condition considering the age and high traffic conditions. This finish will exceeded its expected life within the next five years and is recommended for removal and replacement.

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: 70,000.00

Unit of Measure: S.F.

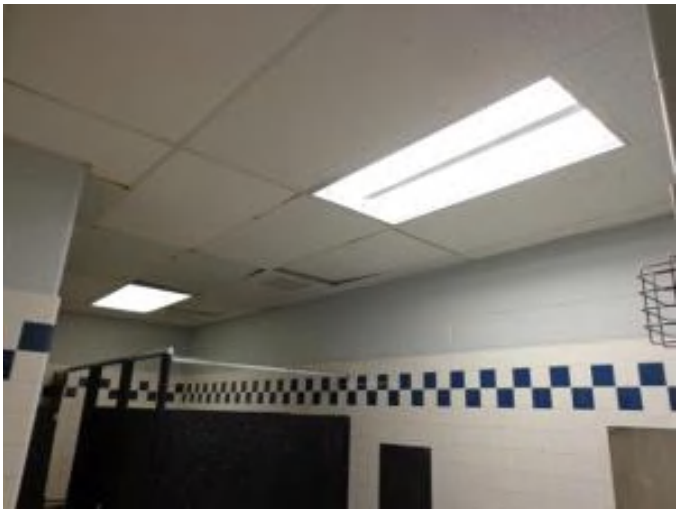
Estimate: $1,124,143.85

Assessor Name: System

Date Created: 08/08/2015

Notes: Provide a 175 ton air cooled package chiller on the roof with pumps, piping and controls. Connect to new fan coil units.

System: D5020 - Lighting and Branch Wiring



Location: 1998 Addition

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Maintain Lighting Fixtures

Qty: 30.00

Unit of Measure: Ea.

Estimate: $11,108.93

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide an allowance for 30 lighting fixtures in the 1998 addition for replacement of damaged lighting fixtures and lenses.

System: E1090 - Other Equipment

Location: Loading Dock

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Loading dock equipment - remove and replace dock leveler - delete the pipe bollards if not needed

Qty: 1.00

Unit of Measure: Ea.

Estimate: $61,763.04

Assessor Name: System

Date Created: 08/07/2015

Notes: The loading dock is located just off the parking area between the dumpsters and the access point for students entering the school from Dyer Street. The existing recommendation to enclose and move the dumpsters to a new location is related to this effort. After the dumpster correction is complete it is recommended that the loading dock area be clearly marked and safety barriers be placed to protect pedestrian traffic and mitigate possible issues related to loading and unloading materials and supplies.

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	Elevators/Lifts, residential, wheelchair lift, max	1.00	Ea.	Ground Floor	Porch-Lift	NA	NA		35	1998	2033	$23,653.40	$26,018.74
D1010 Elevators and Lifts	Hydraulic, passenger elevator, 4500 lb, 5 floors, 100 FPM	1.00	Ea.	1998 Building Addition					35	1998	2033	$151,620.00	$166,782.00
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 5230 MBH, includes burners, controls and insulated jacket, packaged	1.00	Ea.	boiler room					35	1980	2050	$122,870.00	$135,157.00
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 5230 MBH, includes burners, controls and insulated jacket, packaged	1.00	Ea.	boiler room					35	1980	2050	$122,870.00	$135,157.00
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 5230 MBH, includes burners, controls and insulated jacket, packaged	1.00	Ea.	boiler room					35	1998	2033	$122,870.00	$135,157.00
D3030 Cooling Generating Systems	Cooling tower, packaged unit, galvanized steel, induced draft, crossflow, vertical, belt drive, 100 ton, includes standard controls, excludes pumps and piping	110.00	TonAC	roof					30	1998	2028	$253.70	$30,697.70
D3030 Cooling Generating Systems	Cooling tower, packaged unit, galvanized steel, induced draft, crossflow, vertical, belt drive, 100 ton, includes standard controls, excludes pumps and piping	110.00	TonAC	roof					30	1998	2028	$253.70	$30,697.70
D3030 Cooling Generating Systems	Water chiller, screw liquid chiller, air cooled, insulated evaporator, 130 ton, includes standard controls	1.00	Ea.	chiller room					30	1998	2028	$122,760.00	$135,036.00
D3030 Cooling Generating Systems	Water chiller, screw liquid chiller, air cooled, insulated evaporator, 130 ton, includes standard controls	1.00	Ea.	chiller room					30	1998	2028	$122,760.00	$135,036.00
D3040 Distribution Systems	Central station air handling unit, packaged indoor, constant volume, 10,000 CFM, cooling coils may be chilled water or DX, heating coils may be hot water, steam or electric	1.00	Ea.	chiller room	mcquay				25	1998	2023	$33,042.90	$36,347.19
D3040 Distribution Systems	Central station air handling unit, packaged indoor, constant volume, 10,000 CFM, cooling coils may be chilled water or DX, heating coils may be hot water, steam or electric	1.00	Ea.	boiler room	mcquay				25	1998	2023	$33,042.90	$36,347.19
D3040 Distribution Systems	Central station air handling unit, packaged indoor, constant volume, 20,000 CFM, cooling coils may be chilled water or DX, heating coils may be hot water, steam or electric	1.00	Ea.	chiller room	mcquay				25	1998	2023	$82,351.50	$90,586.65
D3040 Distribution Systems	Central station air handling unit, packaged indoor, constant volume, 5000 CFM, cooling coils may be chilled water or DX, heating coils may be hot water, steam or electric	1.00	Ea.	gym mechanical room	mcquay				25	1998	2023	$22,301.40	$24,531.54

