

**PORTLAND STATE UNIVERSITY
GRADUATE SCHOOL OF EDUCATION**

BUILDING NUMBER: ED

FACILITY CONDITION ANALYSIS

APRIL 1, 2008



PORTLAND STATE UNIVERSITY
Facility Condition Analysis

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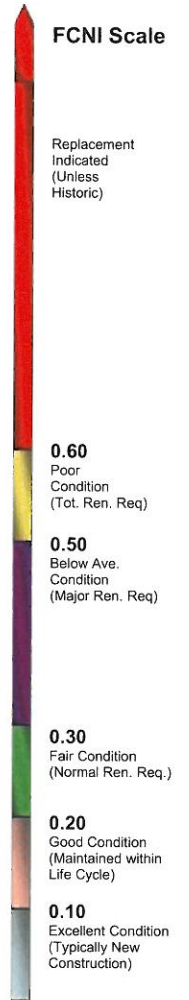
A. EXECUTIVE SUMMARY - GRADUATE SCHOOL OF EDUCATION

Building Code: ED
Building Name: GRADUATE SCHOOL OF EDUCATION
Year Built: 1981
Building Use: Classroom / Academic
Square Feet: 53,420

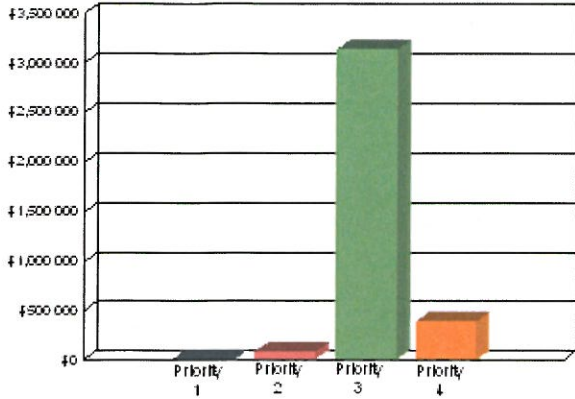
Project Costs by Priority

Priority 1:	\$0
Priority 2:	\$77,601
Priority 3:	\$3,129,885
Priority 4:	\$398,930
Total Project Costs:	\$3,606,415
Facility Replacement Cost:	\$14,248,490

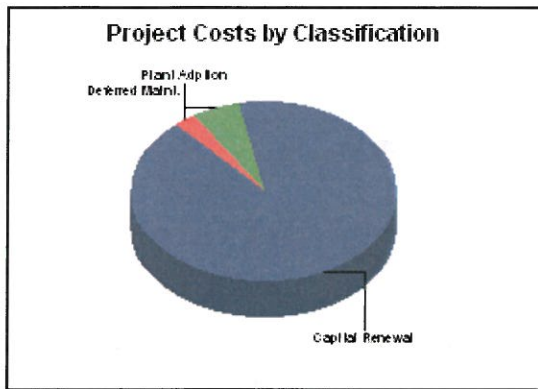
Facility Condition Needs Index (FCNI): 0.25
 (Project Costs / Replacement Cost)



