EAST CAROLINA UNIVERSITY

Facility Condition Assessment

Student Recreation Center

Asset SRCB

Inspected March 17, 2015

ISES CORPORATION

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FACILITY CONDITION ASSESSMENT

SECTION 1

ASSET OVERVIEW

EXECUTIVE SUMMARY - STUDENT RECREATION CENTER

Building Code: SRCB
Building Name: STUDENT RECREATION CENTER
Year Built: 1995
Building Use: Gymnasium / Athletics
Square Feet: 150,227

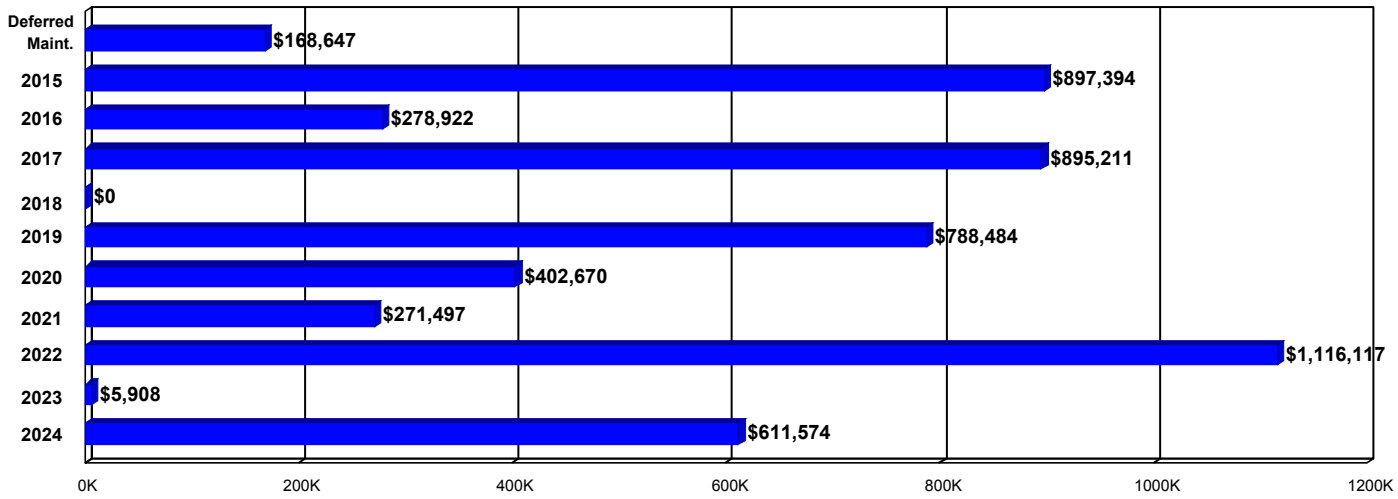
Non-Recurring Project Costs by Priority

Immediate:	$0
Critical:	$0
Non-Critical:	$4,337

Current Replacement Value: **$40,671,000**

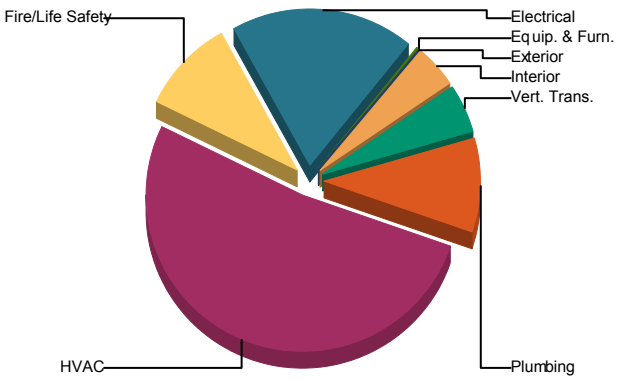
Total Non-Recurring Project Costs: **$4,337**

Recurring Component Replacement Cost By Year



Recurring Facilities Renewal Cost By System

Exterior	**$3,524**
Interior	**$244,374**
Plumbing	**$525,047**
HVAC	**$2,826,906**
Fire/Life Safety	**$528,728**
Electrical	**$1,029,345**
Site	**$0**
Conveying	**$267,256**
Equipment	**$11,244**
Total	**$5,436,423**



Non-Recurring Project Cost	**$4,337**
Deferred Maintenance Cost	**$168,647**
Projected Facility Renewal Cost	**$5,267,776**
Total 10-Year Facility Cost	**$5,440,760**

FCNI	FCI	10-Yr $/SqFt
0.13	0.004	$36.22

All costs shown as Present Value

ASSET SUMMARY

Constructed in 1997, the 150,227 gross square foot, two-story Student Recreation Center at East Carolina University contains a variety of fitness areas, including weight and exercise rooms, a running track, racquetball and basketball courts, two indoor pools, and one outdoor pool. There are some classrooms and administrative offices. This irregularly shaped, Romanesque style building has a mostly red brick exterior, with lighter colored brick and concrete accents. The rotunda main entry has metal and glass entry doors with arched storefront glazing above and is topped with arched clerestory windows and a large pyramidal glass skylight. Around the outdoor pool has a brick pilaster screen wall with metal picket infill.

Information for this report was gathered during a site visit on the week of March 17, 2015.

Site

The site is adequately landscaped. Sidewalk systems include brick pavers and concrete. They are in good condition and expected to have a lifecycle that extends beyond the scope of this report. The parking area is a shared lot. The loading dock area with support parking is a mix of concrete pads and asphalt paving. The paving is in very good condition. No upgrades are recommended at this time.

Exterior Structure

The exterior brick facades are in very good condition, and no upgrades are anticipated within the next ten years. The building has both a pitched, standing seam metal roof and a flat, modified bitumen roof. There are also several skylights and aluminum-framed fiberglass panels. The roofing was reportedly installed in 2015. The systems are in very good condition and should outlast the scope of this report. The double-pane, aluminum frame windows are in good condition. Exterior doors are aluminum and glass at the main and secondary entrances and metal at the emergency exits and mechanical rooms. There are also two overhead doors at the loading dock. The exterior doors and windows should outlast the scope of this report.

Interior Finishes/Systems

The administrative areas have carpet, painted CMU and drywall walls, and acoustical tile ceilings. The carpeting is near the end of its useful life and should be upgraded. The painted walls and acoustical tile ceilings are in good condition and expected to have a lifecycle that extends beyond the outlook of this report.

The rubberized athletic flooring in the workout, track, and free weight areas is in very good condition, as is the hardwood flooring in the studios and playing courts. Common areas and the natatorium have

ceramic or vinyl tile floors. The restrooms have a ceramic tile floors. These finishes are well maintained and expected to have a lifecycle that extends beyond the outlook of this report.

Ceilings are painted in areas such as the racquetball and handball courts and acoustical tile in the administrative and common areas. There is also a section of 12 x 12 attached acoustical tile near the Juice Bar common area. The ceilings are in very good condition, with no upgrade required at this time.

The glass block walls in and around the administrative areas are well maintained. The remaining walls are mostly painted CMU or drywall. These finishes are generally in fair to good condition and should require only normal cyclical renewal over the next ten years. The few ceramic tile walls in the restrooms should outlast the scope of this report.

The interior doors for the administrative areas are the standard commercial, solid core wood doors. The handball and racquetball courts have glass doors. All doors are in very good condition, and no upgrade is recommended.

Accessibility

This building is considered handicap accessible. At-grade entrances provide wheelchair access into the building, and there are power assisted entrances. Doors have the required lever hardware, and signage is ADA compliant. The stair handrails are the proper geometry and are installed at the correct height. Both the indoor and outdoor pools have a zero entry section, and the indoor pool has a wheelchair lift. The restrooms and locker rooms are also ADA compliant, and there are drinking fountains on both levels. No additional upgrades are recommended at this time.

Health

Walk-in cold room 115 supports the food service area of this facility. The condenser unit is located on the roof. The refrigeration system is near the end of its expected service life and should be scheduled for replacement. The enclosure, however, should outlast the scope of this report.

Fire/Life Safety

Items are being stored under the main stair, in the open space below the bottom stringer. This area is not in the direct path of travel, but the university should ensure that this material does not interfere with the path of travel.

This facility is protected by a modern point addressable central fire alarm system with a Notifier control panel. The devices that serve this system include manual pull stations, audible/visible devices, and smoke detectors. The control panel was recently installed and should outlast the scope of this report. The devices, however, are mainly original and should be scheduled for replacement soon. Also add a strobe to restroom 141.

This facility is protected by an automatic, comprehensive, sprinkler system. Most of the system is wet-pipe, but a dry-pipe system is located in the boat storage area. Most of the sprinkler system is adequate and in good condition. With proper testing and maintenance, it will outlast the scope of this report. The exception is in the mezzanine above mechanical room 224. This area is the air intake for air handlers 4 and 5. When the outside air is below freezing, the air handlers cannot be run properly because the outside air could freeze the sprinkler pipes. The sprinkler system is this area is recommended for replacement with a dry-pipe system. A 30 hp fire pump provides additional water pressure to the sprinkler system. The fire pump shows significant corrosion and should be scheduled for replacement.

Exit signs are LED illuminated and connected to the emergency power network. Emergency lighting is available through standard interior light fixtures that are connected to the emergency power network. The exit signs are in fair condition but are approaching the end of their expected service life. Replacement is recommended.

HVAC

The facility is connected to the campus steam loop via a group of pressure reducing valves (PRV) in room 159. A large shell-and-tube heat exchanger uses the steam to produce heating hot water. The hot water is circulated to the air handling units (AHU), fan coil units, and reheat coils throughout the building by several heating hot water pumps. A condensate receiver captures the steam condensate and completes the campus steam loop.

The PRVs and condensate receiver have the shortest expected service life and should be scheduled for replacement in the next few years. The heating hot water pumps are in fair condition but should be scheduled for replacement in the next ten years. The large heat exchanger has a longer expected service life and should outlast the scope of this report.

Two 400 ton Trane centrifugal chillers located in room 159 provide chilled water to the air handlers. An 800 ton cooling tower (located on the southeast exterior) provides heat removal from the chilled water. Several chilled water pumps and condenser water pumps circulate the heat removal medium. Chiller 1 has rebuilt compressors. It should provide reliable service for the next ten years. Chiller 2 has original compressors. This chiller and the pumps should be scheduled for replacement towards the end of the next ten years. The cooling tower has a new variable frequency drive, and the fill has been replaced. This has extended the expected service life, but the unit should still be scheduled for replacement in the next ten years.

Several Carrier air handling units provide conditioned air to the interior. The AHUs use heating hot water coils for heating and chilled water coils for cooling. The largest AHUs are AHU1, AHU2, AHU4, and AHU5. AHU1 (30 hp) is located in room 235. AHU2 (20 hp) is located in room 214. AHU4 (40 hp) and AHU5 (75 hp) are located in room 224. The larger AHUs also have return fans. Smaller AHUs and several fan coil units (FCU) also serve this facility. These units (AHUs, return fans, and FCUs) are original. Based upon normal lifecycle depletion, all of these units should be scheduled for replacement towards the end of the next ten years. AHU4 serves the swimming pool area and is thus exposed to moisture and chlorine. The upper half of the chilled water coils has already been replaced. The remaining coils will need replacement soon. Therefore, the lifecycle for AHU4 has been adjusted down. The lifecycle for AHU5 has

also been adjusted down because of the lack of a preheat system, steel rather than a stainless steel drain pan, and the set up for the humidification system needs to be corrected so that the humidification can run all the time. Also, a complexity factor has been added to the largest AHUs to account for the extra costs that involved with replacement (including crane and removal/replacement of section of roof). Also note that replacement fan coil units in the ceiling areas should be installed so that they can be easily maintained.

Additional ventilation is provided by centrifugal roof exhausters, utility fans, and ceiling fans. Most of these are original and should be scheduled for replacement due to normal wear and tear.

The HVAC distribution network is in fair condition. It is reported that many of the victaulic fittings on the steam piping leak when the steam is turned off, damaging the flooring. Also, some of the VAV boxes have had ruptures in their copper tubing. Consequently, the lifecycle for the distribution network has been reduced. However, the end of the expected service life is still outside the bounds of this report.

The HVAC controls are the original Landis+Gyr with electric actuators. Replacement parts (such as the actuators on the chilled water pipe) are very difficult to find. The control panels have received a few upgrades, but most of the end devices are original. Several fans (AHUs, return fans, and cooling tower) are equipped with variable frequency drives (VFD). Most of the original VFDs have been replaced at various times. The expected service life has been extended a few years, but the HVAC controls should still be scheduled for replacement. The VFDs should also be scheduled for replacement as they reach the end of their expected service life. As part of the improvements to the controls, a VFD should be added to the supply fan on AHU4.

In the past, the ductwork for the lint removal from the dryer in room 136 has caused problems. The addition of a trash fan or redesign of the system could help prevent future clogging of the ductwork. This can be handled as part of routine maintenance.

Electrical

The 7,200 volt power enters the oil-filled transformer at the southeast exterior of the building. The 1,500 kVA Siemens transformer reduces the power to 480/277 volts and feeds the power into the 3,000 amp Siemens switchboard. The transformer and switchboard are original. The transformer has a longer expected service life and should provide reliable service beyond the next ten years. The switchboard, located in room 159, should be scheduled for replacement soon due to normal lifecycle depletion.

The electrical distribution network is a dual voltage configuration. The 277/480 volt power is distributed to branch transformers that step the power down to 120/208. The lighting and major mechanical systems are supported by the 277/480 volt circuit. The panels and branch transformers were manufactured by Siemens and General Electric. The distribution network is in good condition and should not require any significant work in the next ten years.

Interior spaces are illuminated by fluorescent, LED, and ceramic metal halide fixtures. The LED and ceramic metal halide fixtures above the gym floor area were recently installed. These will outlast the scope of this report. The remaining areas have lighting that appears to be original. The lighting is still in

good condition but should be scheduled for replacement in the next ten years. It is reported that the light control panels are outdated and cannot communicate with modern systems. Replace these panels. Specify energy-efficient fixtures, and install occupancy sensors where possible.

