UNIVERSITY OF CALIFORNIA, SAN DIEGO

STUDENT CENTER

ASSET NUMBER: 9998

FACILITY CONDITION ANALYSIS

SEPTEMBER 15, 2010

ISES CORPORATION

TABLE OF CONTENTS

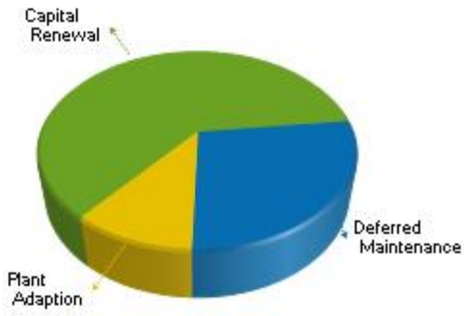
FACILITY CONDITION ANALYSIS

SECTION 1

GENERAL ASSET INFORMATION

EXECUTIVE SUMMARY - STUDENT CENTER

PROJECT COSTS BY CLASSIFICATION

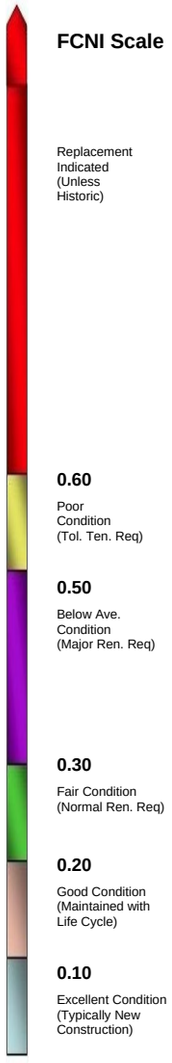


Building Code:	9998
Building Name:	STUDENT CENTER
Year Built:	1967
Building Use:	Student Union
Square Feet:	42,393

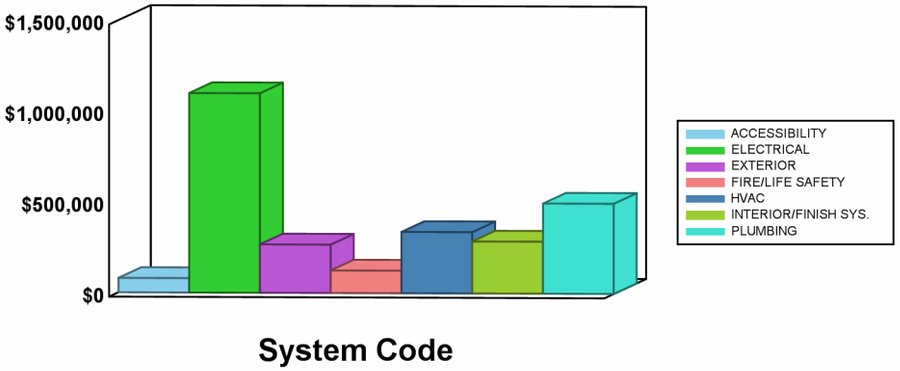
Project Costs by Priority

Priority 1:	$8,700	
Priority 2:	$690,454	
Priority 3:	$1,846,848	
Priority 4:	$147,303	
Total Project Costs:		**$2,693,304**
Facility Replacement Cost:		**$17,021,000**
Facility Condition Needs Index (FCNI):		**0.16**

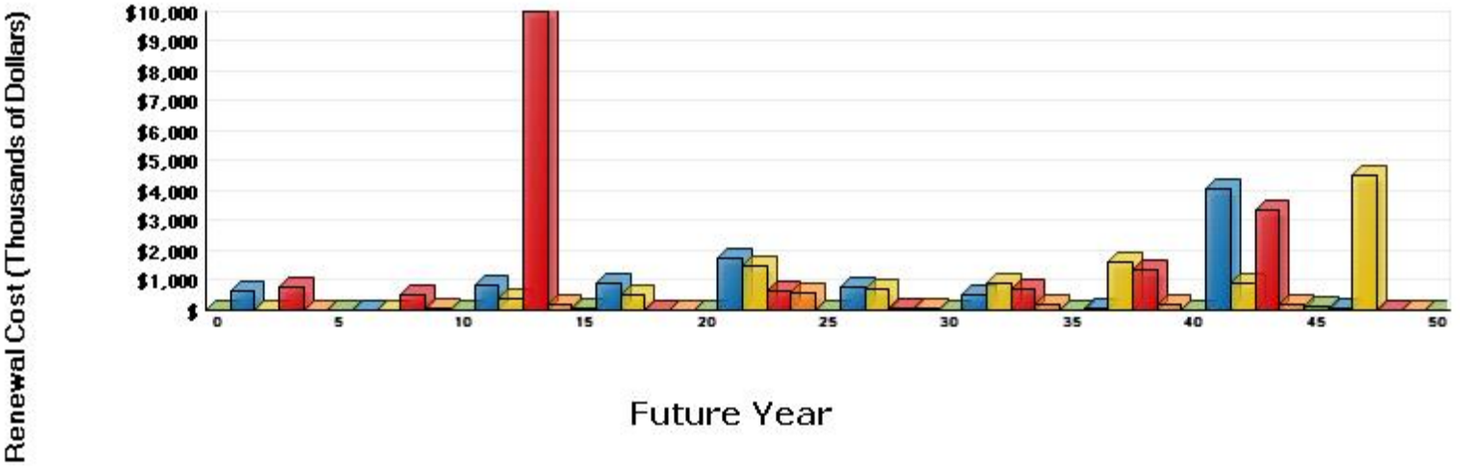
(Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt $9.05

B. ASSET SUMMARY

The Student Center is a complex of five two-story, wood-framed, retail / dining / meeting / office buildings and the one-story Porter's Pub restaurant and lounge. Construction on these generally rectangular structures was begun in the late 1960s and continued intermittently over the next three-plus decades. The two most recently constructed structures are atop the ridge at the north edge of the site. Located near the west central side of the campus of the University of California, San Diego, in San Diego, California, the Student Center complex has an estimated area of 42,393 gross square feet.

Information for this report was gathered during a site inspection visit that concluded on July 15, 2010.

SITE

Except for the ridge along its northern edge, the site is essentially flat. There is some formal landscaping, but most of the site is a grove of eucalyptus trees. There is a galvanized metal-framed bridge that connects the upper floors of the two newest buildings. An external elevator tower provides access from their upper levels to their lower levels and then down to the entry floor level of the remaining four buildings in the complex. No landscaping or paving upgrades are proposed.

EXTERIOR STRUCTURE

The majority of the building exteriors are sheathed with horizontally and diagonally applied painted wood board siding, with punched windows with wood frames. The two newer buildings are a combination of concrete masonry units with integral color and painted stucco exteriors. All of the exteriors are in overall fair condition. Exterior doors are glass and aluminum units, with a few painted metal exterior doors, all in overall good condition. The upper floors of the three central buildings are interconnected by elevated balcony walkways, accessible by elevator from the entry floor level.

The built-up roofing system is not expected to outlast the scope of this analysis. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace this roof with a similar application.

The exterior wood framing is failing and beyond repair at the covered patio at the southwest corner of Building 3. There is also some termite-damaged balcony overhang framing at the south side of the upper floor of Building 4. All of this deteriorated framing should be replaced. Also, although the applied finish on the exterior wood siding is in overall good condition, it will need to be renewed within the next ten years.

INTERIOR FINISHES / SYSTEMS

The interior finishes vary depending on the space use. Most offices have carpeted floors, painted walls, and lay-in tile ceilings. The carpeting is in fair condition and will need to be replaced within the next five years due to typical life cycle depletion. Some of the retail establishments have vinyl tile floors, which are not recommended for upgrade at this time. The two newer buildings have office spaces and eating

facilities. The ceiling of the upper floor of these two buildings is exposed wood beam roof framing. There are also some painted ceiling finishes. The painted and tile ceiling finishes will require an upgrade within the next ten years. Interior doors are in overall good condition.

ACCESSIBILITY

There much handicapped accessibility at these buildings. There are at-grade entrances, wheelchair accessible restrooms, lever door hardware on most doors, and ADA compliant elevators. However, a few accessibility upgrades are still proposed.

ADA legislation requires that buildings be wheelchair accessible. To enhance accessibility on the path of travel, it is recommended that lever door hardware be installed at all doors that currently have knob hardware. Also, ADA compliant signage should be installed for all permanent spaces in a building. The signage should meet specific size, graphical, Braille, height, and location requirements. This scope includes directional signage.

Goods and services offered in buildings are required to be generally accessible to all persons. The steps at the southeast corner of Building 1, the exterior seating at the Porter's Pub, and portions of the interior seating in Porter's Pub cannot be easily traversed by a person requiring additional support to use the steps. It is recommended that ADA compliant painted metal railings be installed at these step conditions.

The service counters in the south facade of Building 4 lack a wheelchair height position and are barriers to accessibility. A wheelchair accessible section should be incorporated into one of the two non-compliant service counters. The single level drinking fountain in Porter's Pub is also a barrier to accessibility. This drinking fountain should be replaced with a dual level, refrigerated unit.

HEALTH

Except for possible evidence of some past termite activity, there were no current reports of infestations by insects or vermin in these buildings. Also, no information was provided by the University as to the presence of asbestos-containing materials (ACM). No pest extermination or ACM abatement program is recommended.

Each of the food service operations contains one or more smoke extraction hoods with fire extinguishment and gas service emergency shutdown. The hoods, fans, make-up air tempering and supply units, and extinguishment system components of the food smoke extraction systems are considered serviceable for at least ten additional years. No physical testing of the hood extinguishment or gas shutdown system was performed as part of this visual assessment of the facility.

The tenant maintained and purchased food refrigeration / freezer components vary widely in age and condition. Maintenance of these elements is not the financial responsibility of UCSD, so they have been omitted from restoration cost estimates for the purposes of this assessment.

FIRE / LIFE SAFETY

All of the buildings are two-story units with adequate exits, and these are appropriately located. However, it is not apparent that all of the glazing in the glass and aluminum doors of these buildings has safety labels. The installation of safety glazing is recommend at all of the glass and aluminum doors where it cannot be determined that the existing glazing is safety rated, especially at the sliding glass doors at the conference rooms of the northeast building and the northwest building.

The Simplex 4100U fire alarm systems in the recently constructed elements of the complex are in excellent condition and use the latest technology. However, the current system also covers in a minimalist manner the older segments of the complex (Buildings 1, 2, and 3). These areas are not served in the same manner as the northeast expansion, northwest expansion, or the Building 3 addition. Porter's Pub has an obsolete stand-alone system that cannot be feasibly maintained. Upgrade the minimalist systems and totally replace the Porter's Pub systems to provide a unified system for the complex, through expansion of the current point addressable Simplex 4100U supervised system, whose primary fire alarm panel is presently located in the northeast expansion first floor machine room. Include a local annunciator within the Pub. New work should include new addressable pull stations, audible and visible alarms, addressable smoke and heat detectors, addressable suppression monitoring devices, and the associated wiring network. Install all devices in accordance with current NFPA and ADA requirements. The present monitoring system will be adequate once the Pub is added to the current system.

The complex is generally protected by wet-pipe fire suppression of varying ages. The recently constructed elements, such as the northeast and northwest expansions along with the Building 3 addition, have modern glass bulb type sprinkler heads that are suitable for extended future use. The older metallic trigger heads present in the older buildings are obsolete in design and should be replaced to assure proper performance in the event of an emergency. The statistical life cycle for a sprinkler head is approximately twenty years. During this time, scale can accumulate inside the head and cause it to malfunction when needed. New glass bulb design sprinkler heads are more reliable. It is recommended that the aging metallic sprinkler heads throughout the complex be replaced to ensure that proper protection is available.

Exit signage design and age vary according to the element of the complex being considered. The new additions and expansions have high quality LED exit signage, while the older buildings have fluorescent exit signage. All of the new additions have signage that is alternately powered by local emergency power inverter storage units, while the remainder of the exit signage and emergency lighting has battery pack standby power. Replace the existing exit signs throughout Buildings 1, 2, 3, 4, and Porter's Pub to renew their service life. Interface these signs with the recommended generator and power grid being suggested for installation to eliminate the maintenance costs of maintaining individual battery power in each device.

HVAC

HVAC systems vary in design and competence. The northeast expansion, northwest expansion, and Building 3 addition are served by ducted rooftop package systems and DX split systems, which are in excellent condition and suitable for extended future use. The remaining buildings vary in the amount of mechanical cooling provided. DX split systems, aging rooftop systems, and evaporative cooling systems are applied where cooling is provided. Heat is generated by natural gas furnaces or electric element heaters either in unitary form or within packaged units. As part of proposed interior renovations in the

older construction segments of the complex, replacement and redesign of the HVAC systems is recommended. The installation of ducted heating and cooling systems served by modular rooftop packaged HVAC units is recommended. Include modern digital and centralized controls to minimize energy use during periods of sporadic occupancy. Exhaust fans are partially maintained by local maintenance staff and partially maintained by tenants. The roof-mounted exhaust fans are generally serviceable and amply maintained.