D3040 Distribution Systems	Central station air handling unit, packaged indoor, constant volume, 5000 CFM, cooling coils may be chilled water or DX, heating coils may be hot water, steam or electric	1.00	Ea.	ballet mechanical room	mcquay				25	1998	2023	$22,301.40	$24,531.54
D3040 Distribution Systems	Pump, circulating, cast iron, close coupled, end suction, bronze impeller, flanged joints, 15 HP, to 1000 GPM, 5" size	1.00	Ea.	chiller room					25	1998	2023	$7,780.50	$8,558.55
D3040 Distribution Systems	Pump, circulating, cast iron, close coupled, end suction, bronze impeller, flanged joints, 15 HP, to 1000 GPM, 5" size	1.00	Ea.	chiller room					25	1998	2023	$7,780.50	$8,558.55
D3040 Distribution Systems	Pump, circulating, cast iron, close coupled, end suction, bronze impeller, flanged joints, 15 HP, to 1000 GPM, 5" size	1.00	Ea.	chiller room					25	1998	2023	$7,780.50	$8,558.55
D3040 Distribution Systems	Pump, circulating, cast iron, close coupled, end suction, bronze impeller, flanged joints, 15 HP, to 1000 GPM, 5" size	1.00	Ea.	chiller room					25	1998	2023	$7,780.50	$8,558.55
D4010 Sprinklers	Fire pumps, electric, 1000 GPM, 150 psi, 142 HP, 3550 RPM, 5" pump, including controller, fittings and relief valve	1.00	Ea.	mechanical room					35	1998	2033	$38,724.70	$42,597.17
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NEHB, 277/480 V, 400 A, 0 stories, 0' horizontal	2.00	Ea.	Adjacent to MAin Electrical Room	Siemens	SE	Cat. No. SEE42JX400CTS		30	1998	2028	$13,413.60	$29,509.92
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NEHB, 277/480 V, 400 A, 0 stories, 0' horizontal	1.00	Ea.	1924 Main Electrical Room	Siemens	S4	Cat. No. S460HJ400FTS		30	1998	2028	$13,413.60	$14,754.96
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NEHB, 277/480 V, 400 A, 0 stories, 0' horizontal	1.00	Ea.	Main Electrical Room	Siemens	S4	Cat. No. S4E60HJ400FTS		30	1998	2028	$13,413.60	$14,754.96
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 400 A, 0 stories, 0' horizontal	1.00	Ea.	Main Electrical Room	Siemens	S4	Cat. No. S4C60JX400FTS		30	1998	2028	$7,824.60	$8,607.06
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 600 A, 0 stories, 0' horizontal	1.00	Ea.	1924 Main Electrical Room	Siemens	S4	Cat. No. S4C75SL600ETS		30	1998	2028	$10,650.15	$11,715.17
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 277/480 V, 1600 A	3.00	Ea.	Main Electrical Room	Siemens	SB3	S.O. 17-30010-F10		30	1998	2028	$53,561.25	$176,752.13
D5010 Electrical Service/Distribution	Transformer, dry-type, 3 phase 15 kV primary 277/480 volt secondary, 1500 kVA	1.00	Ea.	Main Electrical Room	ABB	NA	24-36786R01		30	1998	2028	$125,442.00	$137,986.20
												Total:	**$1,612,995.02**