The exterior areas adjacent to the building are illuminated by HID and fluorescent fixtures. There are a variety of fixtures, including recessed, ground-mounted, wall-mounted, surface-mounted and stanchion. The fluorescent and recessed fixtures appear to be original. Others were added approximately fifteen years ago, while the newest fixtures appear to be about ten years old. The fixtures that are more than ten years old are at the end of their expected service life and should be scheduled for replacement soon. The newer fixtures should be replaced in the next ten years. Additionally, exterior lighting was lacking at both the north and south entrances. Add lighting to these areas, and place the new lights on photocell activation.

Emergency power is provided by the 185 kW Onan diesel generator located at the southeast exterior. The Onan automatic transfer switch (ATS) is located in room 159. Both the generator and ATS are original. They appear to be in good condition but should be scheduled for replacement towards the end of the next ten years due to normal lifecycle depletion.

Plumbing

Potable water is distributed throughout this facility via a copper piping network. There are backflow preventers (BFP) on the domestic water main and the fire suppression main. Both BFPs are assumed to be original. Due to the normally short expected service life of BFPs, these should be scheduled for replacement soon. Sanitary waste and stormwater piping is cast iron, no-hub. The supply and drain piping networks appear to be in good to fair condition. They will likely provide reliable service throughout the scope of this analysis. An exception is that there is reportedly a lack of cut-off valves for the supply pipe. Also, many of the valves are gate valves. Ball valves should be installed. This should be addressed as part of routine maintenance.

The plumbing fixtures are original. Normally, they would be expected to provide reliable service for much longer than the scope of this report. However, the restroom fixtures receive heavy use. They are currently is fair to good condition but should be scheduled for replacement in the next ten years. Restroom fixtures should have automatic, hands-free faucets and flush valves.

A large steam-fed water tank provides domestic hot water. This tank shows significant corrosion and is overdue for replacement. This facility requires hot water at both 120°F and 140°F temperatures. Currently, there is only one domestic water heater providing both temperatures via mixing valves. This water heater should be replaced with two separate water heaters, one for each temperature. The complexity of the existing water heater has been increased in the Lifecycle Model to account for the replacement cost of two units.

A set of three plate frame heat exchangers are located in room 157. These provide hot water as a secondary (efficient) method to heat the swimming pools. The heat exchangers are not functioning properly. Their immediate replacement would provide a significant cost savings for the operation of the swimming pools. Also included in this replacement is the PVC piping between the heat exchangers and

the swimming pool. The existing piping has been warped by the high water temperatures. Making repairs to the piping is becoming impossible because the pipe is no longer round.

Filtration systems for the swimming pools are located in room 154. These systems are very near the end of their expected service life and should be scheduled for replacement soon.

Vertical Transportation

This facility is served by a two-stop hydraulic passenger elevator. It is an Otis elevator with a 30 hp hydraulic pump. The elevator mechanicals are currently in good condition but expected to reach the end of their service life in the next ten years. Schedule a modernization project at that time. The cab should receive a renovation in the near future.

Note: The renewal needs outlined in this report were identified from the visual inspection and staff interviews. Our professional architectural and engineering inspectors thoroughly examined the accessible equipment and various building components to determine what repairs or modifications may be necessary to restore the systems and asset to an acceptable condition, or to a level defined by the Client. The estimated costs represent correction of existing deficiencies and anticipated lifecycle failures within a ten-year period. These recommendations are to bring the facility to modern standards without any anticipation of change to facility space layout or function. The total costs include variable project delivery costs as determined by the Owner. The costs developed do not represent the cost of a complete facility renovation. Soft costs not represented in this report include telecommunications, security, furniture, window treatment, space change, program issues, relocation, swing space, contingency, or costs that could not be identified or determined from the visual inspection and available building information.

INSPECTION TEAM DATA

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Date of Inspection

March 17, 2015

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Client Contact

NAME	POSITION
Griffin L. Avin	Director of Facilities Services, Health Sciences Campus

DEFINITIONS

The following information is a clarification of the Facility Condition Assessment report using example definitions.

Overview

Recurring and Non-Recurring Facility Renewal Costs

Facility renewal costs are divided into two main categories – recurring and non-recurring. Recurring costs are cyclical and consist primarily of major repairs to or replacement/rebuilding of facility systems and components (e.g., roof or HVAC system replacement at or past the end of its normal useful life). The tool for projecting the recurring renewal costs is the Lifecycle Component Inventory, which is explained in detail below. Non-recurring costs typically consist of modifications or repairs necessary to comply with fire/life safety or accessibility code requirements or to address isolated, non-recurring deficiencies that could negatively affect the structure of the facility or the systems and components within. For these non-recurring costs, projects have been developed and include estimated material and labor costs.

Facility Condition Needs Index (FCNI)

The FCNI provides a lifecycle cost comparison. It is a ratio of the sum of the recurring and non-recurring facilities renewal costs over ten years to the current replacement value of the asset. The current replacement value is based on replacement with current construction standards for the facility use type, and not original design parameters. This index gives the university a comparison within all buildings for identifying worst case/best case building conditions.

$$\text{FCNI} = \frac{\text{Non-Recurring Projects + 10-Year Recurring Component Renewal}}{\text{Current Replacement Value}}$$

Facility Condition Index (FCI)

The FCI is a ratio of the Deferred Maintenance facilities renewal costs to the current replacement value.

$$\text{FCI} = \frac{\text{Deferred Maintenance}}{\text{Current Replacement Value}}$$

Material and Labor Cost Factors and Additional Markups

The project costs are adjusted from the national averages to reflect conditions in Greenville using the R. S. Means City Cost Index for material and labor cost factors. The percentage adjustment of the national average is shown in the table below. Typical general contractor fees (which could include profit, overhead, bonds, and insurance) and professional fees (architect or engineer design fees and in-house design costs) are also included in the project costs.

GLOBAL MARKUP	%
Local Labor Index	51.3
Local Materials Index	100.7
General Contractor Markup	20.0
Professional Fees	16.0

Recurring Costs

Asset Component Inventory and Cost Projections

The Asset Component Inventory (starting on page 4.1.1) is based on industry standard lifecycle expectancies applied to an inventory of major building systems and major components within a facility. This is a list of all major systems and components within the facility. Each indicated component has the following associated information:

CATEGORY	DEFINITION
Uniformat Code	The standard Uniformat Code that applies to the component
Component Description	This line item describes the individual component
Identifier	Unique identifying information entered for a component as necessary
Quantity	The quantity of the listed component
Units	The unit of measure associated with the quantity
Unit Cost	The cost to replace each individual component unit (this cost is in today's dollars)
Complexity Adjustment	A factor utilize to adjust component replacement costs accordingly when it is anticipated that the actual cost will deviate from the average for that component
Total Cost	Unit cost multiplied by quantity, in today's dollars. Note that this is a one-time renewal/replacement cost
Install Date	Year that the component was or is estimated to have been installed. When this data is not available, it defaults to the year the asset was constructed
Life Expectancy	Average life expectancy for each individual component
Life Expectancy Adjustment	Utilized to adjust the first lifecycle of the component and to express when the next replacement should occur

The component listing forms the basis of the Recurring Component Renewal Schedule, which provides a year-by-year list of projected recurring renewal costs over the next ten years. Each individual component is assigned a replacement year based on lifecycles, and the costs for each item are in future year dollars. For items that are already past the end of their lifecycle, the replacement year is shown as Deferred Maintenance.

For a longer term perspective, the Recurring Component Expenditure Projections Graph presents recurring renewal cost projections over a 50-year period (starting from the date the report is run) based on each individual item's renewal cost and life span. Some components might require renewal several times within the 50-year model, while others might not occur at all. The vertical bars on the graph represent the accumulated total costs for each individual year. The average annual cost per gross square foot ($/GSF) is shown at the bottom of the graph. In this calculation, costs are not escalated. This figure can be utilized to assess the adequacy of existing capital renewal and repair budgets.

Recurring Cost Classifications

- Deferred Maintenance
  Recurring repairs, generated by the Lifecycle Component Inventory, that are past due for completion but have not yet been accomplished as part of normal maintenance or capital repair efforts. Further deferral of such renewal could impair the proper functioning of the facility. Costs estimated for Deferred Maintenance projects should include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to effect the needed repairs.

- Recurring Component Replacement
  Recurring renewal efforts, generated by the Lifecycle Component Inventory, that will be due within the scope of the assessment. These projects represent regular or normal facility maintenance, repair, or renovation that should be planned in the near future.

Non-Recurring Costs

As previously mentioned, modifications or repairs necessary to comply with fire/life safety or accessibility code requirements and those that address isolated, non-recurring deficiencies that could negatively affect the structure of the facility or the systems and components within are not included in the Lifecycle Component Inventory. For each such deficiency identified during the facility inspection, a project with an estimated cost to rectify said deficiency is recommended. These projects each have a unique identifier and are categorized by system type, priority, and classification, which are defined below. The costs in these projects are also indexed to local conditions and markups applied as the situation dictates.

Project Number

Each project has a unique number consisting of three elements, the asset identification number, system code, and a sequential number assigned by the FCA software. For example, the third fire/life safety project identified for asset 0001 would have a project number of 0001FS03 (0001 for the asset number, FS for fire/life safety, and 03 being the next sequential number for a fire/life safety project).

Project Classifications

- Plant/Program Adaption
  Non-recurring expenditures, stored in the Projects module, required to adapt the physical plant to the evolving needs of the institution and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g., accessibility), facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).

- Corrective Action
  Non-recurring expenditures, stored in the Projects module, for repairs needed to correct random and unpredictable deficiencies. Such projects are not related to aligning a building with codes or standards. Deficiencies classified as Corrective Action could have an effect on building aesthetics, safety, or usability.

Priority Classes

Recurring renewal needs do not receive individual prioritization, as the entire data set of needs in this category is year-based. Each separate component has a distinct need year, rendering further prioritization unnecessary. Each non-recurring renewal project, however, has a priority assigned to indicate the criticality of the recommended work. The prioritization utilized for this subset of the data is as follows.

- Priority 1 – Immediate

  Projects in this category require immediate action to:

  a. correct a cited safety hazard
  b. stop accelerated deterioration
  c. and/or return a facility to normal operation

- Priority 2 – Critical

  Projects in this category include actions that must be addressed in the short-term:

  a. repairs to prevent further deterioration

  b. improvements to facilities associated with critical accessibility needs

  c. potential safety hazards

- Priority 3 – Non-Critical

  Projects in this category include:

  a. improvements to facilities associated with non-critical accessibility needs

  b. actions to bring a facility into compliance with current building codes as grandfather clauses expire

  c. actions to improve the usability of a facility following an occupancy or use change

Category Codes

CATEGORY CODE*	SYSTEM DESCRIPTION
AC1A – AC4B	ACCESSIBILITY
EL1A – EL8A	ELECTRICAL
ES1A – ES6E	EXTERIOR STRUCTURE
FS1A – FS6A	FIRE/LIFE SAFETY
HE1A – HE7A	HEALTH
HV1A – HV8B	HVAC
IS1A – IS6D	INTERIOR FINISHES/SYSTEMS
PL1A – PL5A	PLUMBING
SI1A – SI4A	SITE
SS1A – SS7A	SECURITY SYSTEMS
VT1A – VT7A	VERTICAL TRANSPORTATION

Refer to the Category Code Report starting on page 1.5.1.

Example: **Category Code = EL5A**	
EL	System Description
5	Component Description
A	Element Description

Priority Sequence

A Priority Sequence number is automatically assigned to each project to rank the projects in order of relative criticality and show the recommended execution order. This number is calculated based on the Priority Class and identified system of each project.

Example:

Priority Class	Category Code	Project Number	Priority Sequence
1	HV2C	0001HV04	01
1	PL1D	0001PL02	02
2	IS1E	0001IS06	03
2	EL4C	0001EL03	04

Project Subclass Type

- Energy Conservation
  Projects with energy conservation opportunities, based on simple payback analysis.

Drawings/Project Locations

The drawings for this facility are marked with icons (see legend on plans) denoting the specific location(s) for each project. Within each icon are the last four characters of the respective project number (e.g., 0001IS01 is marked on the plan as IS01).

Photographs

A code shown on the Photo Log identifies the asset number, photo sequence, and a letter designation for architect (a) or engineer (e).

Example: **Photo Number: 0001006e**	
0001	Asset Number
006	Photo Sequence
e	Engineering Photo

CATEGORY CODE REPORT

ACCESSIBILITY

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
AC1A	Site	Stair and Railings	Includes exterior stairs and railings which are not part of the building entrance points.
AC1B	Site	Ramps and Walks	Includes sidewalks, grade change ramps (except for a building entrance), curb ramps, etc.
AC1C	Site	Parking	Designated parking spaces, including striping, signage, access aisles and ramps, etc.
AC1D	Site	Tactile Warnings	Raised tactile warnings located at traffic crossing and elevation changes.
AC2A	Building Entry	General	Covers all aspects of entry into the building itself, including ramps, lifts, doors and hardware, power operators, etc.
AC3A	Interior Path of Travel	Lifts/Ramps/ Elevators	Interior lifts, ramps and elevators designed to accommodate level changes inside a building. Includes both installation and retrofitting.
AC3B	Interior Path of Travel	Stairs and Railings	Upgrades to interior stairs and handrails for accessibility reasons.
AC3C	Interior Path of Travel	Doors and Hardware	Accessibility upgrades to the interior doors including widening, replacing hardware power, assisted operators, etc.
AC3D	Interior Path of Travel	Signage	Interior building signage upgrades for compliance with THE ADA.
AC3E	Interior Path of Travel	Restrooms/ Bathrooms	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms that are an integral part of residential suites are catalogued under HC4A.
AC3F	Interior Path of Travel	Drinking Fountains	Upgrading/replacing drinking fountains for reasons of accessibility.
AC3G	Interior Path of Travel	Phones	Replacement/modification of public access telephones.
AC4A	General	Functional Space Modifications	This category covers all necessary interior modifications necessary to make the services and functions of a building accessible. It includes installation of assistive listening systems, modification of living quarters, modifications to laboratory workstations, etc. Bathrooms that are integral to efficiency suites are catalogued here.
AC4B	General	Other	All accessibility issues not catalogued elsewhere.