ELECTRICAL

Primary power for the complex is provided by early 1960s vintage equipment, including an obsolete air-type high voltage load break switch, a fluid filled 500 kVA, 15 kV x 208 volt geometry transformer, and an obsolete outdoor primary distribution switchboard with a primary digital meter and two tenant meters. Except for the relatively new digital meter, which is the property of the utility provider, this equipment has served beyond its typical life expectancy and should be a high priority for future replacement due to the likelihood of failure. Complete replacement of the substation equipment is needed, including new conductors, 15 kV isolation switch, transformer, connections, and terminations. The replacement substation should include an appropriate scheme for tenant metering, ground fault protection, digital metering for remote monitoring and control, and transient voltage surge protection. Size the system according to modern design parameters to meet current and future power demands.

Generally, the electrical distribution networks are original, thus they vary in age according to the date of construction of each segment of the complex. The systems in the expansions and the Building 3 addition are in excellent condition, suitable for decades of future reliable service. All of the older buildings have obsolete power panels, older conductors, and visibly aged / damaged terminal devices. Complete replacement of the older segment of the complex's electrical network is recommended. Aging components, such as the circuit breakers, could serve as fire hazards if they fail to open a circuit in an overload or short circuit condition. Remove existing aged electrical components and branch circuitry. Install new power panels, switches, raceways, conductors, and devices. Provide molded case thermal magnetic circuit breakers and HACR circuit breakers for HVAC equipment. Redistribute the electrical loads to the appropriate areas to ensure safe and reliable power to building occupants. Provide ground fault circuit interrupter (GFCI) protection where required, and clearly label all circuits / loads within the new panels.

Interior lighting quality and efficiency vary by vintage of construction. The new expansion buildings and the Building 3 addition have excellent and efficient interior lighting. The remainder of the complex has inefficient and low quality interior lighting of varying ages and styles. As part of future renovation considerations, an interior lighting upgrade is recommended. Replace existing aged and / or inefficient systems with an efficient and proficient lighting design which is specifically tailored to the needs of each occupancy. Install occupancy sensors in select areas where appropriate for additional energy conservation. Brace all new lighting systems for potential seismic activity.

Generally, the exterior lighting fixtures are in satisfactory condition, and lighting levels appear to be satisfactory. However, there is no system of central lighting control. The installation of a central lighting control scheme is recommended to save lamp life and energy. Provide a central lighting distribution panel, central relay control panel, wiring modifications, and digital logic control devices to assure lighting throughout the complex responds to low lighting levels and does not operate when not needed.

The northwest expansion, northeast expansion, and Building 2 original segments rely on small modular inverter / power storage units to alternately power life safety systems during periods of utility interruption. There is no emergency power source for elevators. A complex of this size and nature should typically be served by a standby power source and should have an emergency power network system to alternately power life safely equipment, elevators, and important (non-essential class) user loads. The installation of an appropriately sized diesel-fired generator, associated automatic transfer switches (ATS), and an emergency distribution network is recommended to provide emergency power for the life safety and specific non-essential loads. The power grid should be expanded within the new additions and expansions to carry elevator and critical user loads. Once completed, existing inverter / battery power systems can be retired from service.

PLUMBING

The facility is provided domestic water from the public utility through a traditional turbine-type water meter and backflow prevention system. The building's distribution system has central pressure control and does not require a pressure booster system. Domestic water supply piping, domestic water heaters, drain piping, and fixtures vary according to the date of construction of the structure being considered. The fixtures and piping systems in the new expansion areas and the Building 3 addition are in excellent condition, needing no major work over the future ten-year period. The piping, fixtures, and domestic hot water generation equipment in the older buildings have fulfilled their normal service lifespans and should be replaced as part of planned future renovation or accessibility upgrade proposals. Suggested work should include demolition of existing water supply and drain piping networks, all plumbing fixtures, and domestic hot water heating equipment. Install new insulated copper water supply networks, complete with backflow protection devices, pressure regulators, and appropriately placed isolation valves. Install new drain networks comprised of cast-iron piping with no-hub fittings. New plumbing fixtures should be installed throughout, in coordination with proposed ADA recommendations. Install new high efficiency domestic water heating equipment appropriately sized to accommodate the new fixtures. Brace all piping and associated equipment for potential seismic activity.

VERTICAL TRANSPORTATION

Two two-stop hydraulic passenger elevators (one with two-door geometry) are installed in this facility. One elevator is part of the northern expansion, while the other is part of the Building 3 addition. Generally, these units are contemporary. No major issues were observed or reported for these systems.

Note: The deficiencies outlined in this report were noted from a visual inspection. ISES engineers and architects developed projects with related costs that are needed over the next ten-year period to bring the facility to “like-new” condition. The costs developed do not represent the cost of a complete facility renovation. Soft costs not represented in this report include telecommunications, 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. However, existing fixed building components and systems were thoroughly inspected. The developed costs represent correcting existing deficiencies and anticipated life cycle failures (within a ten-year period) to bring the facility to modern standards without any anticipation of change to facility space layout or function. Please refer to Section Three of this report for recommended Specific Project Details.

C. INSPECTION TEAM DATA

DATE OF INSPECTION: July 15, 2010

INSPECTION TEAM PERSONNEL:

NAME	POSITION	SPECIALTY
Doug Fredendall	Facility Analyst	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Norm Teahan, RA, AIA, NCARB	Project Architect	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

FACILITY CONTACTS:

NAME	POSITION
Jeff Turner	Senior Vice President, Brailsford & Dunlavey
Matt Bohannon	Project Manager, Brailsford & Dunlavey
Paul Terzino	Director, UC San Diego

REPORT DEVELOPMENT:

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Contact:
Norman Teahan, Project Manager
770-879-7376, ext. 153

D. FACILITY CONDITION ANALYSIS - DEFINITIONS

The following information is a clarification of the Asset Report using example definitions.

1. MATERIAL AND LABOR COST FACTORS AND ADDITIONAL MARKUPS

The cost summaries and totals are illustrated by detailed projects sorted in multiple formats (shown in Sections 2 and 3). The project costs are adjusted from national averages to reflect conditions in San Diego using the R. S. Means City Cost Index for material / labor cost factors (2010). Typical general contractor and professional fees are also included in the project costs.

GLOBAL MARKUP PERCENTAGES		R.S. MEANS
Local Labor Index:	107.5 %	of National Average
Local Materials Index:	102.4 %	of National Average
General Contractor Markup:	25.0 %	Contractor profit and overhead, bonds and insurance
Professional Fees:	16.0 %	Arch. / Eng. Firm design fees and in-house design cost

2. FACILITY CONDITION NEEDS INDEX (FCNI) (Shown in Sections 1 and 2)

FCNI = Facility Condition Needs Index, Total Cost vs. Replacement Cost. The FCNI provides a life cycle cost comparison. Facility replacement cost is based on replacement with current construction standards for the facility use type, and not original design parameters. This index gives the client a comparison within all buildings for identifying worst case / best case building conditions.

$$FCNI = \frac{\text{Deferred Maintenance + Capital Renewal + Plant Adaption}}{\text{Plant / Facility Replacement Cost}}$$

3. PROJECT NUMBER (Shown in Sections 2 and 3)

Example: Project Number = 0001-EL-04 (unique for each independent project)

0001 - Asset Identification Number
EL - System Code, EL represents Electrical
04 - Sequential Assignment Project Number by Category / System

4. PROJECT CLASSIFICATION (Shown in Sections 2 and 3)

A. Plant / Program Adaption: Expenditures 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).

B. Deferred Maintenance: Refers to expenditures for repairs which were not accomplished as a part of normal maintenance or capital repair which have accumulated to the point that facility deterioration is evident and 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 affect the needed repairs. Deferred maintenance projects represent catch up expenses.

C. Capital Renewal: A subset of regular or normal facility maintenance which refers to major repairs or the replacement / rebuilding of major facility components (e.g., roof replacement at the end of its normal useful life is capital repair; roof replacement several years after its normal useful life is deferred maintenance).

5. PRIORITY CLASS (Shown in Sections 2 and 3)

PRIORITY 1 - Currently Critical (Immediate)

Projects in this category require immediate action to:
a. return a facility to normal operation
b. stop accelerated deterioration
c. correct a cited safety hazard

PRIORITY 2 - Potentially Critical (Year One)

Projects in this category, if not corrected expeditiously, will become critical within a year. Situations in this category include:
a. intermittent interruptions
b. rapid deterioration
c. potential safety hazards

PRIORITY 3 - Necessary - Not Yet Critical (Years Two to Five)

Projects in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

PRIORITY 4 - Recommended (Years Six to Ten)

Projects in this category include items that represent a sensible improvement to existing conditions. These items are not required for the most basic function of a facility; however, Priority 4 projects will either improve overall usability and / or reduce long-term maintenance.

6. CATEGORY CODE (Shown in Sections 2 and 3)

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

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.

7. PRIORITY SEQUENCE BY PRIORITY CLASS

All projects are assigned both a Priority Sequence number and Priority Class number for categorizing and sorting projects based on criticality and recommended execution order.

Example:

PRIORITY CLASS 1

Code	Project No.	Priority Sequence
HV2C	0001HV04	01
PL1D	0001PL02	02

PRIORITY CLASS 2

Code	Project No.	Priority Sequence
IS1E	0001IS06	03
EL4C	0001EL03	04

8. PROJECT SUBCLASS TYPE

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

9. DRAWINGS / PROJECT LOCATIONS (Shown in Section 4)

The drawings for this facility are marked with icons (see legend) denoting the specific location(s) for each project. Within each icon is the last four characters of the respective project number (e.g., 0001IS01 is marked on plan by IS01). There is one set of drawings marked with icons representing all priority classes (1, 2, 3, and 4).

10. LIFE CYCLE COST MODEL DESCRIPTION AND DEFINITIONS (Shown in Section 5)

Included in this report is a Life Cycle Cost Model. This model consists of two elements, one is the component listing (starting on page 5.1.1) and the other is the Life Cycle Cost Projections Graph (page 5.2.1). The component list is a summary of all major systems and components within the facility. Each indicated component has the following associated information:

Uniformat Code	This is the standard Uniformat Code that applies to the component
Component Description	This line item describes the individual component
Qty	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)
Total Cost	Unit cost multiplied by quantity, also in today's dollars. Note that this is a one-time renewal / replacement cost
Install Date	Year that the component was installed. Where this data is not available, it defaults to the year the asset was constructed
Life Exp	Average life expectancy for each individual component

The component listing forms the basis for the Life Cycle Cost Projections Graph shown on page 5.2.1. This graph represents a projection over a fifty-year period (starting from the date the report is run) of expected component renewals based on each individual item's renewal cost and life span. Some components might require renewal several times within the fifty-year model, while others might not occur at all. Each individual component is assigned a renewal year based on life cycles, and the costs for each item are inflated forward to the appropriate year. The vertical bars shown on the graph represent the accumulated (and inflated) total costs for each individual year. At the bottom of the graph, the average annual cost per gross square foot ($/GSF) is shown for the facility. In this calculation, all costs are not inflated. This figure can be utilized to assess the adequacy of existing capital renewal and repair budgets.

11. PHOTO NUMBER (Shown in Section 6)

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

Example: 0001006e

Asset Number	Photo Sequence	Arch / Eng / VT
0001	006	e

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
SYSTEM DESCRIPTION: ACCESSIBILITY			
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.
SYSTEM DESCRIPTION: ELECTRICAL			
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.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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.
SYSTEM DESCRIPTION: EXTERIOR			
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.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere, including finish and structural work on freestanding boiler stacks.
SYSTEM DESCRIPTION: FIRE / LIFE SAFETY			
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.
SYSTEM DESCRIPTION: HEALTH			
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.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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.
SYSTEM DESCRIPTION: HVAC			
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.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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.
SYSTEM DESCRIPTION: INTERIOR FINISHES / SYSTEMS			
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.
SYSTEM DESCRIPTION: PLUMBING			
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.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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.
SYSTEM DESCRIPTION: SITE			
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.