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):	74,300
Year Built:	1924
Last Renovation:	
Replacement Value:	$1,035,886
Repair Cost:	$60,538.55
Total FCI:	5.84 %
Total RSLI:	37.16 %

Description:

Attributes:

General Attributes:

Bldg ID:	S725001	Site ID:	S725001

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	36.73 %	6.73 %	$60,538.55
G40 - Site Electrical Utilities	40.00 %	0.00 %	$0.00
Totals:	**37.16 %**	**5.84 %**	**$60,538.55**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.	1,500	30	2008	2038		76.67 %	0.00 %	23			$17,280
G2020	Parking Lots	$7.65	S.F.	10,000	30	2008	2038		76.67 %	2.89 %	23		$2,207.61	$76,500
G2030	Pedestrian Paving	$11.52	S.F.	30,800	40	1980	2020		12.50 %	8.11 %	5		$28,765.70	$354,816
G2040	Site Development	$4.36	S.F.	74,300	25	2000	2025		40.00 %	5.82 %	10		$18,852.52	$323,948
G2050	Landscaping & Irrigation	$3.78	S.F.	33,500	15	2010	2025		66.67 %	8.46 %	10		$10,712.72	$126,630
G4020	Site Lighting	$1.07	S.F.	74,300	30	1997	2027		40.00 %	0.00 %	12			$79,501
G4030	Site Communications & Security	$0.77	S.F.	74,300	30	1997	2027		40.00 %	0.00 %	12			$57,211
								Total	**37.16 %**	**5.84 %**			**$60,538.55**	**$1,035,886**

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.