ELECTRICAL

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
EL1A	Incoming Service	Transformer	Main building service transformer.
EL1B	Incoming Service	Disconnects	Main building disconnect and switchgear.
EL1C	Incoming Service	Feeders	Incoming service feeders. Complete incoming service upgrades, including transformers, feeders, and main distribution panels are catalogued here.
EL1D	Incoming Service	Metering	Installation of meters to record consumption and/or demand.
EL2A	Main Distribution Panels	Condition Upgrade	Main distribution upgrade due to deficiencies in condition.
EL2B	Main Distribution Panels	Capacity Upgrade	Main distribution upgrades due to inadequate capacity.
EL3A	Secondary Distribution	Step-Down Transformers	Secondary distribution step-down and isolation transformers.
EL3B	Secondary Distribution	Distribution Network	Includes conduit, conductors, sub-distribution panels, switches, outlets, etc. Complete interior rewiring of a facility is catalogued here.

EL3C	Secondary Distribution	Motor Controllers	Mechanical equipment motor starters and control centers.
EL4A	Devices and Fixtures	Exterior Lighting	Exterior building lighting fixtures, including supply conductors and conduit.
EL4B	Devices and Fixtures	Interior Lighting	Interior lighting fixtures (also system wide emergency lighting), including supply conductors and conduits.
EL4C	Devices and Fixtures	Lighting Controllers	Motion sensors, photocell controllers, lighting contactors, etc.
EL4D	Devices and Fixtures	GFCI Protection	Ground fault protection, including GFCI receptacles and breakers.
EL4E	Devices and Fixtures	Lightning Protection	Lightning arrestation systems including air terminals and grounding conductors.
EL5A	Emergency Power System	Generation/ Distribution	Includes generators, central battery banks, transfer switches, emergency power grid, etc.
EL6A	Systems	UPS/DC Power Supply	Uninterruptible power supply systems and DC motor-generator sets and distribution systems.
EL7A	Infrastructure	Above Ground Transmission	Includes poles, towers, conductors, insulators, fuses, disconnects, etc.
EL7B	Infrastructure	Underground Transmission	Includes direct buried feeders, ductbanks, conduit, manholes, feeders, switches, disconnects, etc.
EL7C	Infrastructure	Substations	Includes incoming feeders, breakers, buses, switchgear, meters, CTs, PTs, battery systems, capacitor banks, and all associated auxiliary equipment.
EL7D	Infrastructure	Distribution Switchgear	Stand-alone sectionalizing switches, distribution switchboards, etc.
EL7F	Infrastructure	Area and Street Lighting	Area and street lighting systems, including stanchions, fixtures, feeders, etc.
EL8A	General	Other	Electrical system components not catalogued elsewhere.

EXTERIOR STRUCTURE

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
ES1A	Foundation/ Footing	Structure	Structural foundation improvements involving structural work on foundation wall/footing, piers, caissons, and piles, including crack repairs, shoring, and pointing
ES1B	Foundation/ Footing	Dampproofing/ Dewatering	Foundation/footing waterproofing work, including, damp-proofing, dewatering, insulation, etc.
ES2A	Columns/Beams/ Walls	Structure	Structural work to primary load-bearing structural components aside from floors, including columns, beams, bearing walls, lintels, arches, etc.
ES2B	Columns/Beams/ Walls	Finish	Work involving restoration of the appearance and weatherproof integrity of exterior wall/structural envelope components, including masonry/pointing, expansion joints, efflorescence and stain removal, grouting, surfacing, chimney repairs, etc.
ES3A	Floor	Structure	Work concerning the structural integrity of the load supporting floors, both exposed and unexposed, including deformation, delamination, spalling, shoring, crack repair, etc.
ES4A	Roof	Repair	Work on waterproof horizontal finish (roof) involving repair and/or limited replacement (<40% total), including membrane patching, flashing repair, coping caulk/resetting, PPT wall parging/coating, walkpad installation, skylight and roof hatch R&R, etc.
ES4B	Roof	Replacement	Work involving total refurbishment of roofing system, including related component rehab.
ES5A	Fenestrations	Doors	Work on exterior exit/access door, including storefronts, airlocks, air curtains, vinyl slat doors, all power/manual operating hardware (except handicapped), etc.
ES5B	Fenestrations	Windows	Work on exterior fenestration closure and related components, including glass/metal/wood curtain walls, fixed or operable window sashes, glazing, frames, sills, casings, stools, seats, coatings, treatments, screens, storm windows, etc.

ES6A	General	Attached Structure	Work on attached exterior structure components not normally considered in above categories, including porches, stoops, decks, monumental entrance stairs, cupolas, tower, etc.
ES6B	General	Areaways	Work on attached grade level or below structural features, including subterranean lightwells, areaways, basement access stairs, etc.
ES6C	General	Trim	Work on ornamental exterior (generally non-structural) elements, including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.
ES6D	General	Superstructure	Finish and structural work on non-standard structures with exposed load-bearing elements, such as stadiums, bag houses, bleachers, freestanding towers, etc.
ES6E	General	Other	Any exterior work not specifically categorized elsewhere, including finish and structural work on freestanding boiler stacks.

FIRE/LIFE SAFETY

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
FS1A	Lighting	Egress Lighting/Exit Signage	R&R work on exit signage and packaged AC/DC emergency lighting.
FS2A	Detection/Alarm	General	Repair or replacement of fire alarm/detection system/components, including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.
FS3A	Suppression	Sprinklers	Repair or installation of water sprinkler type automatic fire suppressions, including wet-pipe and dry-pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.
FS3B	Suppression	Standpipe/Hose	Repair or installation of standpipe system or components, including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.
FS3C	Suppression	Extinguishers	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.
FS3D	Suppression	Other	Other fire suppression items not specifically categorized elsewhere, including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.
FS4A	Hazardous Materials	Storage Environment	Installation or repair of special storage environment for the safe holding of flammable or otherwise dangerous materials/supplies, including vented flammables storage cabinets, holding pens/rooms, cages, fire safe chemical storage rooms, etc.
FS4B	Hazardous Materials	User Safety	Improvements, repairs, installation, or testing of user safety equipment, including emergency eyewashes, safety showers, emergency panic/shut-down system, etc.
FS5A	Egress Path	Designation	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.
FS5B	Egress Path	Distance/ Geometry	Work involving remediation of egress routing problems, including elimination of dead end corridors, excessive egress distance modifications, and egress routing inadequacies.
FS5C	Egress Path	Separation Rating	Restoration of required fire protective barriers, including wall rating compromises, fire-rated construction, structural fire proofing, wind/safety glazing, transom retrofitting, etc.
FS5D	Egress Path	Obstruction	Clearance of items restricting the required egress routes.
FS5E	Egress Path	Stairs Railing	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.
FS5F	Egress Path	Fire Doors/ Hardware	Installation/replacement/repair of fire doors and hardware, including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.
FS5G	Egress Path	Finish/Furniture Ratings	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.
FS6A	General	Other	Life/fire safety items not specifically categorized elsewhere.

HEALTH

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HE1A	Environmental Control	Equipment and Enclosures	Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and all associated mechanical equipment.
HE1B	Environmental Control	Other	General environmental control problems not catalogued elsewhere.
HE2A	Pest Control	General	Includes all measures necessary to control and destroy insects, rodents, and other pests.
HE3A	Refuse	General	Issues related to the collection, handling, and disposal of refuse.
HE4A	Sanitation Equipment	Laboratory and Process	Includes autoclaves, cage washers, steam cleaners, etc.
HE5A	Food Service	Kitchen Equipment	Includes ranges, grilles, cookers, sculleries, etc.
HE5B	Food Service	Cold Storage	Includes the cold storage room and all associated refrigeration equipment.
HE6A	Hazardous Material	Structural Asbestos	Testing, abatement, and disposal of structural and building finish materials containing asbestos.
HE6B	Hazardous Material	Mechanical Asbestos	Testing, abatement, and disposal of mechanical insulation materials containing asbestos.
HE6C	Hazardous Material	PCBs	Includes testing, demolition, disposal, and cleanup of PCB contaminated substances.
HE6D	Hazardous Material	Fuel Storage	Includes monitoring, removal, and replacement of above and below ground fuel storage and distribution systems. Also includes testing and disposal of contaminated soils.
HE6E	Hazardous Material	Lead Paint	Testing, removal, and disposal of lead-based paint systems.
HE6F	Hazardous Material	Other	Handling, storage, and disposal of other hazardous materials.
HE7A	General	Other	Health related issues not catalogued elsewhere.

HVAC

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HV1A	Heating	Boilers/Stacks/ Controls	Boilers for heating purposes, including their related stacks, flues, and controls.
HV1B	Heating	Radiators/ Convectors	Including cast-iron radiators, fin tube radiators, baseboard radiators, etc.
HV1C	Heating	Furnace	Furnaces and their related controls, flues, etc.
HV1D	Heating	Fuel Supply/Storage	Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related leak detection/monitoring.
HV2A	Cooling	Chillers/ Controls	Chiller units for production of chilled water for cooling purposes, related controls (not including mods for CFC compliance).
HV2B	Cooling	Heat Rejection	Repair/replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of once-through system to cooling tower.
HV3A	Heating/Cooling	System Retrofit/ Replace	Replacement or major retrofit of HVAC systems.
HV3B	Heating/Cooling	Water Treatment	Treatment of hot water, chilled water, steam, condenser water, etc.
HV3C	Heating/Cooling	Package/Self-Contained Units	Repair/replacement of self-contained/package type units, including stand-up units, rooftop units, window units, etc; both air conditioners and heat pumps.
HV3D	Heating/Cooling	Conventional Split Systems	Repair, installation, or replacement of conventional split systems, both air conditioners and heat pumps, including independent component replacements of compressors and condensers.

HV4A	Air Moving/ Ventilation	Air Handlers/ Fan Units	Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.
HV4B	Air Moving/ Ventilation	Exhaust Fans	Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.
HV4C	Air Moving/ Ventilation	Other Fans	Supply, return, or any other fans not incorporated into a component categorized elsewhere.
HV4D	Air Moving/ Ventilation	Air Distribution Network	Repair, replacement, or cleaning of air distribution network, including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.
HV5A	Steam/Hydronic Distribution	Piping Network	Repair/replacement of piping networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.
HV5B	Steam/Hydronic Distribution	Pumps	Repair or replacement of pumps used in heating and cooling systems, related control components, etc.
HV5C	Steam/Hydronic Distribution	Heat Exchangers	Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.
HV6A	Controls	Complete System Upgrade	Replacement of HVAC control systems.
HV6B	Controls	Modifications/ Repairs	Repair or modification of HVAC control system.
HV6C	Controls	Air Compressors/ Dryers	Repair or modification of control air compressors and dryers.
HV7A	Infrastructure	Steam/Hot Water Generation	Generation of central steam and/or hot water, including boilers and related components.
HV7B	Infrastructure	Steam/Hot Water Distribution	Distribution system for central hot water and/or steam.
HV7C	Infrastructure	Chilled Water Generation	Generation of central chilled water, including chillers and related components.
HV7D	Infrastructure	Chilled Water Distribution	Distribution system for central chilled water.
HV7E	Infrastructure	Tunnels/ Manholes/ Trenches	Repairs, installation, or replacement of utility system access chambers.
HV7F	Infrastructure	Other	HVAC infrastructure issues not specifically categorized elsewhere.
HV8A	General	CFC Compliance	Chiller conversions/replacements for CFC regulatory compliance, monitoring, etc.
HV8B	General	Other	HVAC issues not catalogued elsewhere.

INTERIOR FINISHES/SYSTEMS

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
IS1A	Floor	Finishes-Dry	R&R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum and tile, marble, terrazzo, rubber flooring, and underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)
IS1B	Floor	Finishes-Wet	Flooring finish/underlayment work in predominantly "wet" areas, including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.
IS2A	Partitions	Structure	Structural work on full height permanent interior partitions, including wood/metal stud and drywall systems, CMU systems, structural brick, tile, glass block, etc.
IS2B	Partitions	Finishes	Work on full height permanent interior partitions, including R&R, to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.
IS3A	Ceilings	Repair	Repair of interior ceilings (<40% of total), including tiles, gypsum board, plaster, paint, etc.
IS3B	Ceilings	Replacement	Major refurbishments (>40% of total) to interior ceiling systems, including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.

IS4A	Doors	General	Any work on interior non-fire-rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).
IS5A	Stairs	Finish	Any finish restorative work to stair tower walking surfaces, including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).
IS6A	General	Molding	R&R to interior trim/molding systems, including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.
IS6B	General	Cabinetry	R&R work to interior casework systems, including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).
IS6C	General	Screening	Work on temporary or partial height partitioning systems, including toilet partitions, urinal/vanity screens, etc.
IS6D	General	Other	Any work on interior elements not logically or specifically categorized elsewhere, including light coves, phone booths, interior lightwells, etc.