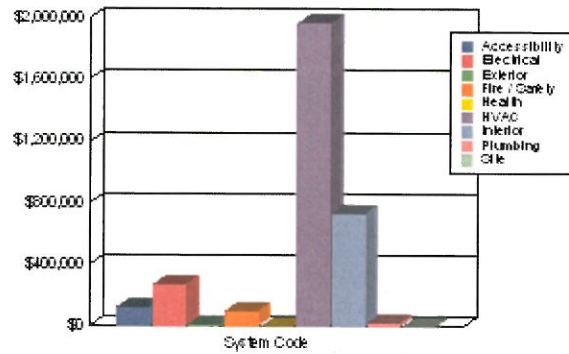
Project Costs by Priority



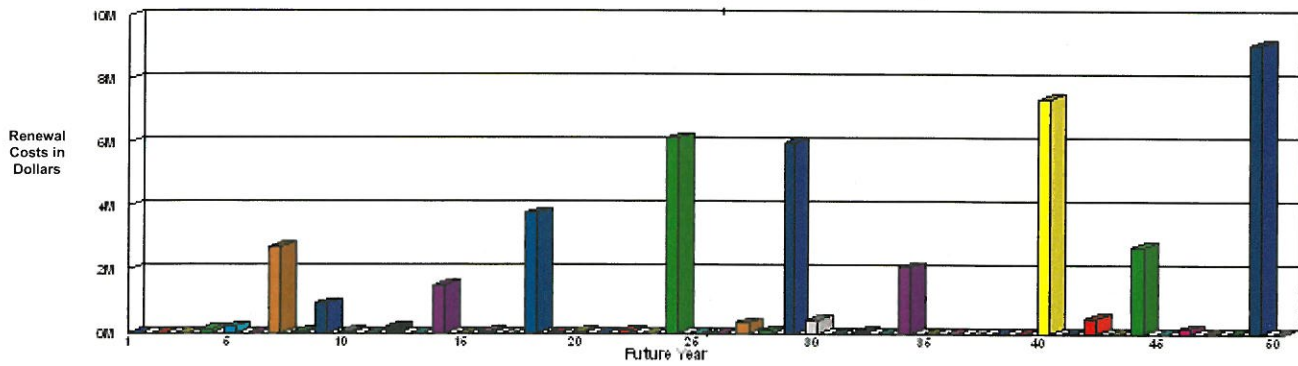
Project Costs by Classification



Project Costs by System Code



Life Cycle Model Expenditure Projections



Average Annual Renewal Cost per SqFt \$7.03

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B. ASSET SUMMARY

The Graduate School of Education at Portland State University was originally constructed in 1981. In 1987, this seven-story structure was attached on all occupied floors to the newly constructed School of Business Administration. Like the contiguous structure, the Graduate School of Education primarily contains offices, conference rooms, and classrooms, plus associated support facilities. This older facility also provides passenger elevators and public restrooms for both buildings. This education building is reported to comprise 53,420 gross square feet.

Information for this report was gathered during a site visit on February 18, 2008.

SITE

The urban landscaping around this building is considered adequate for this location. Pedestrian sidewalks are also in satisfactory condition at this time. There is no dedicated parking directly associated with this building.

EXTERIOR STRUCTURE

The ballasted membrane roof on this 1981 structure appears to be in satisfactory condition at this time, although there is an isolated roof leak outside the south roof access door. In addition, roof walkpads are broken or missing, and there is evidence of former or ongoing water penetration problems in the elevator machine room. Repair the roof, and replace deteriorated or missing walkpads. Also address former or ongoing water penetration problems in the elevator machine room, then clean and paint damaged interior finishes.

Exterior personnel doors appear to be in good working order, and exterior fixed and operable, double-pane glazing is energy efficient. In addition, no significant damage to exterior masonry and vertical metal siding was visible, although there was minor discoloration in the exterior masonry facades due to leaching salts.

INTERIOR FINISHES / SYSTEMS

Interior paint finishes are still in good overall condition, but cyclical repainting should continue as part of routine building maintenance. Acoustical, lay-in ceiling finishes are also adequate but are anticipated to reach the end of their useful life within the next six to ten years. In addition, some ceiling panels are damaged due to roof leaks. On a low priority basis, install new acoustical ceiling grids to maintain an acceptable interior aesthetic. Stained or damaged ceiling tiles should be replaced on a higher priority basis as part of routine building maintenance.

The built-in cabinetry in workrooms and break areas is currently in satisfactory condition for its age. Most interior doors also appear to be in good working order, although a small percentage of damaged doors

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are recommended for upgrade on an as needed basis. Doors that are still equipped with non-compliant knob hardware are recommended for hardware upgrades as part of the accessibility recommendations detailed below.

Ceramic tile finishes in the restrooms are in good overall condition, as is a majority of the vinyl tile in corridors, classrooms, etc. However, the vinyl flooring in classroom 302 has been damaged by chairs. Either replace the seating and install new vinyl tile in this location, or remove the damaged tile and install a more durable floor finish. As part of these floor finish upgrades, also replace timeworn and / or stained carpeting throughout the building.

ACCESSIBILITY

The newer passenger elevator on the far eastern end of this facility is fully accessible, but the older elevator was not in service at the time of this site visit and could not be assessed. Although a percentage of the interior has been fitted with accessible signage, the remainder of the building should also be updated with new signs featuring Braille and high contrast, raised lettering.