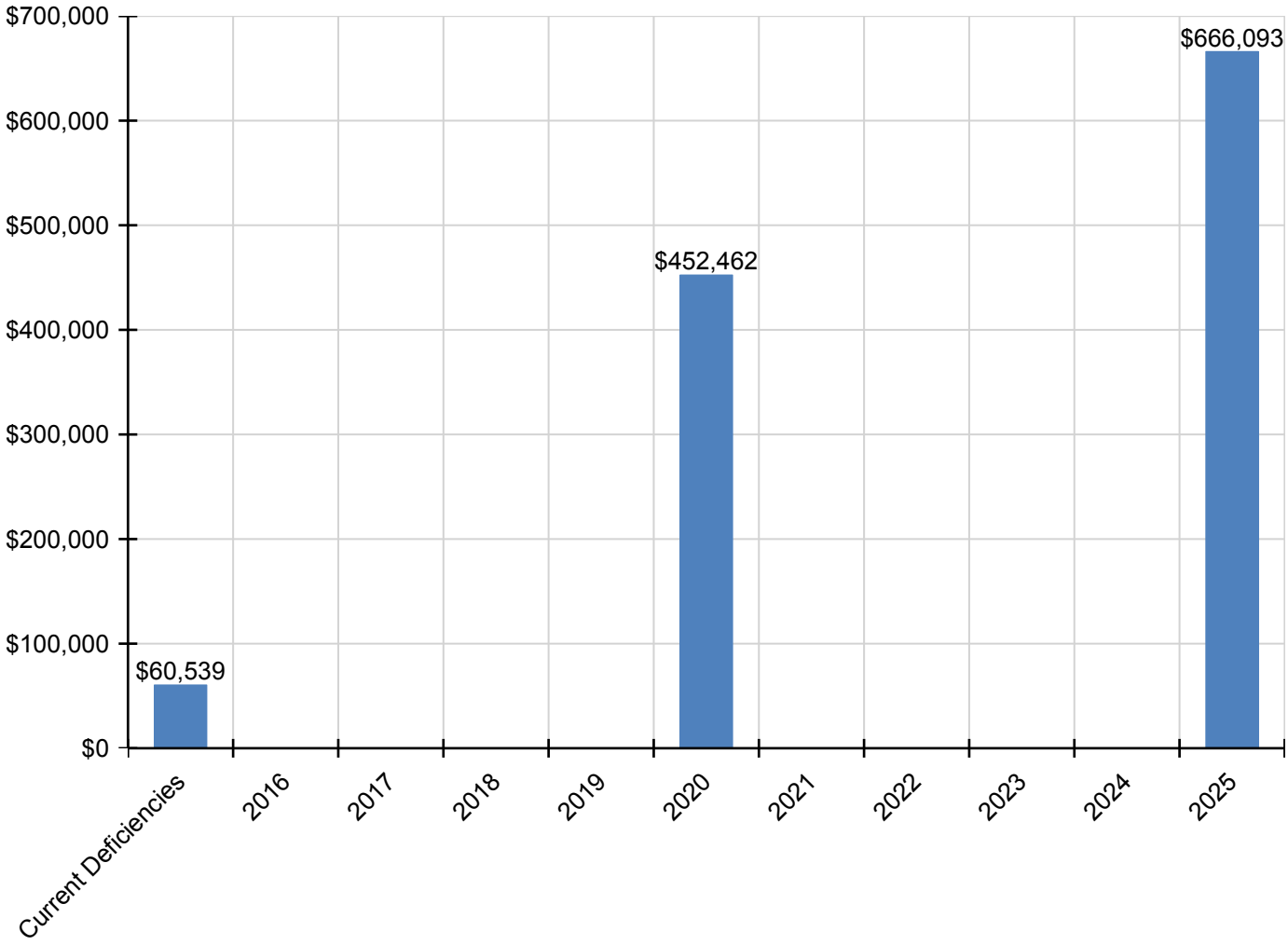
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$60,539**	**$0**	**$0**	**$0**	**$0**	**$452,462**	**$0**	**$0**	**$0**	**$0**	**$666,093**	**$1,179,094**
G - Building Sitework	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G20 - Site Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2010 - Roadways	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2020 - Parking Lots	$2,208	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,208**
G2030 - Pedestrian Paving	$28,766	$0	$0	$0	$0	$452,462	$0	$0	$0	$0	$0	**$481,228**
G2040 - Site Development	$18,853	$0	$0	$0	$0	$0	$0	$0	$0	$0	$478,895	**$497,748**
G2050 - Landscaping & Irrigation	$10,713	$0	$0	$0	$0	$0	$0	$0	$0	$0	$187,198	**$197,911**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