SYSTEM DESCRIPTION: SECURITY SYSTEMS			
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.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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.
SYSTEM DESCRIPTION: VERTICAL TRANSPORTATION			
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 ANALYSIS

SECTION 2

DETAILED PROJECT SUMMARIES AND TOTALS

Detailed Project Totals
Facility Condition Analysis
System Code by Priority Class
9998 : STUDENT CENTER

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	58,651	2,486	18,590	79,727
EL	ELECTRICAL	0	305,114	794,536	0	1,099,650
ES	EXTERIOR	0	235,818	0	31,088	266,906
FS	FIRE/LIFE SAFETY	8,700	90,871	25,024	0	124,595
HV	HVAC	0	0	338,163	0	338,163
IS	INTERIOR/FINISH SYS.	0	0	189,395	97,625	287,020
PL	PLUMBING	0	0	497,244	0	497,244
	TOTALS	8,700	690,454	1,846,848	147,303	2,693,304

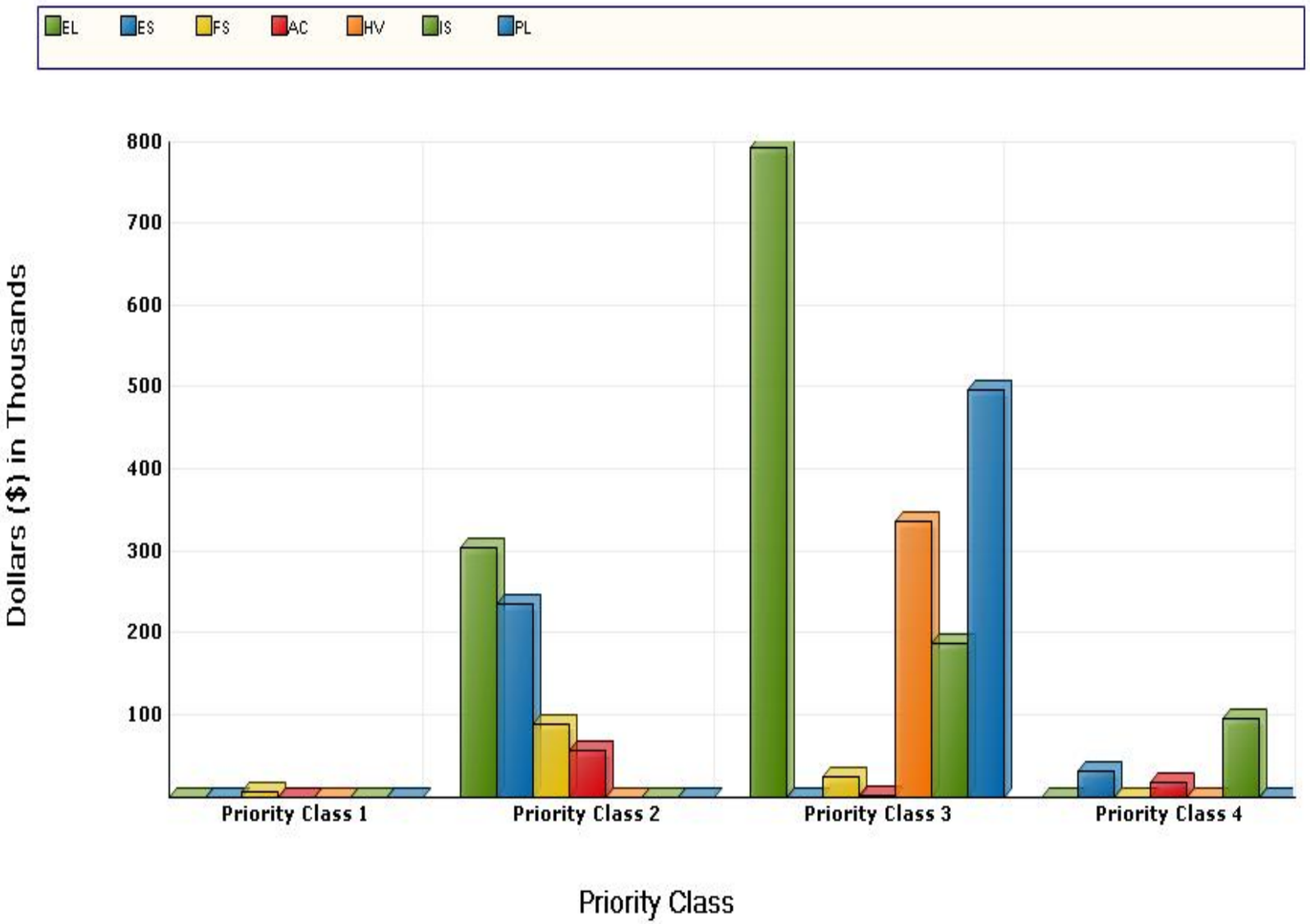
Facility Replacement Cost	$17,021,000
Facility Condition Needs Index	0.16

Gross Square Feet	42,393	**Total Cost Per Square Foot**	$63.53

FACILITY CONDITION ANALYSIS

System Code by Priority Class

9998 : STUDENT CENTER



Detailed Project Totals
Facility Condition Analysis
System Code by Project Class
9998 : STUDENT CENTER

System Code	System Description	Project Classes: Captial Renewal	Deferred Maintenance	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	79,727	79,727
EL	ELECTRICAL	517,279	476,235	106,137	1,099,650
ES	EXTERIOR	31,088	235,818	0	266,906
FS	FIRE/LIFE SAFETY	0	25,024	99,571	124,595
HV	HVAC	338,163	0	0	338,163
IS	INTERIOR/FINISH SYS.	287,020	0	0	287,020
PL	PLUMBING	497,244	0	0	497,244
	TOTALS	1,670,793	737,076	285,435	2,693,304

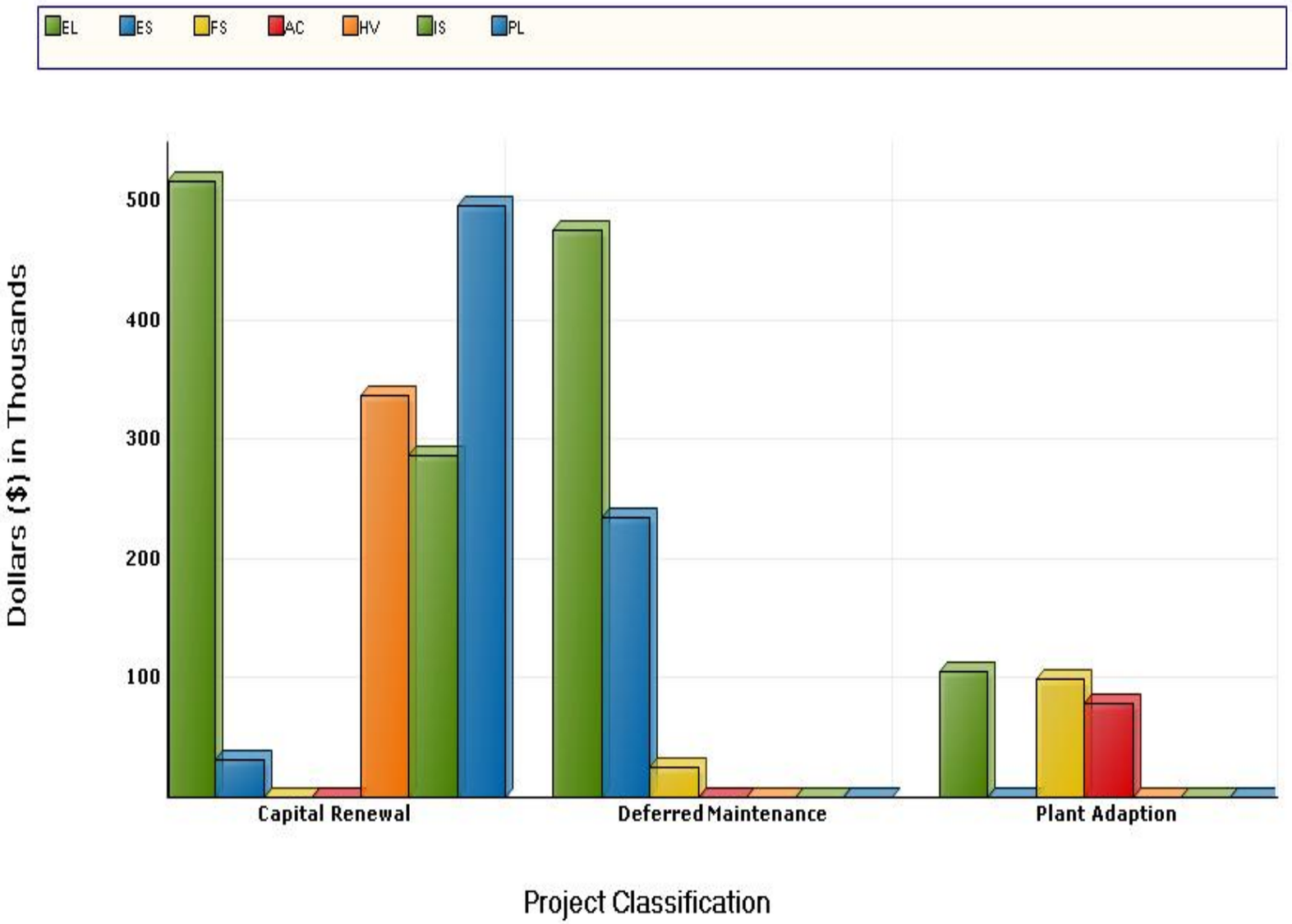
Facility Replacement Cost	$17,021,000
Facility Condition Needs Index	0.16

Gross Square Feet	42,393	**Total Cost Per Square Foot**	$63.53

FACILITY CONDITION ANALYSIS

System Code by Project Class

9998 : STUDENT CENTER



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
9998 : STUDENT CENTER

	Priority Classes				
Project Class	**1**	**2**	**3**	**4**	**Subtotal**
Capital Renewal	0	0	1,542,080	128,713	1,670,793
Deferred Maintenance	0	434,795	302,281	0	737,076
Plant Adaption	8,700	255,659	2,486	18,590	285,435
TOTALS	8,700	690,454	1,846,848	147,303	2,693,304

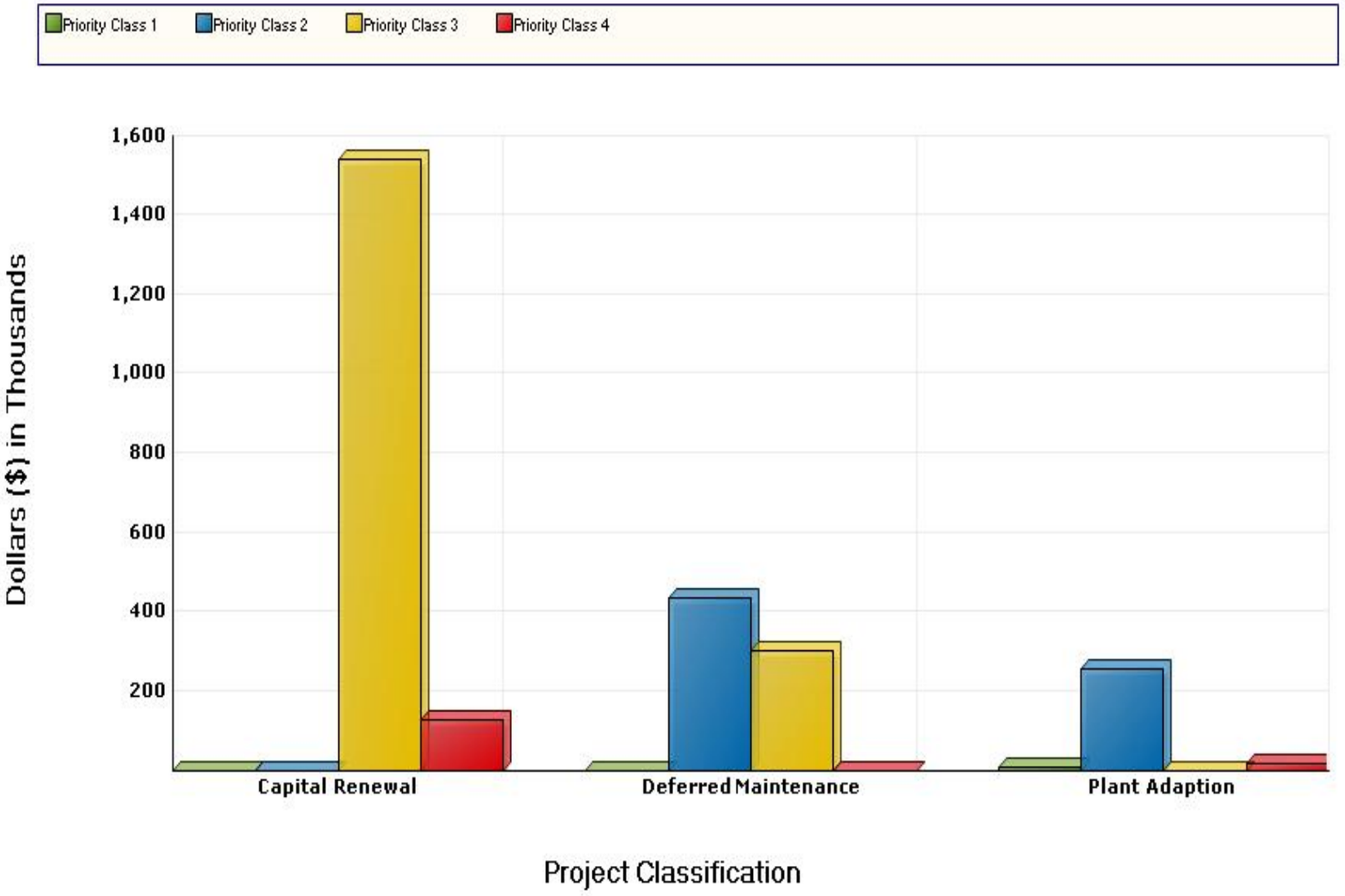
Facility Replacement Cost	$17,021,000
Facility Condition Needs Index	0.16