As noted above, small areas of this building have been upgraded with lever hardware, but the remainder of the doors should also be updated. To facilitate handicapped access to all permanent spaces, add accessible lever hardware where it is lacking.

The public restrooms have been adequately adapted to meet current ADA standards, although exposed piping beneath accessible sink units should be wrapped to protect against contact. This minor effort should be included with routine building maintenance. Single level drinking fountains should also be upgraded to accessible, dual level units on a low priority basis.

HEALTH

No health related issues were observed or reported by facility personnel at the time of the on-site review for this building. Therefore, no recommendations or assessment comment is included in this report.

FIRE / LIFE SAFETY

The handrail / guardrail system in this 1981 structure does not conform to current standards. Modern guardrails must meet height and sphere test requirements. To improve safety and compliance, install code compliant stair railings throughout the building.

The vertical roof access ladder on the seventh floor is not caged or gated. Since this area is open to the general public, this stair should be fitted with a locked gate that can only be opened by authorized personnel. In addition, this ladder should be caged for the increased safety of maintenance personnel.

This facility is monitored by an addressable Silent Knight fire alarm system that features xenon strobes, audible annunciators, smoke / heat detectors, duct smoke detectors, and fire pulls. The main fire alarm panel resides in electrical room 104. The fire alarm system and devices appear to have been installed

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approximately in 2004 and are in good condition. However, there is an inadequate amount of visual / audible fire alarm devices, especially in egress corridors. To comply with current NFPA codes, the installation of additional xenon strobes and audible annunciators is recommended.

Additional protection is provided by a wet-pipe fire sprinkler system. A 4 inch backflow preventer was observed on the fire water main. The fire sprinkler system is equipped with 1980s vintage fusible link sprinkler heads. Replacement of the sprinkler heads is recommended every twenty years. Scale and debris build-up within the sprinkler heads can potentially cause sprinkler head malfunction. Budgetary consideration is allocated for sprinkler head replacement within the next five years.

Emergency exits are indicated by original incandescent / compact fluorescent exit signs, and the path of egress is illuminated by select interior light fixtures. The exit signs and emergency egress lights are connected to the emergency power network. An evaluation of emergency egress illumination levels was not easily accomplished during this daytime inspection, but it is assumed that there is sufficient emergency egress lighting, since no deficiencies were reported. However, additional exit signs are required, especially in the sixth and second floor office areas. Replace the original exit signs, and install additional units within the next five years. LED type exit signs are recommended due to their low maintenance and energy efficiency.

HVAC

The primary heating medium is steam supplied from the central plant and enters the building in the first floor mechanical room 102. New heat exchangers located in the first floor mechanical room 103 convert low pressure steam to heating hot water. Two inline hot water pumps circulate hot water to the various preheat and reheat coils. The heating equipment, inclusive of the heat exchangers, condensate receiver, and hot water pumps, are in good condition.

The cooling media is chilled water supplied from the central plant, and enters the building in first floor mechanical room 102. Two base-mounted chilled water pumps circulate the chilled water to the various air handler cooling coils. The chilled water pumps are in fair condition and anticipated to reach the end of their useful service life within the scope of this report.

Air distribution within the facility is provided by 1980s PACE variable volume rooftop air handling unit ASU1. The air handler return and supply fans were originally equipped with inlet veins. In approximately 2003, the air handler's supply and return fan motors were replaced and the fan's inlet veins were locked in place. Currently, speed control for the supply and return fans is accomplished by ABB variable frequency drives. Building automation is accomplished by an outdated pneumatic hybrid system. The air distribution equipment is outdated and anticipated to become maintenance intensive and inefficient with age. Complete redesign and replacement of the HVAC system is recommended. Demolish and dispose of existing equipment. Install a new modern HVAC system with variable air volume (VAV) and constant volume air distribution as needed. This includes new air handlers, ductwork, terminal units, piping, controls, and electrical connections. Specify direct digital controls (DDCs) for the new equipment. Incorporate variable frequency drives (VFDs) into the new HVAC design as applicable.