PLUMBING

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
PL1A	Domestic Water	Piping Network	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.
PL1B	Domestic Water	Pumps	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	Domestic Water	Storage/ Treatment	Equipment or vessels for storage or treatment of domestic water.
PL1D	Domestic Water	Metering	Installation, repair, or replacement of water meters.
PL1E	Domestic Water	Heating	Domestic water heaters, including gas, oil, and electric water heaters, shell-and-tube heat exchangers, tank type, and instantaneous.
PL1F	Domestic Water	Cooling	Central systems for cooling and distributing drinking water.
PL1G	Domestic Water	Fixtures	Plumbing fixtures, including sinks, drinking fountains, water closets, urinals, etc.
PL1H	Domestic Water	Conservation	Alternations made to the water distribution system to conserve water.
PL1I	Domestic Water	Backflow Protection	Backflow protection devices, including backflow preventers, vacuum breakers, etc.
PL2A	Wastewater	Piping Network	Repair or replacement of building wastewater piping network.
PL2B	Wastewater	Pumps	Pump systems used to lift wastewater, including sewage ejectors and other sump systems.
PL3A	Special Systems	Process Gas/Fluids	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.
PL4A	Infrastructure	Potable Water Storage/ Treatment	Storage and treatment of potable water for distribution.
PL4B	Infrastructure	Industrial Water Distribution/ Treatment	Storage and treatment of industrial water for distribution.
PL4C	Infrastructure	Sanitary Water Collection	Sanitary water collection systems and sanitary sewer systems, including combined systems.
PL4D	Infrastructure	Stormwater Collection	Stormwater collection systems and storm sewer systems; storm water only.
PL4E	Infrastructure	Potable Water Distribution	Potable water distribution network.
PL4F	Infrastructure	Wastewater Treatment	Wastewater treatment plants, associated equipment, etc.
PL5A	General	Other	Plumbing issues not categorized elsewhere.

SITE

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SI1A	Access	Pedestrian	Paved pedestrian surfaces, including walks, site stairs, step ramps, paths, pedestrian signage, sidewalk bridges/canopies, pedestrian plaza/mall areas, etc.
SI1B	Access	Vehicular	Paved vehicular surfaces, including roads, paths, curbs, guards, bollards, bridges, skyways, joints, shoulder work, culverts, ditches, vehicular signage, etc.
SI2A	Landscape	Grade/Flora	Landscape related work, including new grass/turf refurbishment, grade improvements, catch basins, swales, berms, pruning, new ornamental flora, etc.
SI3A	Hardscape	Structure	Permanent hard site features, predominantly ornamental, including terraces, fences, statues, freestanding signage, fountains, benches, etc.
SI4A	General	Other	Other site work not specifically categorized elsewhere.

SECURITY SYSTEMS

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SS1A	Lighting	Exterior	Fixtures, stanchions, foliage interference, cleanliness, locations, etc.
SS2A	Site	Fencing	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.
SS2B	Site	General	Hidden areas due to foliage, fencing, parking, walls, etc.
SS3A	Communications	Emergency Phones	Access, locations, visibility, function, reliability, etc.
SS4A	Access Control	Doors	Access, locks, keys, two-way speakers, reliability, redundancy, etc.
SS4B	Access Control	Windows	Locks, screens, access, reliability, etc.
SS4C	Access Control	Systems	Card key, proximity devices, data control, data use, reliability, system design, etc.
SS5A	Monitoring	Systems	Cameras, audio communication, monitoring stations, locations, system design, etc.
SS6A	Circulation	Pedestrian	On campus as well as to and from off-campus housing and class locations, etc.
SS6B	Circulation	Vehicular	Guard gates, access, systems, data control and use, identification, etc.
SS7A	General	Other	General information/projects pertaining to security issues.

VERTICAL TRANSPORTATION

CODE	Component Description	Element Description	DEFINITION
VT1A	Machine Room	General	Machine, worm gear, thrust bearing, brake, motors, sheaves, generator, controller, selector, governor, pump(s), valves, oil, access, lighting, ventilation, and floor.
VT2A	Car	General	Position indicator, lighting, floor, gate-doors, operation devices, safeties, safety shoe, light ray/detection, emergency light, fire fighter service, car top, door operator, stop switch, car frame, car guides, sheaves, phone, and ventilation.
VT3A	Hoistway	General	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, and compensation.
VT4A	Hall Fixtures	General	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, and card/key access.
VT5A	Pit	General	Buffer(s), guards, sheaves, hydro packing, floor, lighting, and safety controls.
VT6A	Operating Conditions	General	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, and nudging.
VT7A	General	Other	General information/projects relating to vertical transportation system components.

FACILITY CONDITION ASSESSMENT

SECTION 2

COST SUMMARIES AND TOTALS

Detailed Facility Cost Summary

Facilities Renewal Budget Pro-Forma

SRCB : STUDENT RECREATION CENTER

	Non-Recurring Project Costs			Recurring Component Replacement Cost											
	Immediate	Critical	Non-Critical	Deferred Maint.	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Accessibility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
Exterior	0	0	0	0	0	0	0	0	0	3,524	0	0	0	0	**$3,524**
Interior	0	0	0	0	0	0	13,328	0	147,350	0	0	23,020	0	60,677	**$244,374**
Plumbing	0	0	0	61,140	369,588	0	0	0	0	0	0	0	0	94,319	**$525,047**
HVAC	0	0	0	80,687	0	258,432	642,896	0	0	362,585	271,497	754,232	0	456,578	**$2,826,906**
Fire/Life Safety	0	0	0	22,630	453,717	20,491	31,890	0	0	0	0	0	0	0	**$528,728**
Electrical	0	0	4,337	4,190	24,444	0	207,097	0	641,134	36,562	0	110,010	5,908	0	**$1,033,682**
Site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
Conveying	0	0	0	0	38,400	0	0	0	0	0	0	228,855	0	0	**$267,256**
Equipment	0	0	0	0	11,244	0	0	0	0	0	0	0	0	0	**$11,244**
	0	0	4,337	168,647	897,394	278,922	895,211	0	788,484	402,670	271,497	1,116,117	5,908	611,574	**$5,440,760**

Non-Recurring Project Cost	**$4,337**
Recurring Component Replacement Cost	**$5,436,423**
Total 10-Year Facility Cost	**$5,440,760**

CRV	**$40,671,000**
FCNI	**0.13**
FCI	**0.00**

Building SqFt.	**150,227**
10-Yr $ / SqFt	**$36.22**

All costs shown as Present Value

Detailed Facility Cost Summary
Facilities Renewal Needs by System
SRCB : STUDENT RECREATION CENTER

	Non-Recurring Project Costs	Recurring Component Replacement Cost	Total 10-Yr. Facility Renewal Costs
Accessibility	$0	$0	**$0**
Exterior	$0	$3,524	**$3,524**
Interior	$0	$244,374	**$244,374**
Plumbing	$0	$525,047	**$525,047**
HVAC	$0	$2,826,906	**$2,826,906**
Fire/Life Safety	$0	$528,728	**$528,728**
Electrical	$4,337	$1,029,345	**$1,033,682**
Site	$0	$0	**$0**
Conveying	$0	$267,256	**$267,256**
Equipment/Other	$0	$11,244	**$11,244**
	$4,337	**$5,436,423**	**$5,440,760**

All costs shown as Present Value

Detailed Facility Cost Summary
Facilities Renewal Plan
SRCB : STUDENT RECREATION CENTER

Non-Recurring Project Costs

Project Number	Title	Uniformat	Priority Class	Project Classifcation	Project Cost (Present Val.)
SRCBEL01	ADD EXTERIOR LIGHTING	D5020	Non-Critical	Plant Adaption	4,337
					4,337

Recurring Component Replacement Cost

Component			Uniformat	Repl. Year	Repl. Cost (Present Val.)
WH29	WATER HEATER - SHELL & TUBE (105-400 GPM)	STEAM-FED TANK	D2020	Deferred Maint.	$61,140
HX06	HEAT EXCHANGER - PLATE FRAME (<=200 GPM)	POOL	D3040	Deferred Maint.	$18,171
HX07	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	POOL	D3040	Deferred Maint.	$31,258
HX07	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	POOL	D3040	Deferred Maint.	$31,258
FS01	FIRE SPRINKLER SYSTEM	MEZZANINE	D4010	Deferred Maint.	$22,630
VF03	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	AHU4 RET FAN	D5010	Deferred Maint.	$4,190
VT04	ELEVATOR CAB RENOVATION - PASSENGER	ELV-001	D1010	2015	$38,400
BF04	BACKFLOW PREVENTER (3-4 INCHES)	DOMESTIC	D2020	2015	$7,407
BF06	BACKFLOW PREVENTER (6-8 INCHES)	SPRINKLER	D2020	2015	$18,752
WT08	POOL FILTRATION, TREATMENT, PUMPING, HEATING SYSTEMS	INDOOR	D2090	2015	$276,873
WT08	POOL FILTRATION, TREATMENT, PUMPING, HEATING SYSTEMS	OUTDOOR	D2090	2015	$66,556
FA02	FIRE ALARM SYSTEM - DEVICES		D4030	2015	$453,717
LE03	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	ORIGINAL	D5020	2015	$8,908
LE04	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	2000	D5020	2015	$7,049
LE07	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	2000	D5020	2015	$3,808
LE07	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	ORIGINAL	D5020	2015	$2,285
LE08	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	ORIGINAL	D5020	2015	$2,395
CR03	REFRIGERATION SYSTEM - WALK-IN, 3 EVAP FANS, 10000 BTUH, CONDENSER	ROOM 115	E1020	2015	$11,244
AH12	AIR HANDLING UNIT - INDOOR (35-45 HP)	AHU4 (AHUD RM 22	D3040	2016	$242,134
FN04	FAN - AXIAL, RETURN, 1.5" SP (7.5-10 HP) 19,500 CFM	AHU4 RETURN	D3040	2016	$16,298
FP10	FIRE PUMP - ELECTRIC, 500 GPM, 3" ID (15-65 HP)		D4010	2016	$20,491
DR24	DOOR LOCK, COMMERCIAL-GRADE	MECHANICAL	C1020	2017	$13,328
AH45	HUMIDIFIER, STEAM INJECTION	AHU5	D3040	2017	$10,871

FN18	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	EAF-002	D3040	2017	$2,875
FN18	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	EAF-003	D3040	2017	$2,875
FN19	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-001	D3040	2017	$4,954
FN19	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-004	D3040	2017	$4,954
FN19	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-007	D3040	2017	$4,954
FN20	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (25"-30" DIAMETER)	EAF-008	D3040	2017	$6,226
FN20	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (25"-30" DIAMETER)	EF5	D3040	2017	$6,226
FN26	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	CEILING FANS	D3040	2017	$4,603
FN26	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	RM 161 THRU-WALL	D3040	2017	$1,151
HX12	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		D3040	2017	$8,324
HX12	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		D3040	2017	$8,324
HX12	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		D3040	2017	$8,324
HX12	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		D3040	2017	$8,324
PH14	CONDENSATE RECEIVER, ELECTRIC, 2 PUMPS	ROOM 159	D3040	2017	$63,114
BA06	HVAC CONTROLS SYSTEM - GYMNASIUM		D3060	2017	$496,799
EL01	EXIT SIGN - CENTRAL POWER		D4030	2017	$31,890
SG07	MAIN SWITCHBOARD W/BREAKERS (>2500 AMP)	480V	D5010	2017	$207,097
IW01	WALL FINISH - PAINT, STANDARD		C3010	2019	$30,331
IF01	FLOORING - CARPET, TILE OR ROLL, STANDARD		C3020	2019	$117,019
VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	AHU3	D5010	2019	$2,794
LI06	LIGHTING SYSTEM, INTERIOR - GYMNASIUM	ORIGINAL	D5020	2019	$638,340
DR30	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	LOADING DOCK	B2030	2020	$3,524
AH14	AIR HANDLING UNIT - INDOOR (63-88 HP)	AHU5	D3040	2020	$321,786
FN07	FAN - AXIAL, RETURN, 1.5" SP (>20 HP) 38,500 CFM	AHU5 RETURN	D3040	2020	$40,799
LE04	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	2005	D5020	2020	$10,574
LE06	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 30-FOOT	2005	D5020	2020	$18,373
LE07	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	2005	D5020	2020	$7,615
CT08	COOLING TOWER (>701 TONS)	TOW-001	D3030	2021	$271,497
DR24	DOOR LOCK, COMMERCIAL-GRADE	OFCS, GLASS DOOI	C1020	2022	$23,020
VT03	ELEVATOR MODERNIZATION - HYDRAULIC	ELV-001	D1010	2022	$228,855
AH01	AIR HANDLING UNIT - INDOOR (.5-1.25 HP)	FCUS	D3040	2022	$59,733
AH04	AIR HANDLING UNIT - INDOOR (2.75-3.25 HP)	FCU ROOM 164	D3040	2022	$20,892

AH04	AIR HANDLING UNIT - INDOOR (2.75-3.25 HP)	TF160 FCU	D3040	2022	$20,892
AH05	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	AHU3	D3040	2022	$37,933
AH05	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	LOCKER RM FCU	D3040	2022	$37,933
AH05	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	LOCKER RM FCU	D3040	2022	$37,933
AH09	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU2	D3040	2022	$111,351
AH11	AIR HANDLING UNIT - INDOOR (27-35 HP)	AHU-001	D3040	2022	$195,598
FN04	FAN - AXIAL, RETURN, 1.5" SP (7.5-10 HP) 19,500 CFM	AHU1 RETURN	D3040	2022	$16,298
PH01	PUMP - ELECTRIC (<=10 HP)	HHW ROOM 157	D3040	2022	$10,565
PH01	PUMP - ELECTRIC (<=10 HP)	HHW ROOM 157	D3040	2022	$10,565
PH01	PUMP - ELECTRIC (<=10 HP)	SECNDRY CHW	D3040	2022	$13,207
PH01	PUMP - ELECTRIC (<=10 HP)	SECNDRY CHW	D3040	2022	$13,207
PH01	PUMP - ELECTRIC (<=10 HP)	SECNDRY HHW RM	D3040	2022	$13,207
PH01	PUMP - ELECTRIC (<=10 HP)	SECNDRY HHW RM	D3040	2022	$13,207
PH02	PUMP - ELECTRIC (10 - 15 HP)	PRMRY HHW RM 15	D3040	2022	$17,066
PH06	PUMP - ELECTRIC (30 - 40 HP)	CONDW RM 159	D3040	2022	$31,162
PH06	PUMP - ELECTRIC (30 - 40 HP)	CONDW RM 159	D3040	2022	$31,162
PH06	PUMP - ELECTRIC (30 - 40 HP)	PRIMARY CHW	D3040	2022	$31,162
PH06	PUMP - ELECTRIC (30 - 40 HP)	PRIMARY CHW	D3040	2022	$31,162
VF03	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	AHU1 RET FAN	D5010	2022	$4,190
GN03	GENERATOR - DIESEL (100-200 KW)	EMG-001	D5090	2022	$100,632
GN15	SWITCH - AUTO TRANSFER, 480 V (100-400 AMP)	TSW-ATS1 (RM 159)	D5090	2022	$5,188
VF05	VARIABLE FREQUENCY DRIVE (15-20 HP)	AHU2	D5010	2023	$5,908
IW01	WALL FINISH - PAINT, STANDARD		C3010	2024	$60,677
FX01	PLUMBING FIXTURE - LAVATORY, COUNTER		D2010	2024	$17,007
FX02	PLUMBING FIXTURE - LAVATORY, WALL HUNG		D2010	2024	$1,078
FX08	PLUMBING FIXTURE - SHOWER VALVE AND HEAD		D2010	2024	$32,172
FX10	PLUMBING FIXTURE - URINAL		D2010	2024	$10,335
FX12	PLUMBING FIXTURE - WATER CLOSET, TANKLESS		D2010	2024	$33,726
CH03	CHILLER - WATER-COOLED CENTRIFUGAL OR SCREW (350-550 TONS)	WCU-CH2	D3030	2024	$456,578
					$5,436,423