Gross Square Feet	42,393	**Total Cost Per Square Foot**	$63.53

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

9998 : STUDENT CENTER



Detailed Project Summary

Facility Condition Analysis

Priority Class - Priority Sequence

9998 : STUDENT CENTER

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5C	9998FS04	1	1	SAFETY GLAZING INSTALLATION	7,500	1,200	8,700
				Totals for Priority Class 1	**7,500**	**1,200**	**8,700**
FS2A	9998FS01	2	2	PARTIAL FIRE ALARM SYSTEM REPLACEMENT	78,337	12,534	90,871
AC3C	9998AC01	2	3	INSTALL LEVER ACTUATED DOOR HARDWARE	33,202	5,312	38,515
AC3B	9998AC02	2	4	ADA COMPLIANT HANDRAIL INSTALLATIONS	13,243	2,119	15,362
AC4A	9998AC03	2	5	MODIFY SERVICE COUNTER FOR WHEELCHAIR ACCESS	4,116	659	4,775
ES4B	9998ES01	2	6	BUILT-UP ROOF REPLACEMENT	185,091	29,615	214,706
ES2B	9998ES02	2	7	DETERIORATED FRAMING REPLACEMENT	18,200	2,912	21,112
EL1A	9998EL02	2	8	UPGRADE ELECTRICAL SERVICE	171,532	27,445	198,977
EL5A	9998EL01	2	9	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	91,497	14,640	106,137
				Totals for Priority Class 2	**595,219**	**95,235**	**690,454**
FS1A	9998FS03	3	10	REPLACE EXIT SIGNS	6,180	989	7,169
FS3A	9998FS02	3	11	PARTIAL SPRINKLER HEAD REPLACEMENT	15,392	2,463	17,855
AC3F	9998AC04	3	12	DUAL LEVEL DRINKING FOUNTAIN INSTALLATION	2,143	343	2,486
HV3D	9998HV01	3	13	HVAC SYSTEM REPLACEMENT	291,520	46,643	338,163
EL3B	9998EL04	3	14	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	445,930	71,349	517,279
EL4B	9998EL03	3	15	INTERIOR LIGHTING UPGRADE	224,700	35,952	260,652
EL4A	9998EL05	3	16	EXTERIOR LIGHTING CONTROL IMPROVEMENTS	14,315	2,290	16,606
IS1A	9998IS01	3	17	CARPETING UPGRADES	163,271	26,123	189,395
PL1A	9998PL01	3	18	COMPLETE PLUMBING RENOVATION	428,659	68,585	497,244
				Totals for Priority Class 3	**1,592,110**	**254,738**	**1,846,848**
AC3D	9998AC05	4	19	INSTALL ADDITIONAL SIGNAGE	16,026	2,564	18,590
ES2B	9998ES03	4	20	EXTERIOR APPLIED FINISH RENEWAL	26,800	4,288	31,088
IS3B	9998IS02	4	21	CEILING FINISH UPGRADES	84,159	13,466	97,625
				Totals for Priority Class 4	**126,985**	**20,318**	**147,303**
				Grand Total:	**2,321,814**	**371,490**	**2,693,304**

Detailed Project Summary

Facility Condition Analysis

Project Classification

9998 : STUDENT CENTER

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
HV3D	9998HV01	13	Capital Renewal	3	HVAC SYSTEM REPLACEMENT	338,163
EL3B	9998EL04	14	Capital Renewal	3	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	517,279
IS1A	9998IS01	17	Capital Renewal	3	CARPETING UPGRADES	189,395
PL1A	9998PL01	18	Capital Renewal	3	COMPLETE PLUMBING RENOVATION	497,244
ES2B	9998ES03	20	Capital Renewal	4	EXTERIOR APPLIED FINISH RENEWAL	31,088
IS3B	9998IS02	21	Capital Renewal	4	CEILING FINISH UPGRADES	97,625
					Totals for Capital Renewal	**1,670,793**
ES4B	9998ES01	6	Deferred Maintenance	2	BUILT-UP ROOF REPLACEMENT	214,706
ES2B	9998ES02	7	Deferred Maintenance	2	DETERIORATED FRAMING REPLACEMENT	21,112
EL1A	9998EL02	8	Deferred Maintenance	2	UPGRADE ELECTRICAL SERVICE	198,977
FS1A	9998FS03	10	Deferred Maintenance	3	REPLACE EXIT SIGNS	7,169
FS3A	9998FS02	11	Deferred Maintenance	3	PARTIAL SPRINKLER HEAD REPLACEMENT	17,855
EL4B	9998EL03	15	Deferred Maintenance	3	INTERIOR LIGHTING UPGRADE	260,652
EL4A	9998EL05	16	Deferred Maintenance	3	EXTERIOR LIGHTING CONTROL IMPROVEMENTS	16,606
					Totals for Deferred Maintenance	**737,076**
FS5C	9998FS04	1	Plant Adaption	1	SAFETY GLAZING INSTALLATION	8,700
FS2A	9998FS01	2	Plant Adaption	2	PARTIAL FIRE ALARM SYSTEM REPLACEMENT	90,871
AC3C	9998AC01	3	Plant Adaption	2	INSTALL LEVER ACTUATED DOOR HARDWARE	38,515
AC3B	9998AC02	4	Plant Adaption	2	ADA COMPLIANT HANDRAIL INSTALLATIONS	15,362
AC4A	9998AC03	5	Plant Adaption	2	MODIFY SERVICE COUNTER FOR WHEELCHAIR ACCESS	4,775
EL5A	9998EL01	9	Plant Adaption	2	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	106,137
AC3F	9998AC04	12	Plant Adaption	3	DUAL LEVEL DRINKING FOUNTAIN INSTALLATION	2,486
AC3D	9998AC05	19	Plant Adaption	4	INSTALL ADDITIONAL SIGNAGE	18,590
					Totals for Plant Adaption	**285,435**
					Grand Total:	**2,693,304**

Detailed Project Summary

Facility Condition Analysis

Energy Conservation

9998 : STUDENT CENTER

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
ES4B	9998ES01	2	6	BUILT-UP ROOF REPLACEMENT	214,706	800	268.38
				Totals for Priority Class 2	**214,706**	**800**	**268.38**
FS1A	9998FS03	3	10	REPLACE EXIT SIGNS	7,169	50	143.38
EL4B	9998EL03	3	15	INTERIOR LIGHTING UPGRADE	260,652	5,610	46.46
EL4A	9998EL05	3	16	EXTERIOR LIGHTING CONTROL IMPROVEMENTS	16,606	1,890	8.79
				Totals for Priority Class 3	**284,426**	**7,550**	**37.67**
				Grand Total:	**499,132**	**8,350**	**59.78**

Detailed Project Summary

Facility Condition Analysis

Category/System Code

9998 : STUDENT CENTER

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC3C	9998AC01	2	3	INSTALL LEVER ACTUATED DOOR HARDWARE	33,202	5,312	38,515
AC3B	9998AC02	2	4	ADA COMPLIANT HANDRAIL INSTALLATIONS	13,243	2,119	15,362
AC4A	9998AC03	2	5	MODIFY SERVICE COUNTER FOR WHEELCHAIR ACCESS	4,116	659	4,775
AC3F	9998AC04	3	12	DUAL LEVEL DRINKING FOUNTAIN INSTALLATION	2,143	343	2,486
AC3D	9998AC05	4	19	INSTALL ADDITIONAL SIGNAGE	16,026	2,564	18,590
				Totals for System Code: ACCESSIBILITY	**68,730**	**10,997**	**79,727**
EL1A	9998EL02	2	8	UPGRADE ELECTRICAL SERVICE	171,532	27,445	198,977
EL5A	9998EL01	2	9	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	91,497	14,640	106,137
EL3B	9998EL04	3	14	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	445,930	71,349	517,279
EL4B	9998EL03	3	15	INTERIOR LIGHTING UPGRADE	224,700	35,952	260,652
EL4A	9998EL05	3	16	EXTERIOR LIGHTING CONTROL IMPROVEMENTS	14,315	2,290	16,606
				Totals for System Code: ELECTRICAL	**947,975**	**151,676**	**1,099,650**
ES4B	9998ES01	2	6	BUILT-UP ROOF REPLACEMENT	185,091	29,615	214,706
ES2B	9998ES02	2	7	DETERIORATED FRAMING REPLACEMENT	18,200	2,912	21,112
ES2B	9998ES03	4	20	EXTERIOR APPLIED FINISH RENEWAL	26,800	4,288	31,088
				Totals for System Code: EXTERIOR	**230,091**	**36,815**	**266,906**
FS5C	9998FS04	1	1	SAFETY GLAZING INSTALLATION	7,500	1,200	8,700
FS2A	9998FS01	2	2	PARTIAL FIRE ALARM SYSTEM REPLACEMENT	78,337	12,534	90,871
FS1A	9998FS03	3	10	REPLACE EXIT SIGNS	6,180	989	7,169
FS3A	9998FS02	3	11	PARTIAL SPRINKLER HEAD REPLACEMENT	15,392	2,463	17,855
				Totals for System Code: FIRE/LIFE SAFETY	**107,409**	**17,185**	**124,595**
HV3D	9998HV01	3	13	HVAC SYSTEM REPLACEMENT	291,520	46,643	338,163
				Totals for System Code: HVAC	**291,520**	**46,643**	**338,163**
IS1A	9998IS01	3	17	CARPETING UPGRADES	163,271	26,123	189,395
IS3B	9998IS02	4	21	CEILING FINISH UPGRADES	84,159	13,466	97,625
				Totals for System Code: INTERIOR/FINISH SYS.	**247,431**	**39,589**	**287,020**
PL1A	9998PL01	3	18	COMPLETE PLUMBING RENOVATION	428,659	68,585	497,244
				Totals for System Code: PLUMBING	**428,659**	**68,585**	**497,244**
				Grand Total:	**2,321,814**	**371,490**	**2,693,304**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998FS04	**Title:**	SAFETY GLAZING INSTALLATION
Priority Sequence:	1		
Priority Class:	1		
Category Code:	FS5C	**System:**	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	SEPARATION RATING
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 2400		
Project Class:	Plant Adaption		
Project Date:	9/10/2010		
Project Location:	Undefined: Floor(s) 1		

Project Description

It is not apparent that all of the glazing in the glass and aluminum doors of these buildings has safety labels. The installation of safety glazing is recommend at all of the glass and aluminum doors where it cannot be determined that the existing glazing is safety rated, especially at the sliding glass doors at the conference rooms of the northeast building and the northwest building.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998FS04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Safety rated glazing installation allowance	LOT	1	$2,500	$2,500	$3,200	$3,200	$5,700
Project Totals:				**$2,500**		**$3,200**	**$5,700**

Material/Labor Cost		$5,700
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$6,000
General Contractor Mark Up at 25.0%	+	$1,500
Construction Cost		$7,500
Professional Fees at 16.0%	+	$1,200
Total Project Cost		**$8,700**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998FS01	**Title:**	PARTIAL FIRE ALARM SYSTEM REPLACEMENT
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS2A	**System:**	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	702.1
	NFPA	1, 101

Project Class:	Plant Adaption
Project Date:	9/10/2010
Project Location:	Area Wide: Floor(s) 1, 2

Project Description

The Simplex 4100U fire alarm systems in the recently constructed elements of the complex are in excellent condition and use the latest technology. However, the current system also covers in a minimalist manner the older segments of the complex (Buildings 1, 2, and 3). These areas are not served in the same manner as the northeast expansion, northwest expansion, or the Building 3 addition. Porter's Pub has an obsolete stand-alone system that cannot be feasibly maintained. Upgrade the minimalist systems and totally replace the Porter's Pub systems to provide a unified system for the complex, through expansion of the current point addressable Simplex 4100U supervised system, whose primary fire alarm panel is presently located in the northeast expansion first floor machine room. Include a local annunciator within the Pub. New work should include new addressable pull stations, audible and visible alarms, addressable smoke and heat detectors, addressable suppression monitoring devices, and the associated wiring network. Install all devices in accordance with current NFPA and ADA requirements. The present monitoring system will be adequate once the Pub is added to the current system.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998FS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, and cut and patching materials	SF	24,620	$1.52	$37,422	$0.92	$22,650	$60,073
Project Totals:				**$37,422**		**$22,650**	**$60,073**

Material/Labor Cost		$60,073
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$62,670
General Contractor Mark Up at 25.0%	+	$15,667
Construction Cost		$78,337
Professional Fees at 16.0%	+	$12,534
Total Project Cost		**$90,871**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998AC01	**Title:**	INSTALL LEVER ACTUATED DOOR HARDWARE
Priority Sequence:	3		
Priority Class:	2		
Category Code:	AC3C	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DOORS AND HARDWARE
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 309.4