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ELECTRICAL

Primary service for this structure appears to be an underground 120/208 volt, three-phase, four-wire feed, since no service entrance transformers were noted in the vicinity. The Westinghouse switchboard, rated at 2,000 amps, serves the School of Education and the adjoining building. Based on historical life cycle data, the switchboard will reach the end of its useful service life within the next six years. Switchboard replacement is recommended within the next ten years. The cost estimate is based on a 3,000 amp switchboard.

The electrical network is distributed in a vertical riser configuration. The 120/208 volt, three-phase, four-wire bus duct and related breaker panels are in good condition and should remain serviceable for the next ten years. However, electrical devices have a shorter service life. Aging devices, including wall switches and receptacles, are potential shock and fire hazards. Replace all worn or damaged switches, receptacles, and cover plates. Install ground fault circuit interrupter (GFCI) receptacles where required by code. Test power panels for proper operation, replacing faulty breakers as needed. Update power panel directories for circuit identification.

Emergency power for the life safety equipment is provided by an aging, 20 kW, Onan, diesel emergency generator located on the roof. The related automatic transfer switch is located in first floor electrical room 104. Replacement of the Onan generator is recommended. The cost estimate is based on a 75 kW emergency generator.

Interior lighting consists of acrylic lens, 1 x 4 foot, T8 fluorescent fixtures. Compact fluorescent indirect lighting was observed in the library area. Interior illumination appears to be adequate. Nighttime illumination is provided by recessed compact fluorescent fixtures and pole-mounted street lighting. No interior or exterior lighting deficiencies were noted or reported, and no upgrades are recommended.

PLUMBING

A 3 inch backflow preventer provides cross-contamination on the incoming municipal water main. Domestic potable water is fed to the building through copper piping and is in good condition. Sanitary and storm drainage is conveyed by cast-iron, no-hub piping. No leaks or issues with the drainage piping were observed or reported. Both piping systems are serviceable for the next ten years.

The plumbing fixtures consist of modern, water-conserving units. No cracks or damage to the porcelain finish were observed. Automatic flush assemblies are utilized. The plumbing fixtures are in excellent condition. However, additional water conservation can be achieved with the use of automatic faucet assemblies. Replace the manual chrome faucet assemblies with automatic, hands-free, hard-wired faucet units.

Domestic hot water is provided by an original, National Electric brand, domestic water heater located in mechanical room M103. As it ages, a water heater's efficiency is reduced by internal tube scaling and weakening of heat transfer support surfaces. Based on historical life cycles, the domestic water heater will reach life cycle depletion within the next ten years. In kind replacement is recommended.

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VERTICAL TRANSPORTATION

The traction elevators in this building are approaching the end of their useful service life. Comprehensive modernization will need to take place within the next two to five years. Modernization should include replacing or rebuilding the traction elevator hoist machine and installing a new AC motor, installing new digital controls, rebuilding the drive and secondary sheaves, and replacing the ropes, travel cables, selector, and all non-compliant code related items in the hoistway and pit as needed. Install new hoistway door hardware. Verify that rail bracket spacing is compliant with current code. Renovate the cab interior, including all finishes and the ceiling, floor, and fixtures. Upgrade the car operating panel, including fire service and instructions. Install a ventilation fan and car doors, including hardware, door operators, and door restrictors. Hall fixtures should be replaced. All work and equipment are to meet ADA and code requirements in place at the time of modernization. Additional work may be required in the machine room to meet code.

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.

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C. INSPECTION TEAM DATA

DATE OF INSPECTION: February 18, 2008

INSPECTION TEAM PERSONNEL:

<u>NAME</u>	<u>POSITION</u>	<u>SPECIALTY</u>
Imelda Bacate	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Richard Gadd	Facility Analyst	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Rob Gasaway	Facility Analyst	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Mike Sabo	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Norm Teahan, AIA	Project Architect	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

FACILITY CONTACTS:

<u>NAME</u>	<u>POSITION</u>
Ken Irwin	Plant Operations Manager

REPORT DEVELOPMENT:

Report Development by: ISES CORPORATION
2165 West Park Court
Suite N
Stone Mountain, GA 30087