All costs shown as Present Value

Detailed Project Summary

Facility Condition Assessment

Project Classification

SRCB : STUDENT RECREATION CENTER

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
EL4A	SRCBEL01	1	Plant Adaption	3	ADD EXTERIOR LIGHTING	3,739	598	0	4,337
			Totals for Plant Adaption			**3,739**	**598**	**0**	**4,337**
				Grand Total:		**3,739**	**598**	**0**	**4,337**

Detailed Project Summary

Facility Condition Assessment

Category/System Code Update Report

SRCB : STUDENT RECREATION CENTER

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
EL4A	SRCBEL01	3	1	ADD EXTERIOR LIGHTING	3,739	598	0	4,337
	Totals for System Code:			**ELECTRICAL**	**3,739**	**598**	**0**	**4,337**
				Grand Total:	**3,739**	**598**	**0**	**4,337**

FACILITY CONDITION ASSESSMENT

SECTION 3

PROJECT DETAILS

Specific Project Details

Facility Condition Assessment

Section Three

Project Description

Project Number:	SRCBEL01	**Title:**	ADD EXTERIOR LIGHTING
Priority Sequence:	1		
Priority Class:	3		
Category Code:	EL4A	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING
Building Code:	SRCB		
Building Name:	STUDENT RECREATION CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Plant Adaption		
Project Date:	03/17/2015		
Project Location:	Area Wide: Floor(s) 1		

Project Description

Exterior lighting was lacking at both the north and south entrances. Add lighting to these areas, and place the new lights on photocell activation.

Specific Project Details

Facility Condition Assessment

Section Three

Project Cost

Project Number: SRCBEL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
HID wall-mount fixture	EA	6	$349	$2,097	$326	$1,958	$4,055
Project Totals:				**$2,097**		**$1,958**	**$4,055**

Material/Labor Cost		$4,055
Material Index		100.70
Labor Index		51.30
Material/Labor Indexed Cost		$3,116
General Contractor Mark Up at 20.0%	+	$623
Inflation	+	$0
Construction Cost		$3,739
Professional Fees at 16.0%	+	$598
Total Project Cost		**$4,337**

FACILITY CONDITION ASSESSMENT

SECTION 4

LIFECYCLE COMPONENT INVENTORY

Asset Component Inventory

SRCB : STUDENT RECREATION CENTER

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
B2010	WALL, EXTERIOR, MASONRY POINTING		22,140	SF	$5.02	1.12	$124,439	1997	30	
B2010	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD		4,990	SF	$120.38	1.12	$672,792	1997	40	
B2010	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD	CLERESTORY	1,250	SF	$120.38	1.12	$168,535	1997	40	
B2010	GLASS, CURTAIN WALL, STANDARD	MAIN ENTRANCE	3,600	SF	$142.63	1.12	$575,075	1997	60	
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	MAIN ENTRANCE	10	LEAF	$2,283.18		$22,832	2015	25	
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	POOL, COMMON	34	LEAF	$2,283.18		$77,628	1997	25	10
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL		16	LEAF	$1,680.78		$26,892	1997	40	
B2030	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	LOADING DOCK	320	SF	$76.82		$24,582	1997	30	
B2030	DOOR OPERATOR, POWER-ASSIST	MAIN ENTRANCE	10	EA	$7,152.95		$71,530	2015	20	
B2030	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	LOADING DOCK	2	EA	$1,761.75		$3,524	1997	15	8
B3010	ROOF - BITUMINOUS, 2-PLY, APPLIED MODIFIED BITUMEN, TORCH	SECONDARY	38,277	SF	$3.54		$135,537	2015	20	
B3010	ROOF - PANEL, ALUMINUM OR GALVANIZED, STANDING SEAM	PRIMARY	38,277	SF	$15.48		$592,350	2015	40	
B3010	ROOF GUTTER AND LEADER - ALUMINUM OR GALVANIZED, COATED	PRIMARY	1,960	LF	$12.66		$24,817	2015	20	
B3020	ROOF SKYLIGHT - FIBERGLASS ROOF SANDWICH PANEL	PRIMARY	2,450	SF	$49.43		$121,108	2015	20	
B3020	ROOF SKYLIGHT - GLASS WITH ALUMINUM FRAME	SECONDARY	1,640	SF	$214.28		$351,419	2015	35	
C1020	DOOR AND FRAME, INTERIOR, NON-RATED		58	LEAF	$1,747.12		$101,333	1997	40	
C1020	DOOR AND FRAME, INTERIOR, FIRE-RATED		45	LEAF	$3,109.63		$139,933	1997	40	
C1020	DOOR LOCK, COMMERCIAL-GRADE	OFCS, GLASS DOORS	38	EA	$605.80		$23,020	1997	20	5
C1020	DOOR LOCK, COMMERCIAL-GRADE	COURT, ADMIN	43	EA	$605.80		$26,049	1997	20	10
C1020	DOOR LOCK, COMMERCIAL-GRADE	MECHANICAL	22	EA	$605.80		$13,328	1997	20	
C1020	DOOR LOCK, COMMERCIAL-GRADE	MAIN ENTRANCE	10	EA	$605.80		$6,058	2015	20	
C1020	DOOR LOCK, COMMERCIAL-GRADE	EXTERIOR	50	EA	$605.80		$30,290	1997	20	10
C3010	WALL FINISH - PAINT, STANDARD		20,240	SF	$1.50		$30,331	1997	12	10
C3010	WALL FINISH - PAINT, STANDARD		40,490	SF	$1.50		$60,677	2015	12	
C3010	WALL FINISH - PAINT, STANDARD		40,490	SF	$1.50		$60,677	2003	12	9

Asset Component Inventory

SRCB : STUDENT RECREATION CENTER

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
C3010	WALL FINISH - TILE, CERAMIC / STONE, STANDARD		2,000	SF	$30.18		$60,366	1997	30	
C3010	WALL FINISH - TILE, GLASS MOSAICS		4,000	SF	$88.04		$352,148	1997	40	
C3020	FLOORING - CARPET, TILE OR ROLL, STANDARD		11,420	SF	$10.25		$117,019	1997	12	10
C3020	FLOORING - VINYL COMPOSITION TILE, STANDARD		4,570	SF	$4.97		$22,705	1997	20	10
C3020	FLOORING - TILE, CERAMIC / STONE / QUARRY STANDARD		15,980	SF	$23.97		$383,059	1997	30	5
C3020	FLOORING - HARDWOOD STRIP, STANDARD	COURTS	11,420	SF	$10.39		$118,668	1997	50	
C3020	FLOORING - FLUID APPLIED, EPOXY / ACRYLIC / POLYURETHANE	LOUNGE	6,850	SF	$13.82		$94,634	1997	15	14
C3020	FLOORING - FLUID APPLIED, PAINT OR CLEAR SEAL	CONCRETE AND POOL	20,550	SF	$2.26		$46,484	1997	10	20
C3020	FLOORING - ATHLETIC, RUBBER, TILE OR ROLL	WEIGHTLIFTING	6,850	SF	$24.01		$164,488	1997	15	20
C3020	FLOORING - ATHLETIC COURT, WOOD	COURTS	29,690	SF	$46.32		$1,375,181	1997	60	
C3020	FLOORING - ATHLETIC TRACK, WOOD		6,850	SF	$10.20		$69,874	1997	40	
C3030	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD		22,840	SF	$7.64		$174,609	2014	30	
C3030	CEILING FINISH - ATTACHED ACOUSTICAL TILE	COMMON AREA	11,420	SF	$5.21		$59,540	1997	30	
C3030	CEILING FINISH - PAINTED OR STAINED, STANDARD		14,840	SF	$1.50		$22,239	1997	24	8
C3030	CEILING FINISH - PAINTED OR STAINED, STANDARD	COURTS	14,840	SF	$1.50		$22,239	2014	24	
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	ELV-001	1	EA	$228,855.19		$228,855	1997	25	
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELV-001	1	EA	$38,400.32		$38,400	1997	12	6
D2010	PLUMBING FIXTURE - LAVATORY, COUNTER		16	EA	$1,062.96		$17,007	1997	35	-8
D2010	PLUMBING FIXTURE - LAVATORY, WALL HUNG		1	EA	$1,078.41		$1,078	1997	35	-8
D2010	PLUMBING FIXTURE - SINK, KITCHEN		2	EA	$1,780.26		$3,561	1997	35	
D2010	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY		5	EA	$1,468.86		$7,344	1997	35	
D2010	PLUMBING FIXTURE - SHOWER VALVE AND HEAD		23	EA	$1,398.79		$32,172	1997	35	-8
D2010	PLUMBING FIXTURE - URINAL		6	EA	$1,722.47		$10,335	1997	35	-8

Asset Component Inventory

SRCB : STUDENT RECREATION CENTER

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
D2010	PLUMBING FIXTURE - WATER CLOSET, TANKLESS		21	EA	$1,606.00		$33,726	1997	35	-8
D2010	PLUMBING FIXTURE - EMERGENCY EYEWASH		1	EA	$3,918.51		$3,919	1997	35	
D2020	BACKFLOW PREVENTER (3-4 INCHES)	DOMESTIC	1	EA	$7,406.90		$7,407	1997	10	8
D2020	BACKFLOW PREVENTER (6-8 INCHES)	SPRINKLER	1	EA	$18,752.10		$18,752	1997	10	8
D2020	SUPPLY PIPING SYSTEM - GYMNASIUM		150,227	SF	$3.03	0.94	$428,158	1997	35	
D2020	WATER HEATER - SHELL & TUBE (105-400 GPM)	STEAM-FED TANK	140	GPM	$363.93	1.20	$61,140	1997	30	-13
D2030	DRAIN PIPING SYSTEM - GYMNASIUM		150,227	SF	$4.61	0.94	$650,636	1997	40	
D2090	POOL FILTRATION, TREATMENT, PUMPING, HEATING SYSTEMS	OUTDOOR	1,500	SF	$37.60	1.18	$66,556	1997	18	
D2090	POOL FILTRATION, TREATMENT, PUMPING, HEATING SYSTEMS	INDOOR	7,800	SF	$37.60	0.94	$276,873	1997	18	
D3030	CHILLER - WATER-COOLED CENTRIFUGAL OR SCREW (350-550 TONS)	WCU-CH1	400	TON	$1,141.45		$456,578	1997	30	
D3030	CHILLER - WATER-COOLED CENTRIFUGAL OR SCREW (350-550 TONS)	WCU-CH2	400	TON	$1,141.45		$456,578	1997	30	-3
D3030	COOLING TOWER (>701 TONS)	TOW-001	900	TON	$301.66		$271,497	1997	23	1
D3040	AIR HANDLING UNIT - INDOOR (.5-1.25 HP)	FCUS	8	HP	$7,466.65		$59,733	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (2.75-3.25 HP)	FCU ROOM 164	3	HP	$6,963.84		$20,892	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (2.75-3.25 HP)	TF160 FCU	3	HP	$6,963.84		$20,892	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	AHU3	5	HP	$7,586.51		$37,933	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	LOCKER RM FCU	5	HP	$7,586.51		$37,933	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	LOCKER RM FCU	5	HP	$7,586.51		$37,933	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU2	20	HP	$5,567.56		$111,351	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	AHU-001	30	HP	$5,215.93	1.25	$195,598	1997	25	
D3040	AIR HANDLING UNIT - INDOOR (35-45 HP)	AHU4 (AHUD RM 224)	40	HP	$4,842.68	1.25	$242,134	1997	25	-6
D3040	AIR HANDLING UNIT - INDOOR (63-88 HP)	AHU5	75	HP	$3,575.40	1.20	$321,786	1997	25	-2
D3040	HUMIDIFIER, STEAM INJECTION	AHU5	1	EA	$10,871.26		$10,871	1997	20	