Project Class: Plant Adaption

Project Date: 9/10/2010

Project Location: Undefined: Floor(s) 1

Project Description

Current legislation related to accessibility requires that a building be wheelchair accessible. To comply with the intent of this legislation, it is recommended that lever door hardware be installed at all doors that currently have knob hardware.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998AC01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Lever actuated door hardware	EA	72	$284	$20,448	$72.65	$5,231	$25,679
Project Totals:				**$20,448**		**$5,231**	**$25,679**

Material/Labor Cost		$25,679
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$26,562
General Contractor Mark Up at 25.0%	+	$6,640
Construction Cost		$33,202
Professional Fees at 16.0%	+	$5,312
Total Project Cost		**$38,515**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998AC02	**Title:**	ADA COMPLIANT HANDRAIL INSTALLATIONS
Priority Sequence:	4		
Priority Class:	2		
Category Code:	AC3B	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	STAIRS AND RAILINGS
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 505		
Project Class:	Plant Adaption		
Project Date:	9/10/2010		
Project Location:	Item Only: Floor(s) 1		

Project Description

Goods and services offered in buildings are required to be generally accessible to all persons. The steps at the southeast corner of Building 1, the exterior seating at the Porter's Pub, and portions of the interior seating in Porter's Pub cannot be easily traversed by a person requiring additional support to use the steps. It is recommended that ADA compliant painted metal railings be installed at these step conditions.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998AC02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Freestanding handrail system, painted	LF	40	$94.88	$3,795	$156	$6,240	$10,035
Project Totals:				**$3,795**		**$6,240**	**$10,035**

Material/Labor Cost		$10,035
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$10,594
General Contractor Mark Up at 25.0%	+	$2,649
Construction Cost		$13,243
Professional Fees at 16.0%	+	$2,119
Total Project Cost		**$15,362**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998AC03	**Title:**	MODIFY SERVICE COUNTER FOR WHEELCHAIR ACCESS
Priority Sequence:	5		
Priority Class:	2		
Category Code:	AC4A	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 804		
Project Class:	Plant Adaption		
Project Date:	9/10/2010		
Project Location:	Area Wide: Floor(s) 1		

Project Description

Present accessibility legislation requires that building amenities be generally accessible to all persons. The service counters in the south facade of Building 4 lack a wheelchair height position and are barriers to accessibility. A wheelchair accessible section should be incorporated into one of the two non-compliant service counters.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998AC03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant modifications to service counter	LOT	1	$1,200	$1,200	$1,920	$1,920	$3,120
Project Totals:				**$1,200**		**$1,920**	**$3,120**

Material/Labor Cost		$3,120
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$3,293
General Contractor Mark Up at 25.0%	+	$823
Construction Cost		$4,116
Professional Fees at 16.0%	+	$659
Total Project Cost		**$4,775**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998ES01	**Title:**	BUILT-UP ROOF REPLACEMENT
Priority Sequence:	6		
Priority Class:	2		
Category Code:	ES4B	**System:**	EXTERIOR
		Component:	ROOF
		Element:	REPLACEMENT
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Energy Conservation $800		

Code Application: Not Applicable

Project Class: Deferred Maintenance

Project Date: 9/10/2010

Project Location: Floor-wide: Floor(s) R

Project Description

The built-up roofing system is not expected to outlast the scope of this analysis. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace this roof with a similar application.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998ES01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Built-up roof	SF	20,350	$3.19	$64,917	$3.73	$75,906	$140,822
Project Totals:				**$64,917**		**$75,906**	**$140,822**

Material/Labor Cost		$140,822
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$148,073
General Contractor Mark Up at 25.0%	+	$37,018
Construction Cost		$185,091
Professional Fees at 16.0%	+	$29,615
Total Project Cost		**$214,706**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998ES02	**Title:**	DETERIORATED FRAMING REPLACEMENT
Priority Sequence:	7		
Priority Class:	2		
Category Code:	ES2B	**System:**	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	9/10/2010		
Project Location:	Item Only: Floor(s) R		

Project Description

The exterior wood framing is failing and beyond repair at the covered patio at the southwest corner of Building 3. There is also some termite-damaged balcony overhang framing at the south side of the upper floor of Building 4. All of this deteriorated framing should be replaced.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998ES02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Demolition fee, equipment rental, wood, fasteners, supplies, and tools allowance	LOT	1	$7,500	$7,500	$6,400	$6,400	$13,900
Project Totals:				**$7,500**		**$6,400**	**$13,900**

Material/Labor Cost		$13,900
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$14,560
General Contractor Mark Up at 25.0%	+	$3,640
Construction Cost		$18,200
Professional Fees at 16.0%	+	$2,912
Total Project Cost		**$21,112**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998EL02	**Title:**	UPGRADE ELECTRICAL SERVICE
Priority Sequence:	8		
Priority Class:	2		
Category Code:	EL1A	**System:**	ELECTRICAL
		Component:	INCOMING SERVICE
		Element:	TRANSFORMER
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application: NEC Articles 230 and 450

Project Class: Deferred Maintenance

Project Date: 9/10/2010

Project Location: Item Only: Floor(s) 1

Project Description

Primary power for the complex is provided by early 1960s vintage equipment, including an obsolete air-type high voltage load break switch, a fluid filled 500 kVA, 15 kV x 208 volt geometry transformer, and an obsolete outdoor primary distribution switchboard with a primary digital meter and two tenant meters. Except for the relatively new digital meter, which is the property of the utility provider, this equipment has served beyond its typical life expectancy and should be a high priority for future replacement due to the likelihood of failure. Complete replacement of the substation equipment is needed, including new conductors, 15 kV isolation switch, transformer, connections, and terminations. The replacement substation should include an appropriate scheme for tenant metering, ground fault protection, digital metering for remote monitoring and control, and transient voltage surge protection. Size the system according to modern design parameters to meet current and future power demands.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998EL02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Service transformer, main distribution, all connections, and terminations	AMP	2,000	$44.35	$88,700	$21.58	$43,160	$131,860
Project Totals:				**$88,700**		**$43,160**	**$131,860**

Material/Labor Cost		$131,860
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$137,226
General Contractor Mark Up at 25.0%	+	$34,306
Construction Cost		$171,532
Professional Fees at 16.0%	+	$27,445
Total Project Cost		**$198,977**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998EL01	**Title:**	INSTALL EMERGENCY GENERATOR AND POWER NETWORK
Priority Sequence:	9		
Priority Class:	2		
Category Code:	EL5A	**System:**	ELECTRICAL
		Component:	EMERGENCY POWER SYSTEM
		Element:	GENERATION/DISTRIBUTION
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application:	NEC	700, 701, 702

Project Class:	Plant Adaption
Project Date:	9/10/2010
Project Location:	Floor-wide: Floor(s) 1, 2

Project Description

The northwest expansion, northeast expansion, and Building 2 original segments rely on small modular inverter / power storage units to alternately power life safety systems during periods of utility interruption. There is no emergency power source for elevators. A complex of this size and nature should typically be served by a standby power source and should have an emergency power network system to alternately power life safely equipment, elevators, and important (non-essential class) user loads. The installation of an appropriately sized diesel-fired generator, associated automatic transfer switches (ATS), and an emergency distribution network is recommended to provide emergency power for the life safety and specific non-essential loads. The power grid should be expanded within the new additions and expansions to carry elevator and critical user loads. Once completed, existing inverter / battery power systems can be retired from service.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998EL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Diesel generator set, including fuel tank, battery, charger, exhaust, automatic transfer switches	KW	50	$754	$37,700	$195	$9,750	$47,450
Emergency power network, to include power panels, raceways, all connections, and terminations	SF	42,393	$0.23	$9,750	$0.31	$13,142	$22,892
Project Totals:				**$47,450**		**$22,892**	**$70,342**

Material/Labor Cost		$70,342
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$73,198
General Contractor Mark Up at 25.0%	+	$18,299
Construction Cost		$91,497
Professional Fees at 16.0%	+	$14,640
Total Project Cost		**$106,137**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998FS03	**Title:**	REPLACE EXIT SIGNS
Priority Sequence:	10		
Priority Class:	3		
Category Code:	FS1A	**System:**	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE

Building Code:	9998	
Building Name:	STUDENT CENTER	
Subclass/Savings:	Energy Conservation	$50

Code Application:	NFPA	101-47
	IBC	1011

Project Class:	Deferred Maintenance
Project Date:	9/10/2010
Project Location:	Area Wide: Floor(s) 1, 2

Project Description

Exit signage design and age vary according to the element of the complex being considered. The new additions and expansions have high quality LED exit signage, while the older buildings have fluorescent exit signage. All of the new additions have signage that is alternately powered by local emergency power inverter storage units, while the remainder of the exit signage and emergency lighting has battery pack standby power. Replace the existing exit signs throughout Buildings 1, 2, 3, 4, and Porter's Pub to renew their service life. Interface these signs with the recommended generator and power grid being suggested for installation to eliminate the maintenance costs of maintaining individual battery power in each device.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998FS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replacement of existing exit signs with energy-efficient units	EA	28	$79.00	$2,212	$89.00	$2,492	$4,704
Project Totals:				**$2,212**		**$2,492**	**$4,704**

Material/Labor Cost		$4,704
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$4,944
General Contractor Mark Up at 25.0%	+	$1,236
Construction Cost		$6,180
Professional Fees at 16.0%	+	$989
Total Project Cost		**$7,169**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998FS02	**Title:**	PARTIAL SPRINKLER HEAD REPLACEMENT
Priority Sequence:	11		
Priority Class:	3		
Category Code:	FS3A	**System:**	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application: NFPA 1, 13, 13D, 101

Project Class: Deferred Maintenance

Project Date: 9/10/2010

Project Location: Area Wide: Floor(s) 1, 2

Project Description

The complex is generally protected by wet-pipe fire suppression of varying ages. The recently constructed elements, such as the northeast and northwest expansions along with the Building 3 addition, have modern glass bulb type sprinkler heads that are suitable for extended future use. The older metallic trigger heads present in the older buildings are obsolete in design and should be replaced to assure proper performance in the event of an emergency. The statistical life cycle for a sprinkler head is approximately twenty years. During this time, scale can accumulate inside the head and cause it to malfunction when needed. New glass bulb design sprinkler heads are more reliable. It is recommended that the aging metallic sprinkler heads throughout the complex be replaced to ensure that proper protection is available.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998FS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire sprinkler head replacement	SF	24,620	$0.10	$2,462	$0.37	$9,109	$11,571
Project Totals:				**$2,462**		**$9,109**	**$11,571**

Material/Labor Cost		$11,571
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$12,314
General Contractor Mark Up at 25.0%	+	$3,078
Construction Cost		$15,392
Professional Fees at 16.0%	+	$2,463
Total Project Cost		**$17,855**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998AC04	**Title:**	DUAL LEVEL DRINKING FOUNTAIN INSTALLATION
Priority Sequence:	12		
Priority Class:	3		
Category Code:	AC3F	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DRINKING FOUNTAINS
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 211, 602

Project Class:	Plant Adaption
Project Date:	9/10/2010
Project Location:	Item Only: Floor(s) 1

Project Description

Accessibility legislation requires that building amenities be generally accessible to all persons. The single level configuration of the drinking fountain in Porter's Pub is a barrier to accessibility. This drinking fountain should be replaced with a dual level, refrigerated unit.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998AC04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dual level drinking fountain	EA	1	$1,266	$1,266	$389	$389	$1,655
Project Totals:				**$1,266**		**$389**	**$1,655**

Material/Labor Cost		$1,655
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$1,715
General Contractor Mark Up at 25.0%	+	$429
Construction Cost		$2,143
Professional Fees at 16.0%	+	$343
Total Project Cost		**$2,486**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998HV01	**Title:**	HVAC SYSTEM REPLACEMENT
Priority Sequence:	13		
Priority Class:	3		
Category Code:	HV3D	**System:**	HVAC
		Component:	HEATING/COOLING
		Element:	CONVENTIONAL SPLIT SYSTEM
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 62-2004		
Project Class:	Capital Renewal		
Project Date:	9/10/2010		
Project Location:	Area Wide: Floor(s) 1, 2		

Project Description

HVAC systems vary in design and competence. The northeast expansion, northwest expansion, and Building 3 addition are served by ducted rooftop package systems and DX split systems, which are in excellent condition and suitable for extended future use. The remaining buildings vary in the amount of mechanical cooling provided. DX split systems, aging rooftop systems, and evaporative cooling systems are applied where cooling is provided. Heat is generated by natural gas furnaces or electric element heaters either in unitary form or within packaged units. As part of proposed interior renovations in the older construction segments of the complex, replacement and redesign of the HVAC systems is recommended. The installation of ducted heating and cooling systems served by modular rooftop packaged HVAC units is recommended. Include modern digital and centralized controls to minimize energy use during periods of sporadic occupancy.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998HV01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Packaged ducted HVAC system with DX cooling element and gas furnace based heat, power, controls, and refrigerant piping	SF	24,620	$4.08	$100,450	$3.17	$78,045	$178,495
Ductwork and interior finish work	SF	24,620	$0.31	$7,632	$1.46	$35,945	$43,577
Project Totals:				**$108,082**		**$113,991**	**$222,072**