Contact: Michael Sabo, Project Manager
770-879-7376

D. FACILITY CONDITION ANALYSIS - DEFINITIONS

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

1. REPORT DESCRIPTION

Section 1: Asset Executive Summary, Asset Summary, and General Report Information

Section 2: Detailed Project Summaries and Totals

- A. Detailed Project Totals – Matrix with FCNI Data and Associated Charts
- B. Detailed Projects by Priority Class / Priority Sequence
- C. Detailed Projects by Cost within range [\$0 - < \$100,000]
- D. Detailed Projects by Cost within range [≥ \$100,000 - < \$500,000]
- E. Detailed Projects by Cost within range [≥ \$500,000]
- F. Detailed Projects by Project Classification
- G. Detailed Projects by Project Rating Type - Energy Conservation
- H. Detailed Projects by Category / System Code

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 facility use type, and not original design parameters. This index gives the college a comparison within all buildings for identifying worst case / best case building conditions.

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

Section 3: Specific Project Details Illustrating Description / Cost

Section 4: Drawings with Iconography

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).

Section 5: Life Cycle Model Summary and Projections

Section 6: Photographic Log

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2. **PROJECT CLASSIFICATION**

- 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).

3. **PROJECT SUBCLASS TYPE**

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

4. **PRIORITY SEQUENCE BY PRIORITY CLASS** (Shown in Sections 2 and 3)

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

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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. **COST SUMMARIES AND TOTALS**

The cost summaries and totals are illustrated by Detailed Projects sorted in multiple formats (shown in Sections 2 and 3).

City Index material / labor cost factors: (shown in Sections 2 and 3)

Cost factors are based on the Portland City Index and are adjusted for material and labor cost factors (2008). Refer to the project related labor report found later in this section.

<u>Global Markup Percentages</u>		<u>R.S. MEANS</u>
Local Labor Index:	102.7 %	of National Average
Local Materials Index:	101.8 %	of National average
General Contractor Markup:	20.0 %	Contractor profit & overhead, bonds & insurance
Professional Fees:	16.0 %	Arch. / Eng. Firm design fees and in-house design cost

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

Example:

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

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

8. **PHOTO NUMBER** (Shown in Section 6)

A code shown on the Photographic Log identifies the building number, photo sequence, and architect, engineer, or vertical transportation.

Example: 0001006e

<u>Building Number</u>	<u>Photo Sequence</u>	<u>Arch / Eng / VT</u>
0001	006	e

9. **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.

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10. **CATEGORY CODE** (Shown in Sections 2 and 3)

Refer to the following Category Code Report.

Example: Category Code = EL5A

EL = System Description
5 = Component Description
A = Element Description

CATEGORY CODE

AC1A - AC4B
EL1A - EL8A
ES1A - ES6E
FS1A - FS6A
HE1A - HE7A
HV1A - HV8B
IS1A - IS6D
PL1A - PL5A
SI1A - SI4A
SS1A - SS7A
VT1A - VT7A

SYSTEM DESCRIPTION

ACCESSIBILITY
ELECTRICAL
EXTERIOR STRUCTURE
FIRE / LIFE SAFETY
HEALTH
HVAC
INTERIOR FINISHES / SYSTEMS
PLUMBING
SITE
SECURITY SYSTEMS
VERTICAL TRANSPORTATION

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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 ADA.
AC3E	INTERIOR PATH OF TRAVEL	RESTROOMS/ BATHROOMS	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms, which 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, which 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 stepdown 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.

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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, piles including crack repairs, shoring & 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 & 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 & 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 light wells, areaways, basement access stairs, etc.
ES6C	GENERAL	TRIM	Work on ornamental exterior (generally non-structural) elements including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.
ES6D	GENERAL	SUPERSTRUCTURE	Finish and structural work on non-standard structures with exposed load-bearing elements such as stadiums, bag houses, bleachers, freestanding towers, etc.
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere including finish and structural work on

PORTLAND STATE UNIVERSITY
 Facility Condition Analysis
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CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
			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 sprinklers type automatic fire suppressions including wet pipe & 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.

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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 & 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.