Asset Component Inventory

SRCB : STUDENT RECREATION CENTER

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
D3040	FAN - AXIAL, RETURN, 1.5" SP (7.5-10 HP) 19,500 CFM	AHU4 RETURN	10	HP	$1,629.76		$16,298	1997	20	-1
D3040	FAN - AXIAL, RETURN, 1.5" SP (7.5-10 HP) 19,500 CFM	AHU1 RETURN	10	HP	$1,629.76		$16,298	1997	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (>20 HP) 38,500 CFM	AHU5 RETURN	30	HP	$1,359.97		$40,799	1997	20	3
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	EAF-002	1	EA	$2,875.03		$2,875	1997	20	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	EAF-003	1	EA	$2,875.03		$2,875	1997	20	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-001	1	EA	$4,953.73		$4,954	1997	20	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-004	1	EA	$4,953.73		$4,954	1997	20	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-007	1	EA	$4,953.73		$4,954	1997	20	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	NEW	1	EA	$4,953.73		$4,954	2013	20	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (25"-30" DIAMETER)	EF5	1	EA	$6,226.11		$6,226	1997	20	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (25"-30" DIAMETER)	EAF-008	1	EA	$6,226.11		$6,226	1997	20	
D3040	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	RM 161 THRU-WALL	1	HP	$2,301.60	0.50	$1,151	1997	20	
D3040	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	CEILING FANS	5	HP	$2,301.60	0.40	$4,603	1997	20	
D3040	HVAC DISTRIBUTION NETWORKS - GYMNASIUM		150,227	SF	$23.05	0.94	$3,254,511	1997	40	-10
D3040	HEAT EXCHANGER - SHELL & TUBE STEAM TO WATER (>85 GPM)	HHW	500	GPM	$124.47		$62,235	1997	35	
D3040	HEAT EXCHANGER - PLATE FRAME (<=200 GPM)	POOL	140	GPM	$129.79		$18,171	1997	25	-8
D3040	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	POOL	280	GPM	$111.64		$31,258	1997	25	-8
D3040	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	POOL	280	GPM	$111.64		$31,258	1997	25	-8
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,323.56		$8,324	1997	20	
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,323.56		$8,324	1997	20	

Asset Component Inventory

SRCB : STUDENT RECREATION CENTER

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,323.56		$8,324	1997	20	
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,323.56		$8,324	1997	20	
D3040	PUMP - ELECTRIC (<=10 HP)	HHW ROOM 157	8	HP	$1,320.68		$10,565	1997	25	
D3040	PUMP - ELECTRIC (<=10 HP)	HHW ROOM 157	8	HP	$1,320.68		$10,565	1997	25	
D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY HHW RM 159	10	HP	$1,320.68		$13,207	1997	25	
D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY HHW RM 159	10	HP	$1,320.68		$13,207	1997	25	
D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY CHW	10	HP	$1,320.68		$13,207	1997	25	
D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY CHW	10	HP	$1,320.68		$13,207	1997	25	
D3040	PUMP - ELECTRIC (10 - 15 HP)	PRMRY HHW RM 159	15	HP	$1,137.75		$17,066	1997	25	
D3040	PUMP - ELECTRIC (30 - 40 HP)	CONDW RM 159	40	HP	$779.04		$31,162	1997	25	
D3040	PUMP - ELECTRIC (30 - 40 HP)	CONDW RM 159	40	HP	$779.04		$31,162	1997	25	
D3040	PUMP - ELECTRIC (30 - 40 HP)	PRIMARY CHW	40	HP	$779.04		$31,162	1997	25	
D3040	PUMP - ELECTRIC (30 - 40 HP)	PRIMARY CHW	40	HP	$779.04		$31,162	1997	25	
D3040	CONDENSATE RECEIVER, ELECTRIC, 2 PUMPS	ROOM 159	10	HP	$6,311.39		$63,114	1997	20	
D3060	HVAC CONTROLS SYSTEM - GYMNASIUM		150,227	SF	$3.52	0.94	$496,799	1997	18	2
D4010	FIRE PUMP - ELECTRIC, 500 GPM, 3" ID (15-65 HP)		30	HP	$683.02		$20,491	1997	25	-6
D4010	FIRE SPRINKLER SYSTEM		148,202	SF	$9.47	0.94	$1,319,341	1997	80	
D4010	FIRE SPRINKLER SYSTEM	MEZZANINE	2,025	SF	$9.47	1.18	$22,630	1997	80	-63
D4030	EXIT SIGN - CENTRAL POWER		126	EA	$253.10		$31,890	1997	20	
D4030	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	ROOM 159	1	EA	$29,281.79		$29,282	2012	15	
D4030	FIRE ALARM SYSTEM - DEVICES		150,227	SF	$3.21	0.94	$453,717	1997	18	
D5010	ELECTRICAL DISTRIBUTION NETWORK - GYMNASIUM		150,227	SF	$8.10	0.94	$1,144,447	1997	40	
D5010	MAIN SWITCHBOARD W/BREAKERS (>2500 AMP)	480V	3,000	AMP	$69.03		$207,097	1997	20	
D5010	TRANSFORMER - OIL-FILLED, 3PH, 5-15KV PRIMARY (1000-1500 KVA)		1,500	KVA	$79.98		$119,976	1997	40	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	AHU3	5	HP	$558.77		$2,794	2007	12	
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	AHU4 RET FAN	10	HP	$418.99		$4,190	1997	12	5
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	AHU1 RET FAN	10	HP	$418.99		$4,190	2010	12	

Asset Component Inventory

SRCB : STUDENT RECREATION CENTER

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	AHU2	20	HP	$295.38		$5,908	2011	12	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	AHU5 RET FAN	30	HP	$267.61		$8,028	2012	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	AHU1	30	HP	$267.61		$8,028	2010	16	
D5010	VARIABLE FREQUENCY DRIVE (30-40 HP)	COOLING TOWER	40	HP	$227.21		$9,088	2012	16	
D5010	VARIABLE FREQUENCY DRIVE (50-75 HP)	AHU-005	75	HP	$192.54		$14,440	2010	16	
D5020	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	ORIGINAL	49	EA	$181.79		$8,908	1997	15	3
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	2000	4	EA	$1,762.27		$7,049	2000	15	
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	2005	6	EA	$1,762.27		$10,574	2005	15	
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 30-FOOT	2005	4	EA	$4,593.17		$18,373	2005	15	
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	ORIGINAL	3	EA	$761.55		$2,285	1997	15	3
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	2000	5	EA	$761.55		$3,808	2000	15	
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	2005	10	EA	$761.55		$7,615	2005	15	
D5020	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	ORIGINAL	8	EA	$299.42		$2,395	1997	15	3
D5020	LIGHTING SYSTEM, INTERIOR - GYMNASIUM	ORIGINAL	114,047	SF	$5.83	0.96	$638,340	1997	20	2
D5020	LIGHTING SYSTEM, INTERIOR - GYMNASIUM	2014	36,180	SF	$5.83	1.04	$219,381	2014	20	
D5090	GENERATOR - DIESEL (100-200 KW)	EMG-001	185	KW	$543.96		$100,632	1997	25	
D5090	SWITCH - AUTO TRANSFER, 480 V (100-400 AMP)	TSW-ATS1 (RM 159)	150	AMP	$34.59		$5,188	1997	25	
E1020	WALK-IN REFRIGERATOR OR FREEZER STRUCTURE	ROOM 115	300	SF	$279.80	1.18	$99,050	1997	35	
E1020	REFRIGERATION SYSTEM - WALK-IN, 3 EVAP FANS, 10000 BTUH, CONDENSER	ROOM 115	1	EA	$11,244.31		$11,244	1997	10	8
G2010	CONCRETE VEHICULAR PAVING - JOINT MAINTENANCE	LOADING DOCK	200	LF	$4.20		$841	1997	7	25
G2020	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	LOADING DOCK	600	SY	$2.76		$1,656	1997	7	22
G2030	CONCRETE PEDESTRIAN PAVING - JOINT MAINTENANCE		1,000	LF	$3.63		$3,631	1997	7	23
G2030	BRICK PAVERS		3,000	SF	$15.64		$46,907	1997	25	5

Asset Component Inventory

SRCB : STUDENT RECREATION CENTER

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
							$19,652,526			

Recurring Component Renewal Schedule

SRCB : STUDENT RECREATION CENTER

Uniformat Code	Component Description		Qty	Units	DM Replacement Cost	Year
D2020	WATER HEATER - SHELL & TUBE (105-400 GPM)	STEAM-FED TANK	140	GPM	$61,140	DM
D3040	HEAT EXCHANGER - PLATE FRAME (<=200 GPM)	POOL	140	GPM	$18,171	DM
D3040	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	POOL	280	GPM	$31,258	DM
D3040	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	POOL	280	GPM	$31,258	DM
D4010	FIRE SPRINKLER SYSTEM	MEZZANINE	2,025	SF	$22,630	DM
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	AHU4 RET FAN	10	HP	$4,190	DM
		Deferred Maintenance Cost for Asset No. SRCB			**$168,647**	

Uniformat Code	Component Description		Qty	Units	2015 Replacement Cost	Year
D2020	BACKFLOW PREVENTER (3-4 INCHES)	DOMESTIC	1	EA	$7,407	2015
D2020	BACKFLOW PREVENTER (6-8 INCHES)	SPRINKLER	1	EA	$18,752	2015
D2090	POOL FILTRATION, TREATMENT, PUMPING, HEATING SYSTEMS	OUTDOOR	1,500	SF	$66,556	2015
D2090	POOL FILTRATION, TREATMENT, PUMPING, HEATING SYSTEMS	INDOOR	7,800	SF	$276,873	2015
E1020	REFRIGERATION SYSTEM - WALK-IN, 3 EVAP FANS, 10000 BTUH, CONDENSER	ROOM 115	1	EA	$11,244	2015
D5020	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	ORIGINAL	49	EA	$8,908	2015
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	2000	4	EA	$7,049	2015
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	ORIGINAL	3	EA	$2,285	2015

All costs shown as Future Value assuming a 3.00% average inflation rate

Recurring Component Renewal Schedule

D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	2000	5	EA	$3,808	2015
D5020	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	ORIGINAL	8	EA	$2,395	2015
D4030	FIRE ALARM SYSTEM - DEVICES		150,227	SF	$453,717	2015
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELV-001	1	EA	$38,400	2015

Projected Component Replacement Cost for Asset No. SRCB for 2015 $897,394

Uniformat Code	Component Description		Qty	Units	2016 Replacement Cost	Year
D3040	AIR HANDLING UNIT - INDOOR (35-45 HP)	AHU4 (AHUD RM 224)	40	HP	$249,398	2016
D3040	FAN - AXIAL, RETURN, 1.5" SP (7.5-10 HP) 19,500 CFM	AHU4 RETURN	10	HP	$16,787	2016
D4010	FIRE PUMP - ELECTRIC, 500 GPM, 3" ID (15-65 HP)		30	HP	$21,105	2016

Projected Component Replacement Cost for Asset No. SRCB for 2016 $287,290

Uniformat Code	Component Description		Qty	Units	2017 Replacement Cost	Year
D3040	HUMIDIFIER, STEAM INJECTION	AHU5	1	EA	$11,533	2017
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	EAF-002	1	EA	$3,050	2017
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	EAF-003	1	EA	$3,050	2017
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-001	1	EA	$5,255	2017
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-004	1	EA	$5,255	2017
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (20"-22" DIAMETER)	EAF-007	1	EA	$5,255	2017
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (25"-30" DIAMETER)	EF5	1	EA	$6,605	2017
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (25"-30" DIAMETER)	EAF-008	1	EA	$6,605	2017
D3040	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	RM 161 THRU-WALL	1	HP	$1,221	2017

All costs shown as Future Value assuming a 3.00% average inflation rate

Recurring Component Renewal Schedule

D3040	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	CEILING FANS	5	HP	$4,884	2017
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,830	2017
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,830	2017
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,830	2017
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")		1	EA	$8,830	2017
D3040	CONDENSATE RECEIVER, ELECTRIC, 2 PUMPS	ROOM 159	10	HP	$66,958	2017
D3060	HVAC CONTROLS SYSTEM - GYMNASIUM		150,227	SF	$527,054	2017
D5010	MAIN SWITCHBOARD W/BREAKERS (>2500 AMP)	480V	3,000	AMP	$219,709	2017
D4030	EXIT SIGN - CENTRAL POWER		126	EA	$33,833	2017
C1020	DOOR LOCK, COMMERCIAL-GRADE	MECHANICAL	22	EA	$14,139	2017

Projected Component Replacement Cost for Asset No. SRCB for 2017 **$949,729**

No Projected Component Replacement Cost for Asset No. SRCB for 2018

Uniformat Code	Component Description		Qty	Units	2019 Replacement Cost	Year
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	AHU3	5	HP	$3,145	2019
D5020	LIGHTING SYSTEM, INTERIOR - GYMNASIUM	ORIGINAL	114,047	SF	$718,458	2019
C3020	FLOORING - CARPET, TILE OR ROLL, STANDARD		11,420	SF	$131,706	2019
C3010	WALL FINISH - PAINT, STANDARD		20,240	SF	$34,138	2019

Projected Component Replacement Cost for Asset No. SRCB for 2019 **$887,446**

Uniformat Code	Component Description		Qty	Units	2020 Replacement Cost	Year
D3040	AIR HANDLING UNIT - INDOOR (63-88 HP)	AHU5	75	HP	$373,038	2020

All costs shown as Future Value assuming a 3.00% average inflation rate

Recurring Component Renewal Schedule

D3040	FAN - AXIAL, RETURN, 1.5" SP (>20 HP) 38,500 CFM	AHU5 RETURN	30	HP	$47,297	2020
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	2005	6	EA	$12,258	2020
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 30-FOOT	2005	4	EA	$21,299	2020
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	2005	10	EA	$8,828	2020
B2030	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	LOADING DOCK	2	EA	$4,085	2020
	Projected Component Replacement Cost for Asset No. SRCB for 2020				**$466,805**	

Uniformat Code	Component Description		Qty	Units	2021 Replacement Cost	Year
D3030	COOLING TOWER (>701 TONS)	TOW-001	900	TON	$324,181	2021
	Projected Component Replacement Cost for Asset No. SRCB for 2021				**$324,181**	