Material/Labor Cost		$222,072
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$233,216
General Contractor Mark Up at 25.0%	+	$58,304
Construction Cost		$291,520
Professional Fees at 16.0%	+	$46,643
Total Project Cost		**$338,163**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998EL04	**Title:**	UPGRADE ELECTRICAL DISTRIBUTION NETWORK
Priority Sequence:	14		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application: NEC Articles 110, 210, 220, 230

Project Class: Capital Renewal

Project Date: 9/10/2010

Project Location: Area Wide: Floor(s) 1, 2

Project Description

Generally, the electrical distribution networks are original, thus they vary in age according to the date of construction of each segment of the complex. The systems in the expansions and the Building 3 addition are in excellent condition, suitable for decades of future reliable service. All of the older buildings have obsolete power panels, older conductors, and visibly aged / damaged terminal devices. Complete replacement of the older segment of the complex's electrical network is recommended. Aging components, such as the circuit breakers, could serve as fire hazards if they fail to open a circuit in an overload or short circuit condition. Remove existing aged electrical components and branch circuitry. Install new power panels, switches, raceways, conductors, and devices. Provide molded case thermal magnetic circuit breakers and HACR circuit breakers for HVAC equipment. Redistribute the electrical loads to the appropriate areas to ensure safe and reliable power to building occupants. Provide GFCI protection where required, and clearly label all circuits / loads within the new panels.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998EL04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Power panels, conductors, raceways, devices, demolition, and cut and patching materials	SF	24,620	$5.50	$135,410	$8.24	$202,869	$338,279
Project Totals:				**$135,410**		**$202,869**	**$338,279**

Material/Labor Cost		$338,279
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$356,744
General Contractor Mark Up at 25.0%	+	$89,186
Construction Cost		$445,930
Professional Fees at 16.0%	+	$71,349
Total Project Cost		**$517,279**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998EL03	**Title:**	INTERIOR LIGHTING UPGRADE
Priority Sequence:	15		
Priority Class:	3		
Category Code:	EL4B	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	INTERIOR LIGHTING
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Energy Conservation $5,610		
Code Application:	NEC Articles 210, 410		
Project Class:	Deferred Maintenance		
Project Date:	9/10/2010		
Project Location:	Area Wide: Floor(s) 1, 2		

Project Description

Interior lighting quality and efficiency vary by vintage of construction. The new expansion buildings and the Building 3 addition have excellent and efficient interior lighting. The remainder of the complex has inefficient and low quality interior lighting of varying ages and styles. As part of future renovation considerations, an interior lighting upgrade is recommended. Replace existing aged and / or inefficient systems with an efficient and proficient lighting design which is specifically tailored to the needs of each occupancy. Install occupancy sensors in select areas where appropriate for additional energy conservation. Brace all new lighting systems for potential seismic activity.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998EL03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High efficiency fluorescent fixtures, occupancy sensors, and demolition of existing lighting	SF	24,620	$3.12	$76,814	$3.82	$94,048	$170,863
Project Totals:				**$76,814**		**$94,048**	**$170,863**

Material/Labor Cost		$170,863
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$179,760
General Contractor Mark Up at 25.0%	+	$44,940
Construction Cost		$224,700
Professional Fees at 16.0%	+	$35,952
Total Project Cost		**$260,652**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998EL05	**Title:**	EXTERIOR LIGHTING CONTROL IMPROVEMENTS
Priority Sequence:	16		
Priority Class:	3		
Category Code:	EL4A	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Energy Conservation $1,890		
Code Application:	NEC 410		
Project Class:	Deferred Maintenance		
Project Date:	9/10/2010		
Project Location:	Building-wide: Floor(s) 1, 2, R		

Project Description

Generally, the exterior lighting fixtures are in satisfactory condition, and lighting levels appear to be satisfactory. However, there is no system of central lighting control. The installation of a central lighting control scheme is recommended to save lamp life and to save energy. Provide a central lighting distribution panel, central relay control panel, wiring modifications, and digital logic control devices to assure lighting throughout the complex responds to low lighting levels and does not operate when not needed.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998EL05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Central exterior lighting control allocation	SYS	1	$4,150	$4,150	$6,700	$6,700	$10,850
Project Totals:				**$4,150**		**$6,700**	**$10,850**

Material/Labor Cost		$10,850
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$11,452
General Contractor Mark Up at 25.0%	+	$2,863
Construction Cost		$14,315
Professional Fees at 16.0%	+	$2,290
Total Project Cost		**$16,606**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998IS01	**Title:**	CARPETING UPGRADES
Priority Sequence:	17		
Priority Class:	3		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	9/10/2010		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Most areas of this building have carpeting. Carpet installations in buildings with similar traffic patterns need to be replaced every five to seven years. Carpeting upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998IS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	16,430	$5.58	$91,679	$2.08	$34,174	$125,854
Project Totals:				**$91,679**		**$34,174**	**$125,854**

Material/Labor Cost		$125,854
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$130,617
General Contractor Mark Up at 25.0%	+	$32,654
Construction Cost		$163,271
Professional Fees at 16.0%	+	$26,123
Total Project Cost		**$189,395**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998PL01	**Title:**	COMPLETE PLUMBING RENOVATION
Priority Sequence:	18		
Priority Class:	3		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application: IPC All Chapters

Project Class: Capital Renewal

Project Date: 9/10/2010

Project Location: Area Wide: Floor(s) 1, 2

Project Description

Domestic water supply piping, domestic water heaters, drain piping, and fixtures vary according to the date of construction of the structure being considered. The fixtures and piping systems in the new expansion areas and the Building 3 addition are in excellent condition, needing no major work over the future ten-year period. The piping, fixtures, and domestic hot water generation equipment in the older buildings have fulfilled their normal service lifespans and should be replaced as part of planned future renovation or accessibility upgrade proposals. Suggested work should include demolition of existing water supply and drain piping networks, all plumbing fixtures, and domestic hot water heating equipment. Install new insulated copper water supply networks, complete with backflow protection devices, pressure regulators, and appropriately placed isolation valves. Install new drain networks comprised of cast-iron piping with no-hub fittings. New plumbing fixtures should be installed throughout, in coordination with proposed ADA recommendations. Install new high efficiency domestic water heating equipment appropriately sized to accommodate the new fixtures. Brace all piping and associated equipment for potential seismic activity.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998PL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Water supply and drain piping, plumbing fixtures, specialty systems, water heating equipment, demolition, and cut and patching materials	SF	24,620	$4.70	$115,714	$8.48	$208,778	$324,492
Project Totals:				**$115,714**		**$208,778**	**$324,492**

Material/Labor Cost		$324,492
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$342,927
General Contractor Mark Up at 25.0%	+	$85,732
Construction Cost		$428,659
Professional Fees at 16.0%	+	$68,585
Total Project Cost		**$497,244**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998AC05	**Title:**	INSTALL ADDITIONAL SIGNAGE
Priority Sequence:	19		
Priority Class:	4		
Category Code:	AC3D	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	SIGNAGE
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 703.1

Project Class: Plant Adaption

Project Date: 9/10/2010

Project Location: Floor-wide: Floor(s) 1, 2

Project Description

Accessibility legislation has established signage requirements for all permanent spaces in a building. Compliant signage should meet specific size, graphical, Braille, height, and location requirements. To comply with the intent of this legislation, it is recommended that all non-compliant signage be upgraded to conform to the appropriate accessibility standards. This scope includes directional signage.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998AC05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant signage	EA	173	$55.30	$9,567	$16.26	$2,813	$12,380
Project Totals:				**$9,567**		**$2,813**	**$12,380**

Material/Labor Cost		$12,380
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$12,820
General Contractor Mark Up at 25.0%	+	$3,205
Construction Cost		$16,026
Professional Fees at 16.0%	+	$2,564
Total Project Cost		**$18,590**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998ES03	**Title:**	EXTERIOR APPLIED FINISH RENEWAL
Priority Sequence:	20		
Priority Class:	4		
Category Code:	ES2B	**System:**	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	9/10/2010		
Project Location:	Building-wide: Floor(s) 1		

Project Description

The exterior wood siding has an applied finish that is in overall good condition. However, within the next ten years, this finish will need to be renewed.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998ES03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Paint (2 coats), supplies, and tools	LOT	1	$7,500	$7,500	$12,800	$12,800	$20,300
Project Totals:				**$7,500**		**$12,800**	**$20,300**

Material/Labor Cost		$20,300
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$21,440
General Contractor Mark Up at 25.0%	+	$5,360
Construction Cost		$26,800
Professional Fees at 16.0%	+	$4,288
Total Project Cost		**$31,088**

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Description

Project Number:	9998IS02	**Title:**	CEILING FINISH UPGRADES
Priority Sequence:	21		
Priority Class:	4		
Category Code:	IS3B	**System:**	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	9998		
Building Name:	STUDENT CENTER		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	9/10/2010		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Ceiling finishes include lay-in tile and painted applications. Ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
9998 : STUDENT CENTER

Project Cost

Project Number: 9998IS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Acoustical tile ceiling system	SF	11,280	$2.21	$24,929	$3.10	$34,968	$59,897
Painted ceiling finish application	SF	3,870	$0.17	$658	$0.85	$3,290	$3,947
Project Totals:				**$25,587**		**$38,258**	**$63,844**

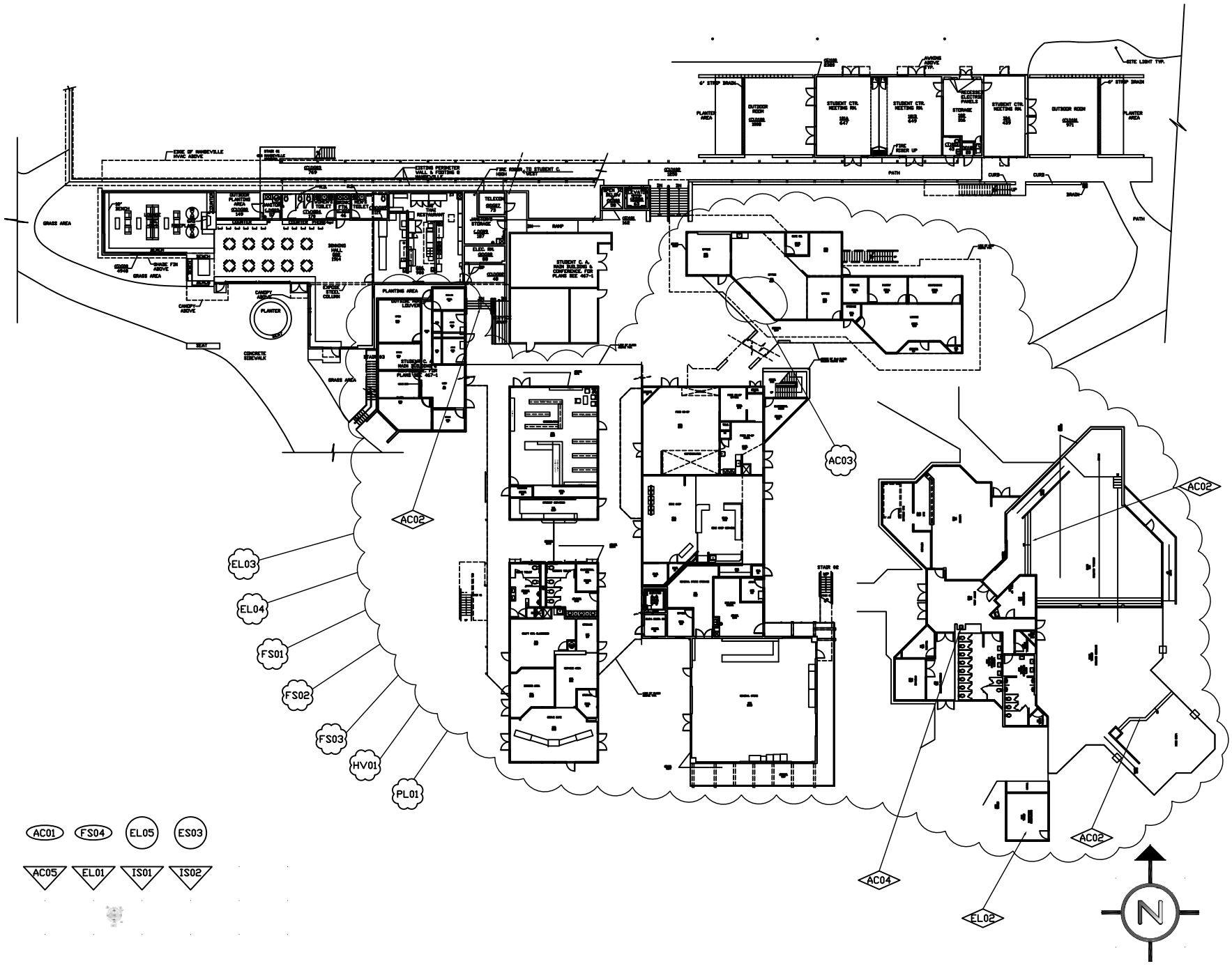
Material/Labor Cost		$63,844
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		$67,328
General Contractor Mark Up at 25.0%	+	$16,832
Construction Cost		$84,159
Professional Fees at 16.0%	+	$13,466
Total Project Cost		**$97,625**