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CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HV6B	CONTROLS	MODIFICATIONS/ REPAIRS	Repair or modification of HVAC control system.
HV6C	CONTROLS	AIR COMPRESSORS/ DRYERS	Repair or modification of control air compressors and dryers.
HV7A	INFRASTRUCTURE	STEAM/HOT WATER GENERATION	Generation of central steam and/or hot water including boilers and related components.
HV7B	INFRASTRUCTURE	STEAM/HOT WATER DISTRIBUTION	Distribution system for central hot water and/or steam.
HV7C	INFRASTRUCTURE	CHILLED WATER GENERATION	Generation of central chilled water including chillers and related components.
HV7D	INFRASTRUCTURE	CHILLED WATER DISTRIBUTION	Distribution system for central chilled water.
HV7E	INFRASTRUCTURE	TUNNELS/ MANHOLES/ TRENCHES	Repairs, installation, 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 & tile, marble, terrazzo, rubber flooring, 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 & 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 light wells, etc.
SYSTEM DESCRIPTION: PLUMBING			
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.

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CATEGORY CODE REPORT

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
PL1B	DOMESTIC WATER	PUMPS	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	DOMESTIC WATER	STORAGE/ TREATMENT	Equipment or vessels for storage or treatment of domestic water.
PL1D	DOMESTIC WATER	METERING	Installation, repair, or replacement of water meters.
PL1E	DOMESTIC WATER	HEATING	Domestic water heaters including gas, oil, and electric water heaters, shell and tube heat exchangers, tank type and instantaneous.
PL1F	DOMESTIC WATER	COOLING	Central systems for cooling and distributing drinking water.
PL1G	DOMESTIC WATER	FIXTURES	Plumbing fixtures including sinks, drinking fountains, water closets, urinals, etc.
PL1H	DOMESTIC WATER	CONSERVATION	Alterations 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, sanitary sewer systems; including combined systems.
PL4D	INFRASTRUCTURE	STORM WATER COLLECTION	Storm water collection systems, 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.

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 Facility Condition Analysis
 Section One

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, 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, ventilation.
VT3A	HOISTWAY	GENERAL	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, compensation.
VT4A	HALL FIXTURES	GENERAL	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, card/key access.
VT5A	PIT	GENERAL	Buffer(s), guards, sheaves, hydro packing, floor, lighting, safety controls.
VT6A	OPERATING CONDITIONS	GENERAL	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, 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
ED : GRADUATE SCHOOL OF EDUCATION