Uniformat Code	Component Description		Qty	Units	2022 Replacement Cost	Year
D3040	AIR HANDLING UNIT - INDOOR (.5-1.25 HP)	FCUS	8	HP	$73,464	2022
D3040	AIR HANDLING UNIT - INDOOR (2.75-3.25 HP)	FCU ROOM 164	3	HP	$25,694	2022
D3040	AIR HANDLING UNIT - INDOOR (2.75-3.25 HP)	TF160 FCU	3	HP	$25,694	2022
D3040	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	AHU3	5	HP	$46,652	2022
D3040	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	LOCKER RM FCU	5	HP	$46,652	2022
D3040	AIR HANDLING UNIT - INDOOR (3.25-6 HP)	LOCKER RM FCU	5	HP	$46,652	2022
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU2	20	HP	$136,948	2022
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	AHU-001	30	HP	$240,560	2022
D3040	FAN - AXIAL, RETURN, 1.5" SP (7.5-10 HP) 19,500 CFM	AHU1 RETURN	10	HP	$20,044	2022
D3040	PUMP - ELECTRIC (<=10 HP)	HHW ROOM 157	8	HP	$12,994	2022
D3040	PUMP - ELECTRIC (<=10 HP)	HHW ROOM 157	8	HP	$12,994	2022
D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY HHW RM 159	10	HP	$16,243	2022
D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY HHW RM 159	10	HP	$16,243	2022

All costs shown as Future Value assuming a 3.00% average inflation rate

Recurring Component Renewal Schedule

D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY CHW	10	HP	$16,243	2022
D3040	PUMP - ELECTRIC (<=10 HP)	SECNDRY CHW	10	HP	$16,243	2022
D3040	PUMP - ELECTRIC (10 - 15 HP)	PRMRY HHW RM 159	15	HP	$20,989	2022
D3040	PUMP - ELECTRIC (30 - 40 HP)	CONDW RM 159	40	HP	$38,325	2022
D3040	PUMP - ELECTRIC (30 - 40 HP)	CONDW RM 159	40	HP	$38,325	2022
D3040	PUMP - ELECTRIC (30 - 40 HP)	PRIMARY CHW	40	HP	$38,325	2022
D3040	PUMP - ELECTRIC (30 - 40 HP)	PRIMARY CHW	40	HP	$38,325	2022
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	AHU1 RET FAN	10	HP	$5,153	2022
D5090	GENERATOR - DIESEL (100-200 KW)	EMG-001	185	KW	$123,765	2022
D5090	SWITCH - AUTO TRANSFER, 480 V (100-400 AMP)	TSW-ATS1 (RM 159)	150	AMP	$6,381	2022
C1020	DOOR LOCK, COMMERCIAL-GRADE	OFCS, GLASS DOORS	38	EA	$28,312	2022
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	ELV-001	1	EA	$281,463	2022

Projected Component Replacement Cost for Asset No. SRCB for 2022 $1,372,683

Uniformat Code	Component Description		Qty	Units	2023 Replacement Cost	Year
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	AHU2	20	HP	$7,484	2023

Projected Component Replacement Cost for Asset No. SRCB for 2023 $7,484

Uniformat Code	Component Description		Qty	Units	2024 Replacement Cost	Year
D2010	PLUMBING FIXTURE - LAVATORY, COUNTER		16	EA	$22,191	2024
D2010	PLUMBING FIXTURE - LAVATORY, WALL HUNG		1	EA	$1,407	2024
D2010	PLUMBING FIXTURE - SHOWER VALVE AND HEAD		23	EA	$41,978	2024
D2010	PLUMBING FIXTURE - URINAL		6	EA	$13,485	2024
D2010	PLUMBING FIXTURE - WATER CLOSET, TANKLESS		21	EA	$44,005	2024
D3030	CHILLER - WATER-COOLED CENTRIFUGAL OR SCREW (350-550 TONS)	WCU-CH2	400	TON	$595,731	2024
C3010	WALL FINISH - PAINT, STANDARD		40,490	SF	$79,169	2024

All costs shown as Future Value assuming a 3.00% average inflation rate

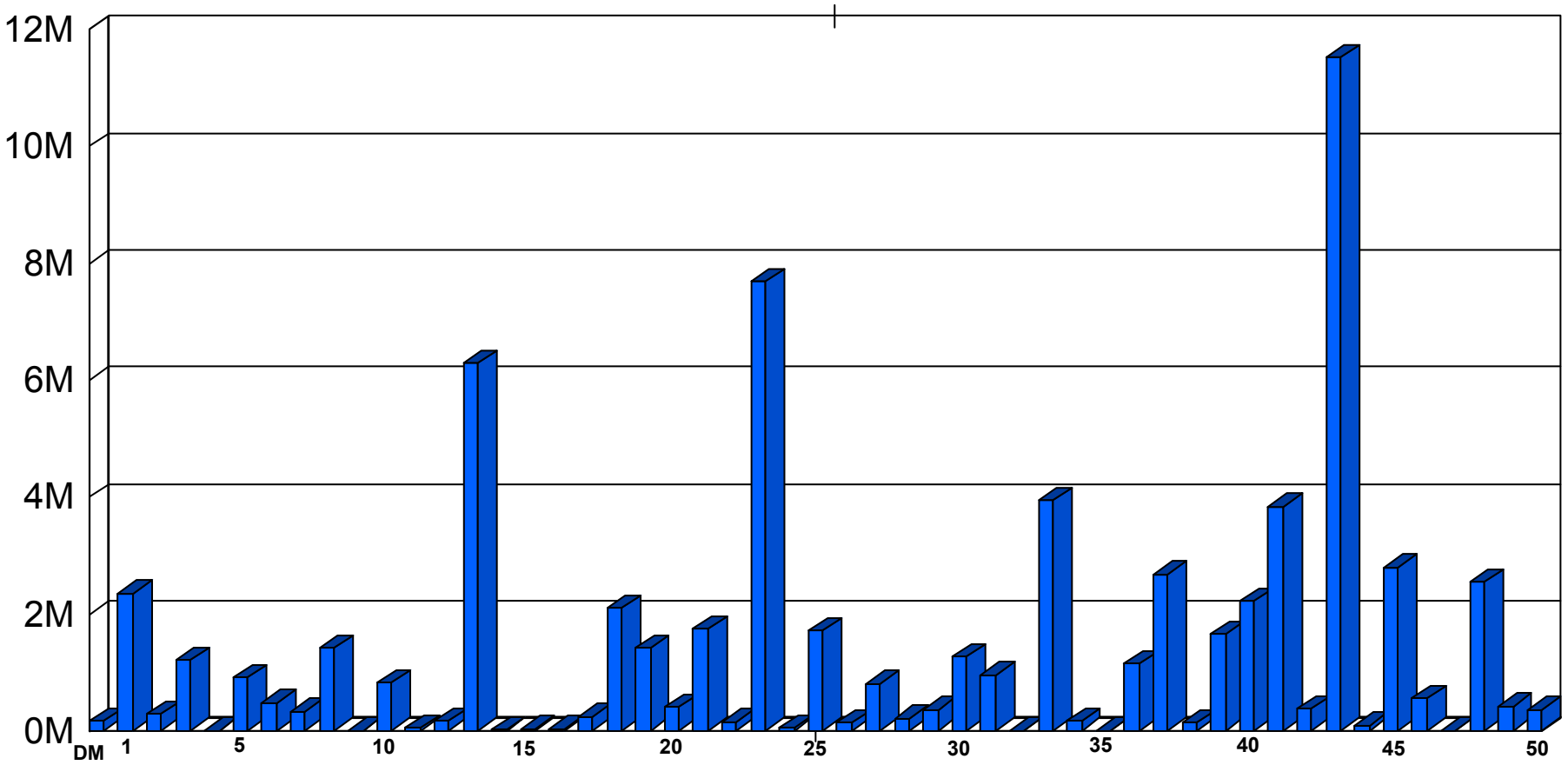
Recurring Component Renewal Schedule

Projected Component Replacement Cost for Asset No. SRCB for 2024	**$797,965**

All costs shown as Future Value assuming a 3.00% average inflation rate

Recurring Component Expenditure Projections

SRCB : STUDENT RECREATION CENTER



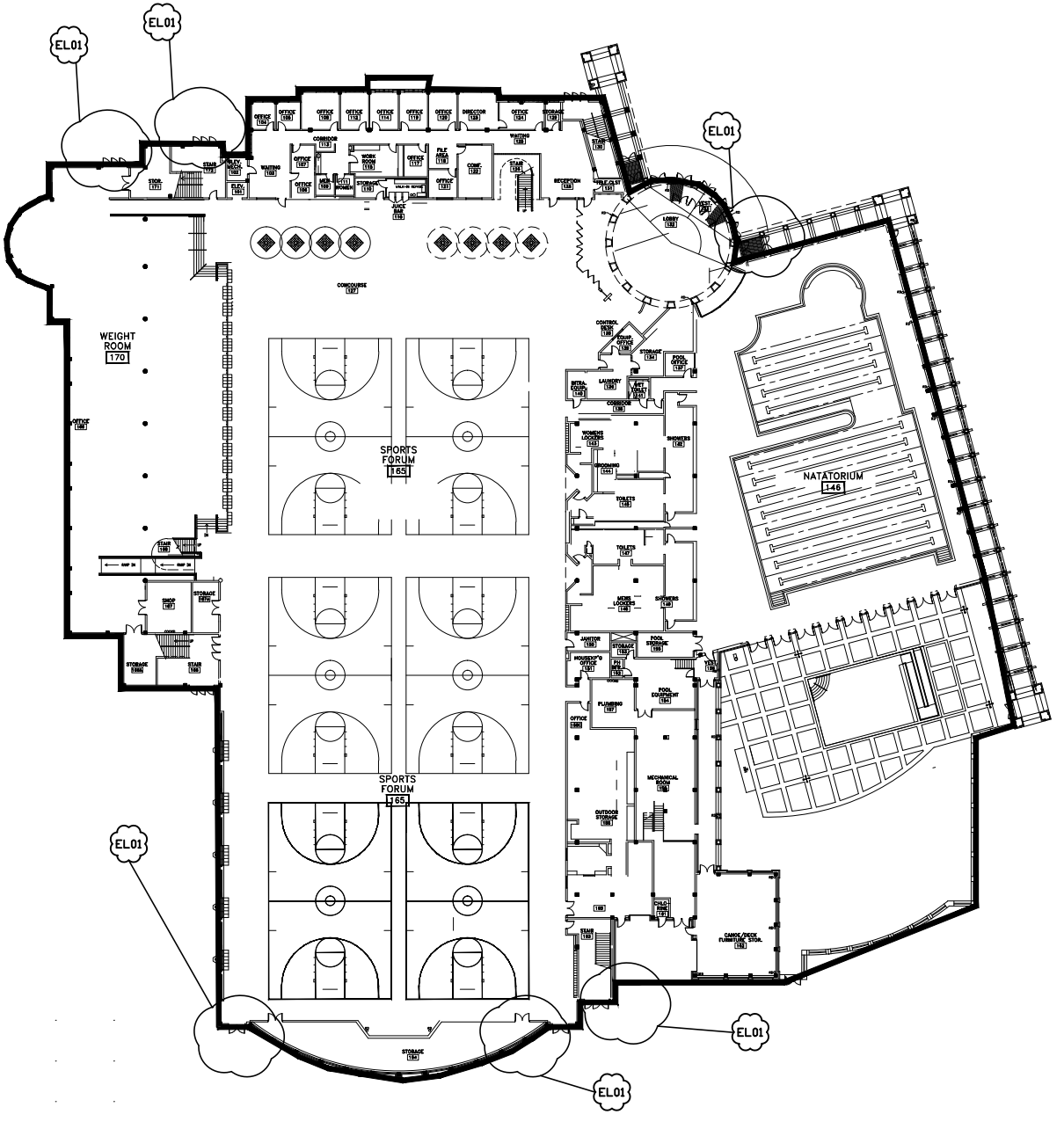
Average Annual Renewal Cost per SqFt $4.18