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

UNIVERSITY OF CALIFORNIA, SAN DIEGO



STUDENT CENTER

BLDG NO. 9998

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376

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

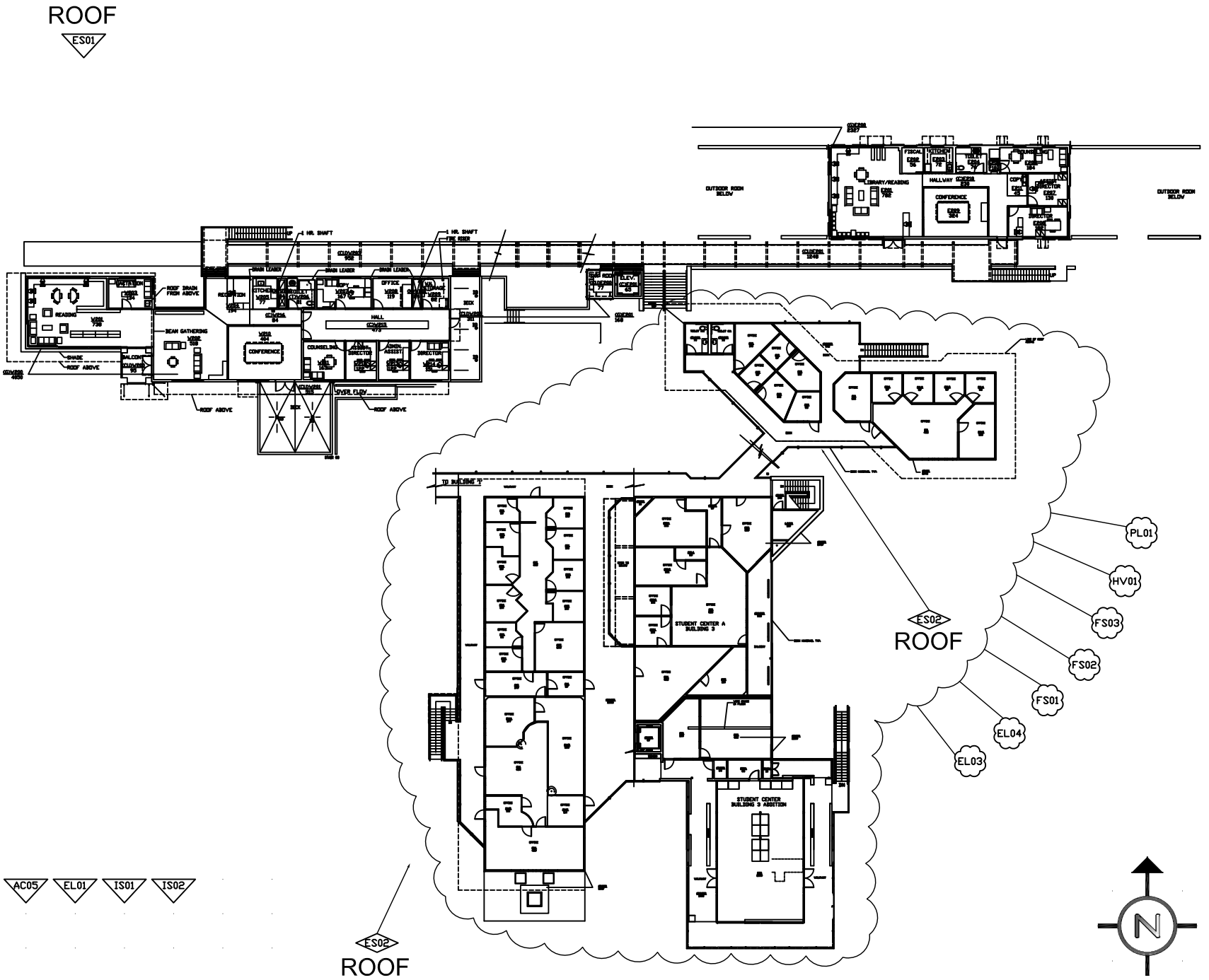
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 09/15/10
Drawn by: J.T.V.
Project No. 10-059

FIRST FLOOR PLAN

Sheet No.
1 of 2

UNIVERSITY OF CALIFORNIA, SAN DIEGO



STUDENT CENTER

BLDG NO. 9998

ISES CORPORATION

FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
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770.879.7376

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

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PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 09/15/10
Drawn by: J.T.V.
Project No. 10-059

SECOND FLOOR PLAN

Sheet No.
2 of 2

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model
Building Component Summary
9998 : STUDENT CENTER

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	6,720	SF	$2.18	.31	$4,537	2006	10
B2010	STUCCO FINISH RENEWAL	3,520	SF	$5.26		$18,523	2006	30
B2010	QUALITY LAP, SHINGLE OR T&G SIDING	21,750	SF	$16.39		$356,513	1967	50
B2020	STANDARD GLAZING AND CURTAIN WALL	27,390	SF	$133.27		$3,650,162	1967	55
B2020	STANDARD GLAZING AND CURTAIN WALL	16,790	SF	$133.27		$2,237,540	1967	55
B2030	OVERHEAD GARAGE DOOR	3	EA	$9,474.30		$28,423	1990	30
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	3	LEAF	$5,875.48		$17,626	1990	20
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	31	LEAF	$5,875.48		$182,140	1990	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	12	LEAF	$3,688.75		$44,265	1990	40
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	62	LEAF	$3,688.75		$228,703	1990	40
B3010	BUILT-UP ROOF	20,350	SF	$9.52		$193,652	1990	20
B3010	MEMBRANE ROOF	2,840	SF	$7.82		$22,211	2008	15
B3010	PAINTED METAL ROOF	470	SF	$10.03		$4,714	2006	30
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	286	LEAF	$1,095.20		$313,226	1990	35
C1020	INTERIOR DOOR HARDWARE	286	EA	$482.78		$138,075	1990	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	26,710	SF	$1.43		$38,162	1990	10
C3020	CARPET	16,430	SF	$10.40		$170,859	1990	10
C3020	VINYL FLOOR TILE	12,240	SF	$8.58		$105,025	1990	15
C3020	RESURFACE AND SEAL CONCRETE OR TERRAZZO	3,540	SF	$11.87		$42,026	1967	50
C3030	ACOUSTICAL TILE CEILING SYSTEM	11,280	SF	$7.32		$82,613	1990	15
C3030	PAINTED CEILING FINISH APPLICATION	3,870	SF	$1.43		$5,529	2006	15
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	1	EA	$224,835.51		$224,836	2000	25
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	1	EA	$224,835.51		$224,836	2006	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	$42,018.07		$42,018	2000	12
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	$42,018.07		$42,018	2006	12
D2010	PLUMBING FIXTURES - STUDENT UNION	24,620	SF	$11.15		$274,418	1998	35
D2010	PLUMBING FIXTURES - STUDENT UNION	17,773	SF	$11.15		$198,101	2006	35
D2020	WATER PIPING - STUDENT UNION	24,620	SF	$9.18		$226,099	1972	35
D2020	WATER PIPING - STUDENT UNION	17,773	SF	$9.18		$163,219	2006	35
D2020	WATER HEATER (RES., ELEC.)	50	GAL	$66.63		$3,332	2002	10

Life Cycle Model
Building Component Summary
9998 : STUDENT CENTER

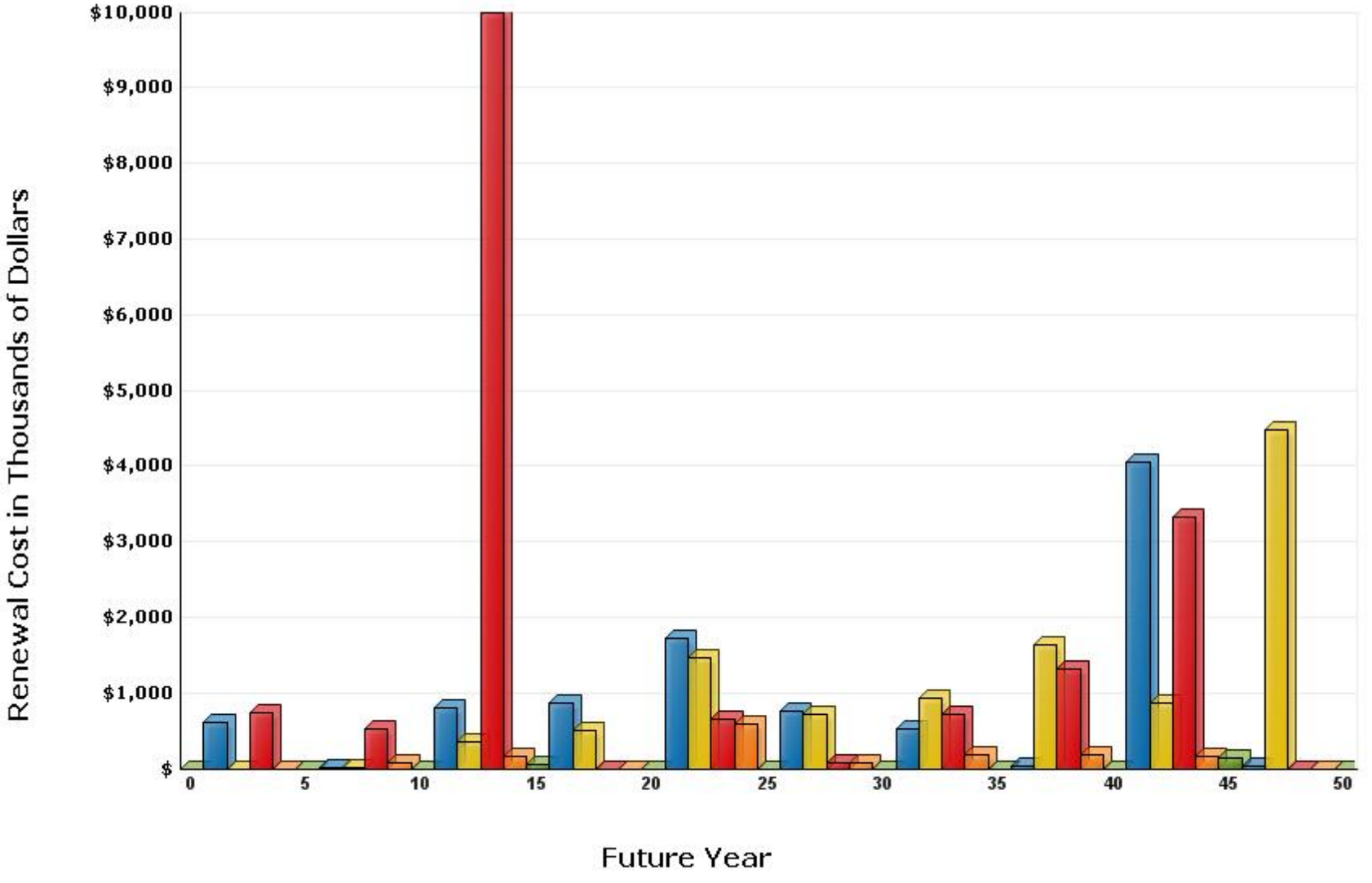
Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D2020	WATER HEATER (RES., ELEC.)	100	GAL	$66.63		$6,663	2005	10
D2020	WATER HEATER (RES., ELEC.)	30	GAL	$66.63		$1,999	2005	10
D2020	WATER HEATER (RES., ELEC.)	40	GAL	$66.63		$2,665	2006	10
D2020	WATER HEATER (RES., ELEC.)	40	GAL	$66.63		$2,665	2006	10
D2020	WATER HEATER (ELECTRIC, INSTANTANEOUS)	1	EA	$581.98		$582	2005	10
D2030	DRAIN PIPING - STUDENT UNION	24,620	SF	$13.74		$338,336	1972	40
D2030	DRAIN PIPING - STUDENT UNION	17,773	SF	$13.74		$244,242	2006	40
D3020	GAS-FIRED FURNACE	300	MBH	$17.06		$5,118	1972	20
D3020	GAS-FIRED FURNACE	400	MBH	$17.06		$6,824	2006	20
D3020	GAS-FIRED FURNACE	80	MBH	$17.06		$1,365	2009	20
D3030	EVAPORATIVE COOLER (SWAMP COOLER)	1	EA	$1,660.86		$1,661	2010	8
D3030	ROOFTOP HVAC UNIT	9	TON	$3,278.52		$29,507	1991	15
D3030	ROOFTOP HVAC UNIT	5	TON	$3,278.52		$16,393	2002	15
D3030	ROOFTOP HVAC UNIT	14	TON	$3,278.52		$45,899	2006	15
D3030	ROOFTOP HVAC UNIT	12	TON	$3,278.52		$39,342	2007	15
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	2	EA	$3,798.54		$7,597	1972	20
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	6	EA	$3,798.54		$22,791	2006	20
D3040	KITCHEN EXHAUST SYSTEM WITH MAKE-UP UNIT	1	SYS	$72,100.38		$72,100	2006	20
D3040	ELECTRIC UNIT HEATER (10 KW)	7	EA	$1,606.53		$11,246	1972	22
D3040	FUME HOOD INCLUDING MECH. SYS	1	SYS	$49,389.65	.3	$14,817	1972	20
D3040	HVAC SYSTEM - STUDENT UNION	24,620	SF	$41.19	.4	$405,616	1972	25
D3040	HVAC SYSTEM - STUDENT UNION	17,773	SF	$41.19	.75	$549,021	2006	25
D3050	SPLIT DX SYSTEM	3	TON	$2,722.91		$8,169	2000	15
D3050	SPLIT DX SYSTEM	7	TON	$2,722.91		$19,060	2003	15
D3050	SPLIT DX SYSTEM	8	TON	$2,722.91		$21,783	2005	15
D3050	SPLIT DX SYSTEM	16	TON	$2,722.91		$43,567	2006	15
D3050	THRU-WALL AC UNIT	2	TON	$1,954.41		$3,909	2000	10
D4010	FIRE SPRINKLER SYSTEM	17,773	SF	$9.82		$174,452	2006	80
D4010	FIRE SPRINKLER SYSTEM	24,620	SF	$9.82		$241,659	1972	80