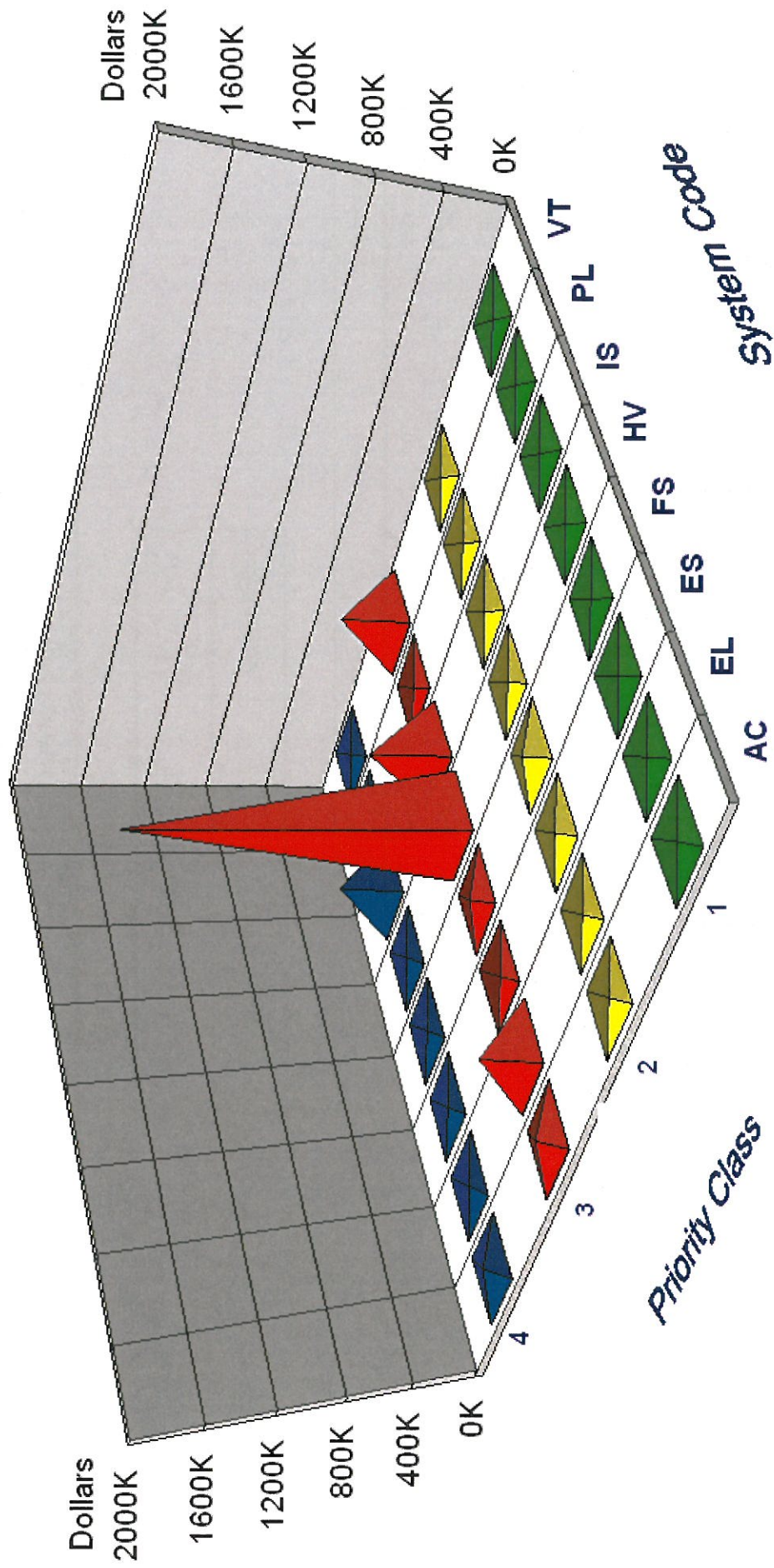
System Code	System Description	Priority Classes				Subtotal
		1	2	3	4	
AC	ACCESSIBILITY	0	0	78,098	50,997	129,094
EL	ELECTRICAL	0	0	276,943	0	276,943
ES	EXTERIOR	0	17,159	0	0	17,159
FS	FIRE/LIFE SAFETY	0	60,442	44,158	0	104,601
HV	HVAC	0	0	1,967,860	0	1,967,860
IS	INTERIOR/FINISH SYS.	0	0	411,289	318,784	730,073
PL	PLUMBING	0	0	0	29,149	29,149
VT	VERT. TRANSPORTATION	0	0	351,537	0	351,537
TOTALS		\$0	\$77,601	\$3,129,885	\$398,930	\$3,606,415

Facility Replacement Cost	\$14,248,490
Facility Condition Needs Index	0.25

Gross Square Feet	53,420
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Total Cost Per Square Foot	\$67.51
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FACILITY CONDITION ANALYSIS
System Code by Priority Class
ED : GRADUATE SCHOOL OF EDUCATION



Detailed Project Totals
 Facility Condition Analysis
 System Code by Project Class
ED : GRADUATE SCHOOL OF EDUCATION