FACILITY CONDITION ASSESSMENT

SECTION 5

DRAWINGS/ PROJECT LOCATIONS

EAST CAROLINA UNIVERSITY



STUDENT RECREATION CENTER

BLDG NO. SRCB

ISES CORPORATION

FACILITY CONDITION ANALYSIS

3100 Breckinridge Boulevard
Suite 400, Duluth GA 30096
770.879-7825

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

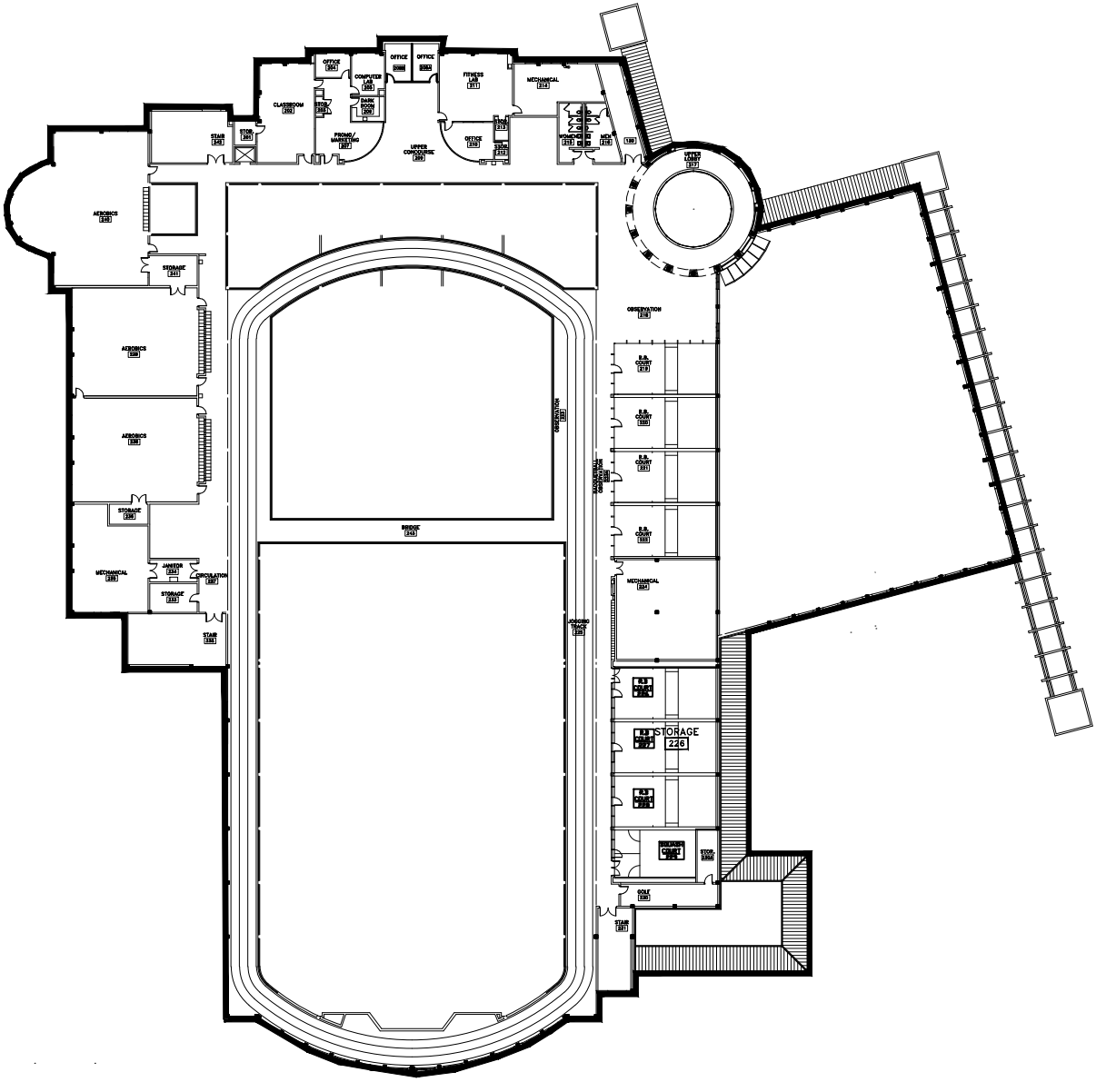
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 06/10/2015
Drawn by: T.C.
Project No. 15-008

FIRST FLOOR PLAN

Sheet No.
1 of 2

EAST CAROLINA UNIVERSITY



STUDENT
RECREATION
CENTER

BLDG NO. SRCB

ISES CORPORATION

FACILITY
CONDITION
ANALYSIS

3100 Breckinridge Boulevard
Suite 400, Duluth GA 30096
770.879-7825

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

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PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 06/10/2015
Drawn by: T.C.
Project No. 15-008

SECOND
FLOOR
PLAN

Sheet No.
2 of 2

SECTION 6

PHOTOGRAPHS

Photo ID No.	Description	Location	Date
SRCB001a	Exterior signage	Exterior elevation	03/17/2015
SRCB001e	Ground-mounted exterior light fixture	Southeast exterior	03/17/2015
SRCB002a	Exterior finishes	Exterior elevation	03/17/2015
SRCB002e	Surface-mounted exterior light fixtures (fluorescent)	Loading dock	03/17/2015
SRCB003a	Concrete loading dock with overhead and service doors	Loading dock	03/17/2015
SRCB003e	Ramp and south entrance lacking exterior lighting	South exterior	03/17/2015
SRCB004a	General landscaping and concrete sidewalk	Exterior elevation	03/17/2015
SRCB004e	Entrance lacking exterior lighting	Southwest exterior	03/17/2015
SRCB005a	Fixed, aluminum frame windows	Exterior elevation	03/17/2015
SRCB005e	Recessed exterior light fixture in column	North exterior	03/17/2015
SRCB006a	Brick finish, landscaping, and sidewalk	Exterior elevation	03/17/2015
SRCB006e	Recessed exterior light fixture in cupola	North exterior	03/17/2015
SRCB007a	Brick finish, landscaping, and sidewalk	Exterior elevation	03/17/2015
SRCB007e	Exit sign	Lobby 132	03/17/2015
SRCB008a	Exterior windows and brick finish	Exterior elevation	03/17/2015
SRCB008e	2x2 fluorescent light fixtures	Room 210	03/17/2015
SRCB009a	Metal exit doors, brick finish, and exterior windows	Exterior elevation	03/17/2015
SRCB009e	Ceramic metal halide light fixtures above gym floor	Gym 165	03/17/2015
SRCB010a	Brick, landscaping, and windows	Exterior elevation	03/17/2015
SRCB010e	Interior light fixtures and ceiling fans	Room 229	03/17/2015
SRCB011a	Assisted entrance doors	Main entrance	03/17/2015
SRCB011e	10 hp return fan for AHU4	Mezzanine	03/17/2015
SRCB012a	Main entrance	Exterior elevation	03/17/2015
SRCB012e	Centrifugal roof exhauster	Roof	03/17/2015
SRCB013a	Brick paver sidewalk	Exterior elevation	03/17/2015
SRCB013e	Compressor unit for walk-in cold room	Roof	03/17/2015
SRCB014a	Exterior brick finish	Exterior elevation	03/17/2015
SRCB014e	Air handler #4	Room 224	03/17/2015
SRCB015a	Brick, landscaping, and concrete sidewalk	Exterior elevation	03/17/2015
SRCB015e	Air handler #5	Room 224	03/17/2015
SRCB016a	Exterior windows and brick	Exterior elevation	03/17/2015

Photo ID No.	Description	Location	Date
SRCB016e	Landis+Gyr System 600 HVAC controls	Room 224	03/17/2015
SRCB017a	Main entrance	Exterior elevation	03/17/2015
SRCB017e	Fan coil unit in hard to reach ceiling location	Outside court #5	03/17/2015
SRCB018a	Ceramic tile floor	Lobby	03/17/2015
SRCB018e	Air handler #1	Room 235	03/17/2015
SRCB019a	Interior brick finish	Lobby	03/17/2015
SRCB019e	3,000 amp Siemens switchboard	Room 159	03/17/2015
SRCB020a	Skylight	Lobby	03/17/2015
SRCB020e	Notifier fire alarm control panel	Room 159	03/17/2015
SRCB021a	Single level drinking fountain	Near restrooms	03/17/2015
SRCB021e	Outdated lighting control panel	Electrical room adjacent to pool	03/17/2015
SRCB022a	Terrazzo floor	Admin common area	03/17/2015
SRCB022e	Filtration system for pool	Room 154	03/17/2015
SRCB023a	Acoustical tile ceiling	Admin common area	03/17/2015
SRCB023e	400 ton Trane chiller #1	Room 159	03/17/2015
SRCB024a	ADA signage	Wellness center	03/17/2015
SRCB024e	Plate frame heat exchanger for heating the pool	Room 157	03/17/2015
SRCB025a	Glass block wall	Wellness center	03/17/2015
SRCB025e	Victaulic fitting that leaks when steam is turned off	Room 157	03/17/2015
SRCB026a	Wood door with lever	Admin area	03/17/2015
SRCB026e	Steam-fed hot water tank	Room 157	03/17/2015
SRCB027a	Glass block wall	Admin area	03/17/2015
SRCB027e	40 hp condenser water pump	Room 159	03/17/2015
SRCB028a	Fixed interior window	Admin area	03/17/2015
SRCB028e	Primary heating hot water pump	Room 159	03/17/2015
SRCB029a	Exterior window	Classroom	03/17/2015
SRCB029e	Condensate receiver	Room 159	03/17/2015
SRCB030a	Carpet finish, painted walls, acoustical tile ceiling	Classroom	03/17/2015
SRCB030e	10 hp secondary chilled water pump	Room 159	03/17/2015
SRCB031a	Wood floor	Dance studio	03/17/2015
SRCB031e	30 hp electric fire pump	Room 159	03/17/2015
SRCB032a	Ceramic tile and wood flooring	Sports forum	03/17/2015

Photo ID No.	Description	Location	Date
SRCB032e	Onan automatic transfer switch	Room 159	03/17/2015
SRCB033a	Single level drinking fountain	Second floor, near classroom	03/17/2015
SRCB033e	Shell-and-tube heat exchanger for heating hot water	Room 159	03/17/2015
SRCB034a	Indoor track	Second floor	03/17/2015
SRCB034e	Steam pressure reducing valves	Room 159	03/17/2015
SRCB035a	Dual level drinking fountain	Second floor near room 238	03/17/2015
SRCB035e	800 ton cooling tower	Southeast exterior	03/17/2015
SRCB036a	Stair with ADA handrail	Stair near lobby	03/17/2015
SRCB036e	1,500 kVA Siemens oil-filled transformer	Southeast exterior	03/17/2015
SRCB037a	Steel frame supports and exposed ceiling	Sports forum	03/17/2015
SRCB037e	185 kW Onan emergency generator	Southeast exterior	03/17/2015
SRCB038a	Wood floor	Sports forum	03/17/2015
SRCB038e	LED light fixture for interior lighting	Under running track	03/17/2015
SRCB039a	Acoustical tile ceiling	Office	03/17/2015
SRCB039e	Fan coil unit	Room 158	03/17/2015
SRCB040a	Painted CMU wall	Second floor track	03/17/2015
SRCB040e	30 hp hydraulic pump for Otis elevator	Room 102	03/17/2015
SRCB041a	Exterior windows and brick finish	Second floor track	03/17/2015
SRCB041e	Typical urinals	Men's locker room	03/17/2015
SRCB042a	Painted CMU wall	Second floor track	03/17/2015
SRCB042e	Typical lavatories	Men's locker room	03/17/2015
SRCB043a	Glass door	Racquetball court	03/17/2015
SRCB043e	Typical water closet	Men's locker room	03/17/2015
SRCB044a	Painted walls and wood floor	Racquetball court	03/17/2015
SRCB044e	Typical shower fixture	Men's locker room	03/17/2015
SRCB045a	Exposed ceiling	Sports forum	03/17/2015
SRCB045e	Stanchion light fixtures at pool side	Southeast exterior	03/17/2015
SRCB046a	Metal roof	Roof	03/17/2015
SRCB047a	Metal gutter system	Roof	03/17/2015
SRCB048a	Roof drain system	Roof	03/17/2015
SRCB049a	Skylight	Roof	03/17/2015
SRCB050a	Fixed, aluminum frame windows	Roof	03/17/2015
SRCB051a	Skylight	Roof	03/17/2015

Photo ID No.	Description	Location	Date
SRCB052a	Leisure pool	Site	03/17/2015
SRCB053a	Brick wall and metal fencing near leisure pool	Site	03/17/2015
SRCB054a	Newly installed modified bitumen roof	Roof	03/17/2015
SRCB055a	Skylight and metal pitched roof	Roof	03/17/2015
SRCB056a	Skylight	Roof	03/17/2015
SRCB057a	Skylights and metal pitched roof	Roof	03/17/2015
SRCB058a	Roof drain system	Roof	03/17/2015
SRCB059a	ADA signage	Room 216	03/17/2015
SRCB060a	Lavatories	Men's restroom	03/17/2015
SRCB061a	Urinal	Men's restroom	03/17/2015
SRCB062a	Painted CMU walls and ceramic floor	Men's restroom	03/17/2015
SRCB063a	Lavatories	Women's restroom	03/17/2015
SRCB064a	Water closet with grab bars	Women's restroom	03/17/2015
SRCB065a	Under-stair hazard	Main stair near lobby	03/17/2015
SRCB066a	Floor tile	Common area	03/17/2015
SRCB067a	Attached acoustical tile ceiling	Common area	03/17/2015
SRCB068a	Exposed ceiling	Ceiling	03/17/2015
SRCB069a	Pool area	Natatorium	03/17/2015
SRCB070a	Pool area	Natatorium	03/16/2015
SRCB071a	Pool side drinking fountain	Natatorium	03/17/2015
SRCB072a	Abandoned-in-place door sensor system	Natatorium	03/17/2015
SRCB073a	Pool area	Natatorium	03/17/2015
SRCB074a	Concrete sidewalk and brick pavers	Leisure pool	03/17/2015
SRCB075a	Concrete sidewalk and brick pavers	Leisure pool	03/17/2015
SRCB076a	Loading dock railing	Loading dock	03/17/2015
SRCB077a	Concrete drive	Loading dock	03/17/2015
SRCB078a	ADA signage	Room 117	03/17/2015
SRCB079a	Carpet	Room 117	03/17/2015
SRCB080a	Acoustical tile ceiling	Room 117	03/17/2015
SRCB081a	Painted wall finish	First floor room 117	03/17/2015

Facility Condition Assessment - Photographs

SRCB001a.jpg

SRCB001e.jpg

SRCB002a.jpg

SRCB002e.jpg

SRCB003a.jpg

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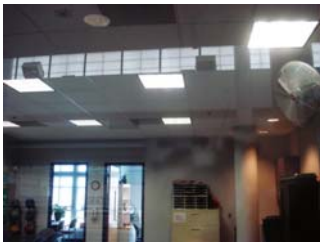

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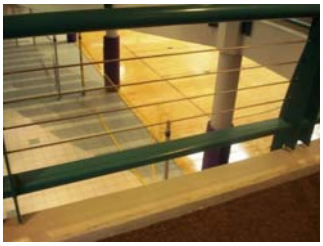

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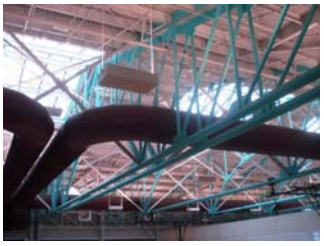

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Facility Condition Assessment - Photographs

SRCB041a.jpg

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SRCB042a.jpg

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SRCB043a.jpg

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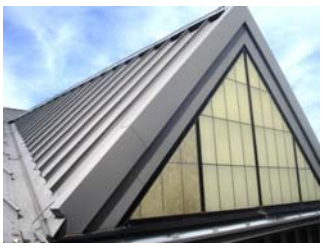

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