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

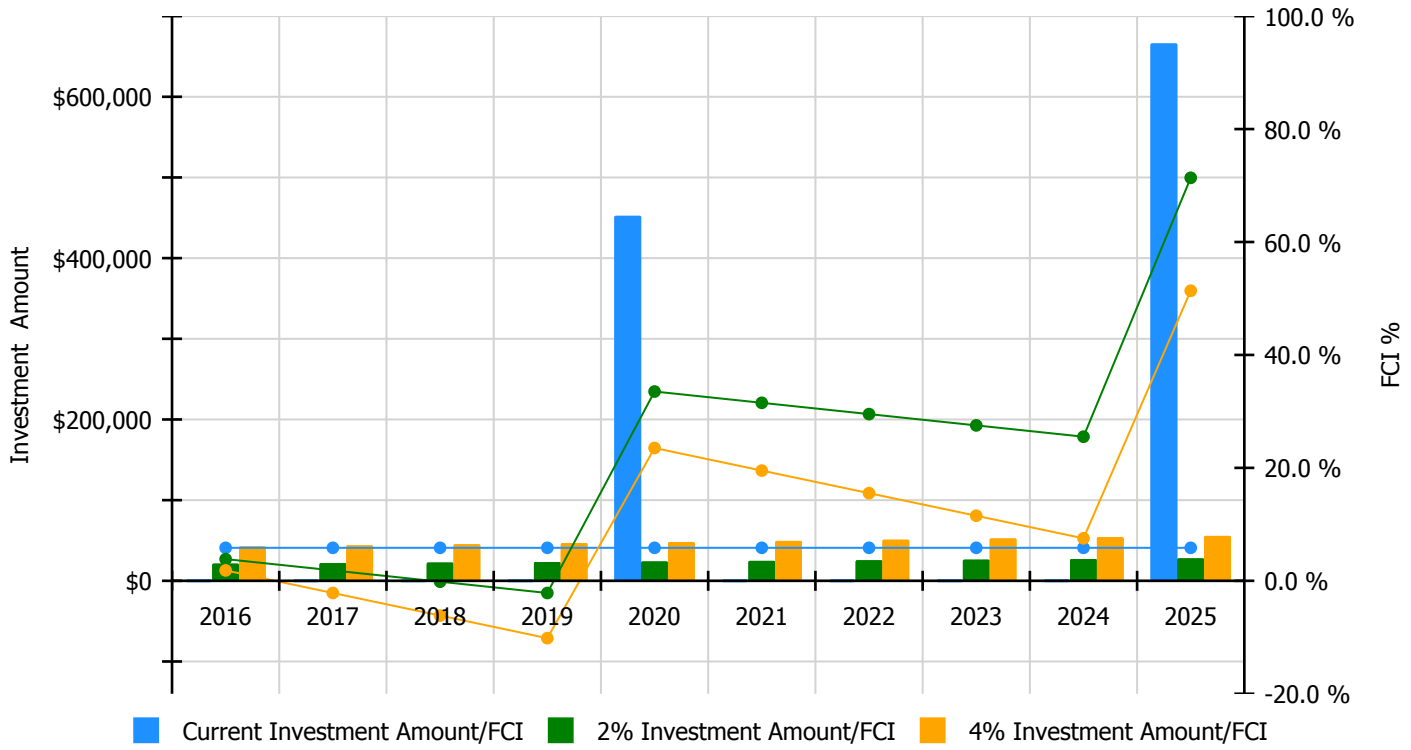


10 Year FCI Forecast by Investment Scenario

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

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

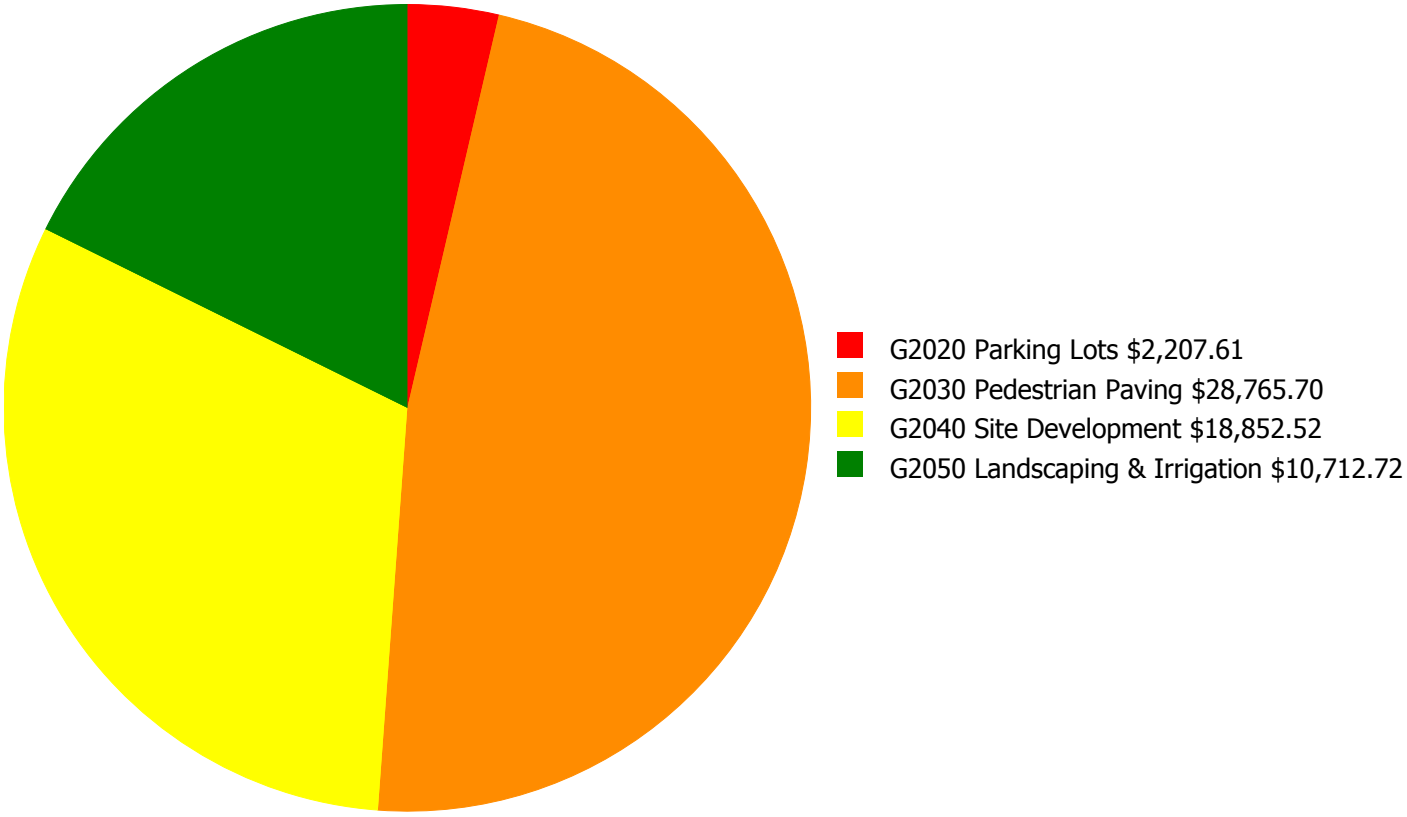
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 5.84%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$21,339.00	3.84 %	$42,679.00	1.84 %
2017	$0	$21,979.00	1.84 %	$43,959.00	-2.16 %
2018	$0	$22,639.00	-0.16 %	$45,278.00	-6.16 %
2019	$0	$23,318.00	-2.16 %	$46,636.00	-10.16 %
2020	$452,462	$24,018.00	33.52 %	$48,035.00	23.52 %
2021	$0	$24,738.00	31.52 %	$49,476.00	19.52 %
2022	$0	$25,480.00	29.52 %	$50,960.00	15.52 %
2023	$0	$26,245.00	27.52 %	$52,489.00	11.52 %
2024	$0	$27,032.00	25.52 %	$54,064.00	7.52 %
2025	$666,093	$27,843.00	71.37 %	$55,686.00	51.37 %
Total:	**$1,118,556**	**$244,631.00**		**$489,262.00**	