Life Cycle Model
Building Component Summary
9998 : STUDENT CENTER

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D4010	FIRE SPRINKLER HEADS	24,620	SF	$0.65		$15,981	1972	20
D4010	FIRE SPRINKLER HEADS	17,773	SF	$0.65		$11,537	2006	20
D5010	ELECTRICAL SYSTEM - STUDENT UNION	24,620	SF	$18.96		$466,840	1972	50
D5010	ELECTRICAL SYSTEM - STUDENT UNION	17,773	SF	$18.96		$337,008	2006	50
D5010	ELECTRICAL SWITCHGEAR 120/208V	1,600	AMP	$43.46		$69,542	1963	20
D5010	TRANSFORMER, OIL, 5-15KV (500-1500 KVA)	500	KVA	$54.45		$27,227	1963	30
D5020	EMERGENCY LIGHT (BATTERY)	42	EA	$395.56		$16,613	1972	20
D5020	EMERGENCY LIGHT (BATTERY)	16	EA	$395.56		$6,329	2006	20
D5020	EXIT SIGNS (BATTERY)	18	EA	$392.65		$7,068	2006	20
D5020	EXIT SIGNS (BATTERY)	28	EA	$392.65		$10,994	1972	20
D5020	EXTERIOR LIGHT (HID)	4	EA	$844.09		$3,376	1972	20
D5020	LIGHTING - STUDENT UNION	24,620	SF	$9.56		$235,445	1972	20
D5020	LIGHTING - STUDENT UNION	17,773	SF	$9.56		$169,966	2006	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	3,309	SF	$3.33		$11,013	1972	15
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	39,084	SF	$3.33		$130,082	2006	15
						$13,141,468		

Life Cycle Model Expenditure Projections

9998 : STUDENT CENTER



Average Annual Renewal Cost Per SqFt $9.05

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo Log - Facility Condition Analysis

9998 : STUDENT CENTER

Photo ID No	Description	Location	Date
9998001a	View looking south at north facade, Porter's Pub	Exterior elevation	7/14/2010
9998001e	Fire suppression head and exterior lighting	Northeast expansion, elevated walkway	7/14/2010
9998002a	View looking southwest across deteriorating roofing, Building 4	Roof	7/14/2010
9998002e	Fire suppression bell	Northeast expansion, south elevation	7/14/2010
9998003a	View looking southwest across deteriorating roofing, Building 4	Roof	7/14/2010
9998003e	Recessed can and suspended globe lighting	Northeast Expansion, upper floor	7/14/2010
9998004a	View looking west across galvanized steel trellis towards east facade, Northwest Building	Exterior elevation	7/14/2010
9998004e	Fire suppression head	Northeast expansion, upper floor	7/14/2010
9998005a	Roof deterioration, Northeast Building	Roof	7/14/2010
9998005e	Exit signage	Northeast expansion, upper floor	7/14/2010
9998006a	View looking southwest at north side of concrete and galvanized steel trellised elevated walkway between Northeast and Northwest Buildings	Site detail	7/14/2010
9998006e	Horn strobe, pull station, tamper / flow switches, and fire alarm signal	Northeast expansion, upper floor	7/14/2010
9998007a	View looking southwest at deteriorating roofing, Buildings 2 and 3	Roof	7/14/2010
9998007e	Local breaker panel	Northeast expansion, upper floor	7/14/2010
9998008a	View looking east along concrete and galvanized steel trellised elevated walkway towards west facade, Northeast Building	Site detail	7/14/2010
9998008e	Fixtures	Northeast expansion, upper floor	7/14/2010
9998009a	View looking southeast at west facade, Building 4	Exterior elevation	7/14/2010
9998009e	Rooftop condensing unit	Northeast expansion, roof	7/14/2010
9998010a	View looking southeast at north facade, Buildings 2 and 3	Exterior elevation	7/14/2010
9998010e	Rooftop condensing units	Northeast expansion, roof	7/14/2010
9998011a	View looking south across deteriorating Building 2 roofing	Roof	7/14/2010
9998011e	Stainless steel sink	Northeast expansion, second floor kitchen	7/14/2010
9998012a	View looking west across Northwest Building roof	Roof	7/14/2010

Photo Log - Facility Condition Analysis

9998 : STUDENT CENTER

Photo ID No	Description	Location	Date
9998012e	Water heater and main power panel	Northwest expansion, second floor, east end	7/14/2010
9998013a	View looking southeast onto south facade patio, Northwest Building, upper floor, and Building 1 rooftop patio, beyond	Exterior detail	7/14/2010
9998013e	DX vertical slim condensing unit	Northwest expansion, roof	7/14/2010
9998014a	View looking southeast along west facade, Building 2	Exterior elevation	7/14/2010
9998014e	DX package unit	Northwest expansion, roof	7/14/2010
9998015a	View looking southwest along west end of north facade, Northwest Building	Exterior elevation	7/14/2010
9998015e	Small utility exhaust fan for restrooms	Northwest expansion, roof	7/14/2010
9998016a	View looking southeast along north facade, Northwest Building	Exterior elevation	7/14/2010
9998016e	Natural gas fired heating ventilator	Northwest expansion, roof	7/14/2010
9998017a	Lack of second handrail at southeast corner exit steps and adjacent ramp, northwest expansion	Site detail	7/14/2010
9998017e	Roof overview	B2, roof	7/14/2010
9998018a	West facade, Porter's Pub, north half	Exterior elevation	7/14/2010
9998018e	Heat pump, mushroom exhauster, and DX split system condenser	B2, roof	7/14/2010
9998019a	West facade, Porter's Pub, south half	Exterior elevation	7/14/2010
9998019e	Typical lighting	Northeast expansion, first floor	7/14/2010
9998020a	View of southeast corner, Northwest Building	Exterior elevation	7/14/2010
9998020e	Heat pump part of the split system	Northeast expansion, first floor	7/14/2010
9998021a	View looking southeast along north facade, Porter's Pub	Exterior elevation	7/14/2010
9998021e	Building power panel	Northeast expansion, first floor electrical closet	7/14/2010
9998022a	View looking south along east facade, Building 3	Exterior elevation	7/14/2010
9998022e	Small instant hot water electric heater	Northeast expansion, first floor, restroom	7/14/2010
9998023a	Termite damage at fascia beam, second floor, Building 4	Exterior detail	7/14/2010
9998023e	Water closet with auto-sensing flush	Northeast expansion, first floor, restroom	7/14/2010
9998024a	Lack of wheelchair station at ticket windows	First floor, Building 4	7/14/2010
9998024e	Drain and fire suppression piping	Northwest expansion, first floor, telecom closet	7/14/2010
9998025a	View looking south across southwest corner roof area, attached to Building 3	Roof	7/14/2010

Photo Log - Facility Condition Analysis

9998 : STUDENT CENTER

Photo ID No	Description	Location	Date
9998025e	Simplex 4100U primary fire alarm control panel	Northwest expansion, first floor, room G08	7/14/2010
9998026a	Single level drinking fountain	Entry lobby, Porter's Pub	7/14/2010
9998026e	Simplex panel for elevator recall	Northwest expansion, first floor, room G08	7/14/2010
9998027a	Lack of handrails at site step seating and lack of wall handrail at ramp to upper level seating	Site detail, Porter's Pub	7/14/2010
9998027e	Power distribution switchboard	Northwest expansion, first floor, room G08	7/14/2010
9998028a	View looking southwest in general seating showing lack of handrails at steps up to outdoors and up to lounge	General seating area 109, Porter’s Pub	7/14/2010
9998028e	Exterior lighting	B1, west elevation	7/14/2010
9998029a	View of southeast corner, Building 3	Exterior elevation	7/14/2010
9998029e	Lighting	Northwest expansion, Thai restaurant	7/14/2010
9998030e	Domestic hot water circulating pump	Northwest expansion, Thai restaurant closet	7/14/2010
9998031e	Obsolete main power panel	B1, corridor	7/14/2010
9998032e	Elevator features	B3, elevator car	7/14/2010
9998033e	Battery pack design exit signage	B2, upper floor, Guardian area	7/14/2010
9998034e	Obsolete fire suppression heads	B2, upper floor, Guardian area	7/14/2010
9998035e	Photo development area	B2, upper level, Craft Center classroom area	7/14/2010
9998036e	Carrier heat pump	B3, roof	7/14/2010
9998037e	DX / gas package unit for computer lounge	B3, roof	7/14/2010
9998038e	DX air conditioning unit	Site, next to Building 4	7/14/2010
9998039e	Domestic water meter	Site, next to Building 4	7/14/2010
9998040e	Backflow preventer for landscape irrigation	Site, next to Building 4	7/14/2010
9998041e	Post indicator valve for fire suppression main	Site, next to Building 4	7/14/2010
9998042e	Broken outdoor receptacle	Site, next to Building 4	7/14/2010
9998043e	GT Sylvania panel with obsolete breakers and bus bar	B3, lower floor	7/14/2010
9998044e	Old lighting and sprinkler head	B3, lower floor	7/14/2010
9998045e	Emergency power inverter	B2, lower floor	7/14/2010
9998046e	Sierra / Zinsco electrical panel and meter	B3, lower floor	7/14/2010
9998047e	Gas overhead space heater	B3, lower level, general store	7/14/2010
9998048e	Water heaters	B2, lower level, restroom closet	7/14/2010
9998049e	New water heater	B2, lower level, craft classroom	7/14/2010

Photo Log - Facility Condition Analysis

9998 : STUDENT CENTER

Photo ID No	Description	Location	Date
9998050e	Inverter	B3A, lower level, general store	7/14/2010
9998051e	Electric water heater	B3A, lower level, general store	7/14/2010
9998052e	Lighting, drain pipe, and conduit	B3, lower level, bike shop	7/14/2010
9998053e	Exit signage	Pub, lobby	7/14/2010
9998054e	Battery backup style egress lighting	Pub, corridor	7/14/2010
9998055e	Obsolete fire suppression head	Pub, corridor	7/14/2010
9998056e	Typical fixture	Pub, restroom	7/14/2010
9998057e	Slop sink	Pub, restroom	7/14/2010
9998058e	Old Simplex 4002 panel	Pub, storage area	7/14/2010
9998059e	Original electrical panel	Pub, storage area	7/14/2010
9998060e	New Carrier rooftop package unit	Pub, roof	7/14/2010
9998061e	Exhaust fan	Pub, roof	7/14/2010
9998062e	Old rooftop package unit	Pub, roof	7/14/2010
9998063e	Electric meter and main disconnect switch	Site, north end of Pub	7/14/2010
9998064e	Distribution section of main switch gear	Site, north end of Pub	7/14/2010
9998065e	Electric meters	Site, north end of Pub	7/14/2010

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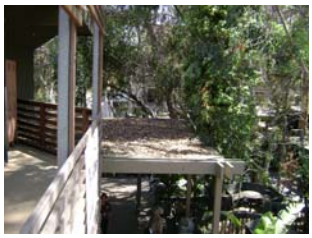

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