Deficiency Summary by System

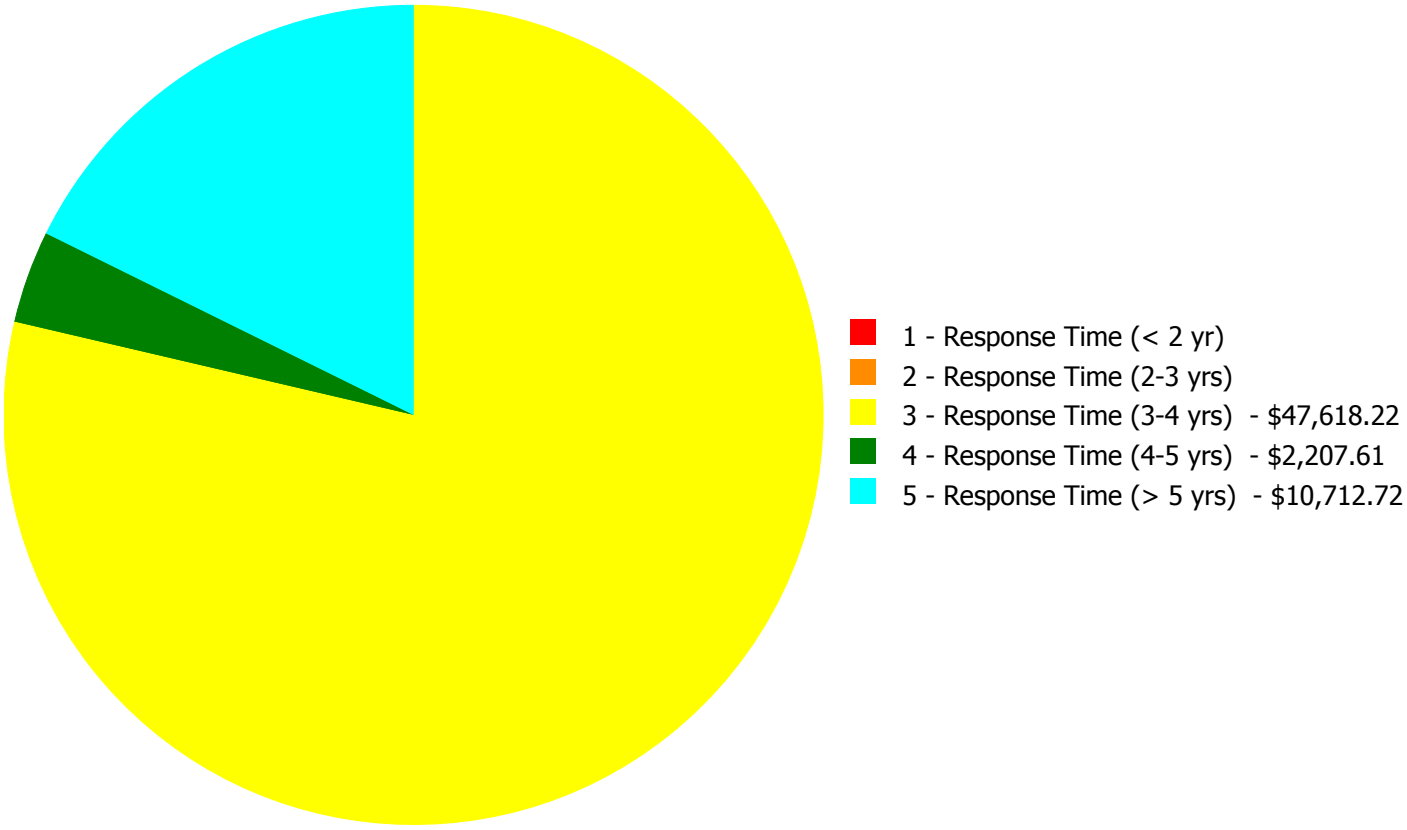
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $60,538.55

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: $60,538.55

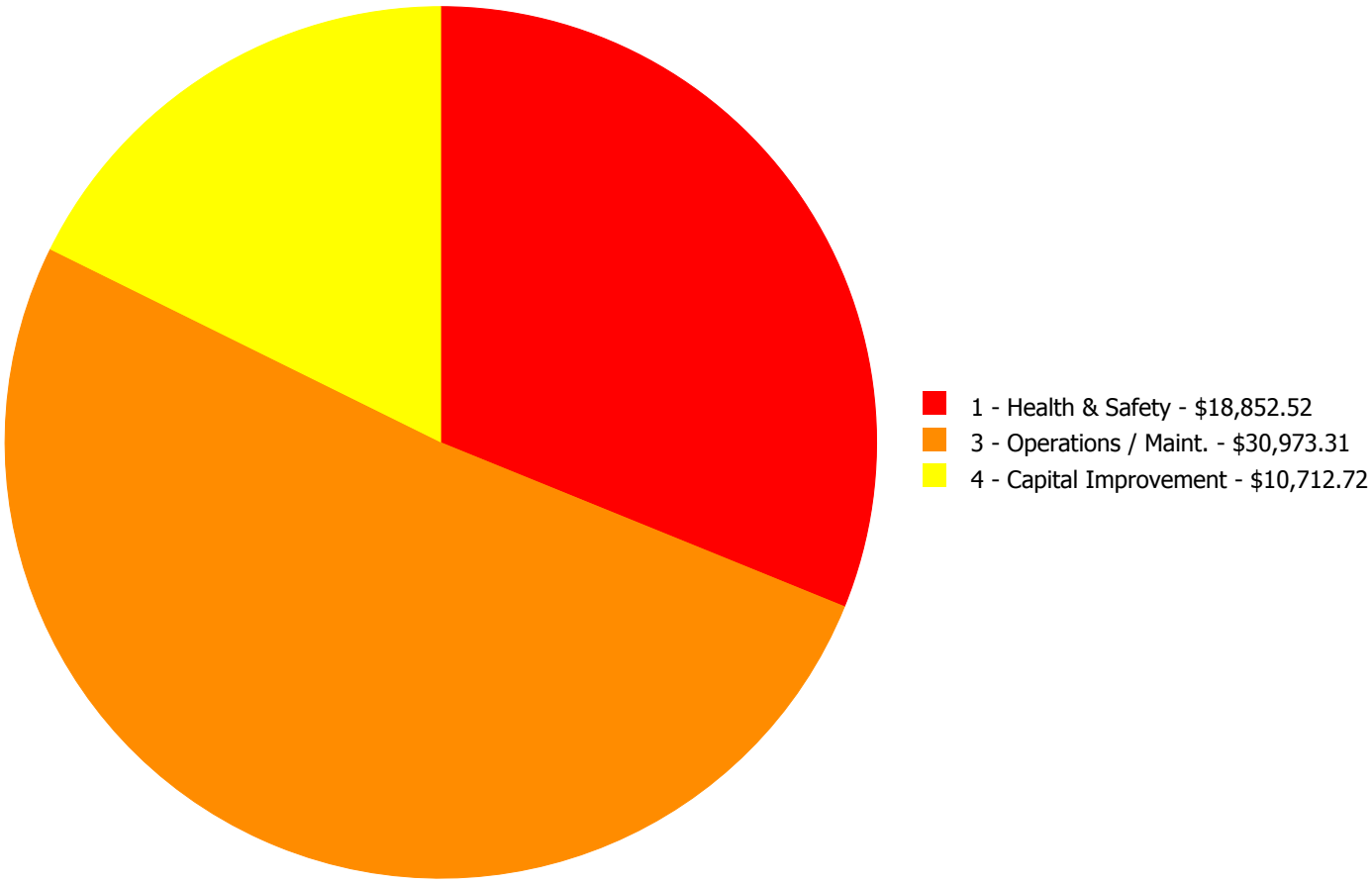
Deficiency By Priority Investment Table

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	$2,207.61	$0.00	$2,207.61
G2030	Pedestrian Paving	$0.00	$0.00	$28,765.70	$0.00	$0.00	$28,765.70
G2040	Site Development	$0.00	$0.00	$18,852.52	$0.00	$0.00	$18,852.52
G2050	Landscaping & Irrigation	$0.00	$0.00	$0.00	$0.00	$10,712.72	$10,712.72
	Total:	$0.00	$0.00	$47,618.22	$2,207.61	$10,712.72	$60,538.55

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: $60,538.55

Deficiency Details by Priority

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

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

System: G2030 - Pedestrian Paving

Location: Exterior Elevation
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Remove and replace concrete sidewalk or concrete paving - 4" concrete thickness
Qty: 2,000.00
Unit of Measure: S.F.
Estimate: $28,765.70
Assessor Name: Tom Moe
Date Created: 08/07/2015

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

System: G2040 - Site Development

Location: Parking Lot
Distress: Health Hazard / Risk
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Build secure trash dumpster enclosure
Qty: 1.00
Unit of Measure: Ea.
Estimate: $18,852.52
Assessor Name: Ben Nixon
Date Created: 08/08/2015

Notes: The trash dumpster is located in the parking lot 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.

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

System: G2020 - Parking Lots

Location: Play Area

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Fill cracks in AC paving - by the LF - select appropriate width and depth

Qty: 1,000.00

Unit of Measure: L.F.

Estimate: $2,207.61

Assessor Name: Ben Nixon

Date Created: 08/08/2015

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.

Priority 5 - Response Time (> 5 yrs):

System: G2050 - Landscaping & Irrigation

Location: Site

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace defective irrigation system - pop up spray system

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $10,712.72

Assessor Name: Tom Moe

Date Created: 08/07/2015

Notes: The landscaping is in good condition and well maintained but with no irrigation system. The landscaping is generally located near the parking / play area of the site with limited turf sections around the general exterior of the school. This deficiency provides a budgetary consideration for the installation of an irrigation system for this site.

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