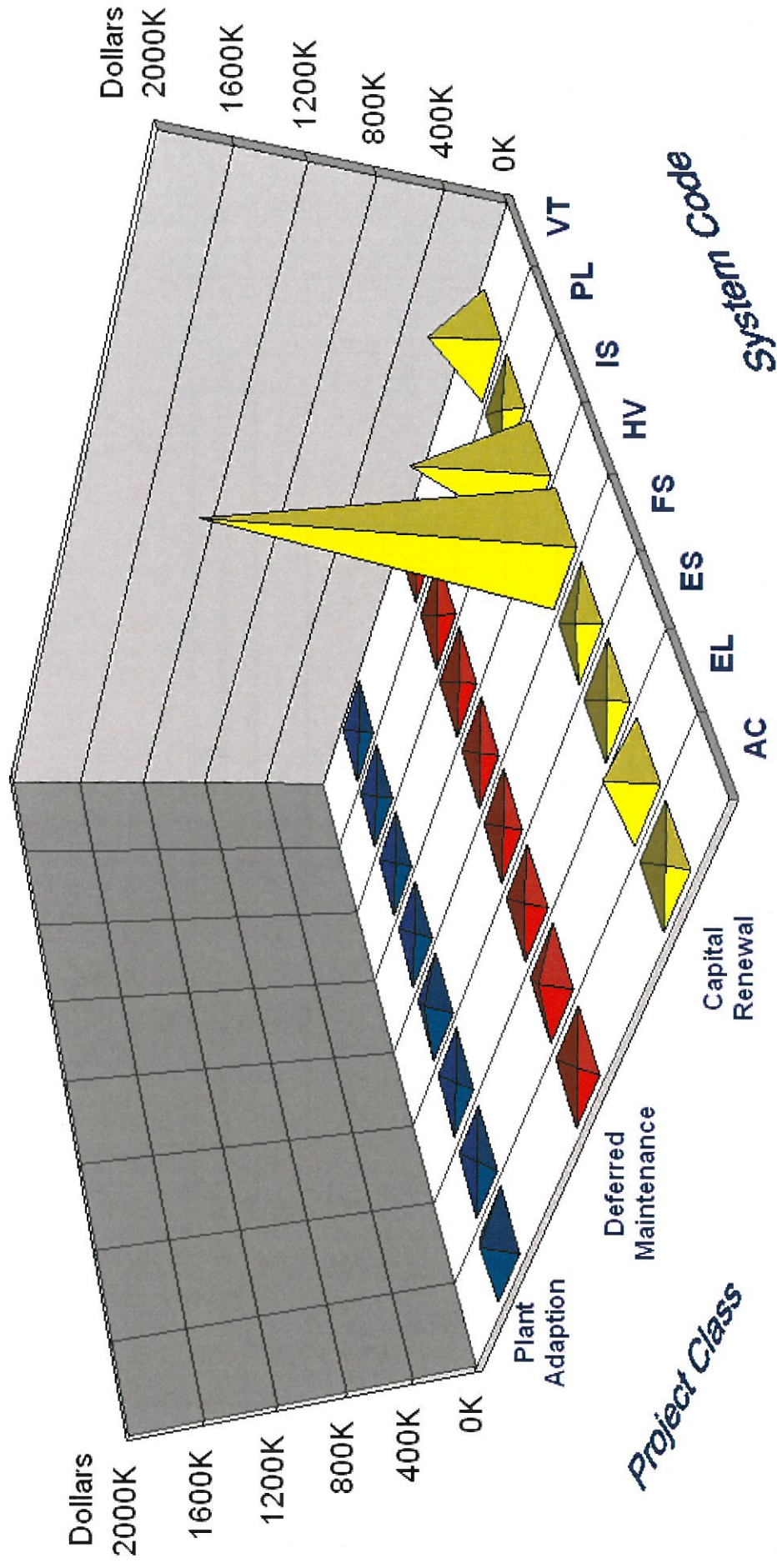
System Code	System Description	Project Classes			Subtotal
		Capital Renewal	Deferred Maintenance	Plant Adaption	
AC	ACCESSIBILITY	0	0	129,094	129,094
EL	ELECTRICAL	192,469	84,474	0	276,943
ES	EXTERIOR	0	17,159	0	17,159
FS	FIRE/LIFE SAFETY	35,455	0	69,146	104,601
HV	HVAC	1,967,860	0	0	1,967,860
IS	INTERIOR/FINISH SYS.	730,073	0	0	730,073
PL	PLUMBING	29,149	0	0	29,149
VT	VERT. TRANSPORTATION	351,537	0	0	351,537
TOTALS		\$3,306,542	\$101,633	\$198,240	\$3,606,415

Facility Replacement Cost	\$14,248,490
Facility Condition Needs Index	0.25

Gross Square Feet	53,420
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Total Cost Per Square Foot	\$67.51
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FACILITY CONDITION ANALYSIS
System Code by Project Class
ED : GRADUATE SCHOOL OF EDUCATION



Detailed Project Summary
 Facility Condition Analysis
 Project Class by Priority Class
ED : GRADUATE SCHOOL OF EDUCATION

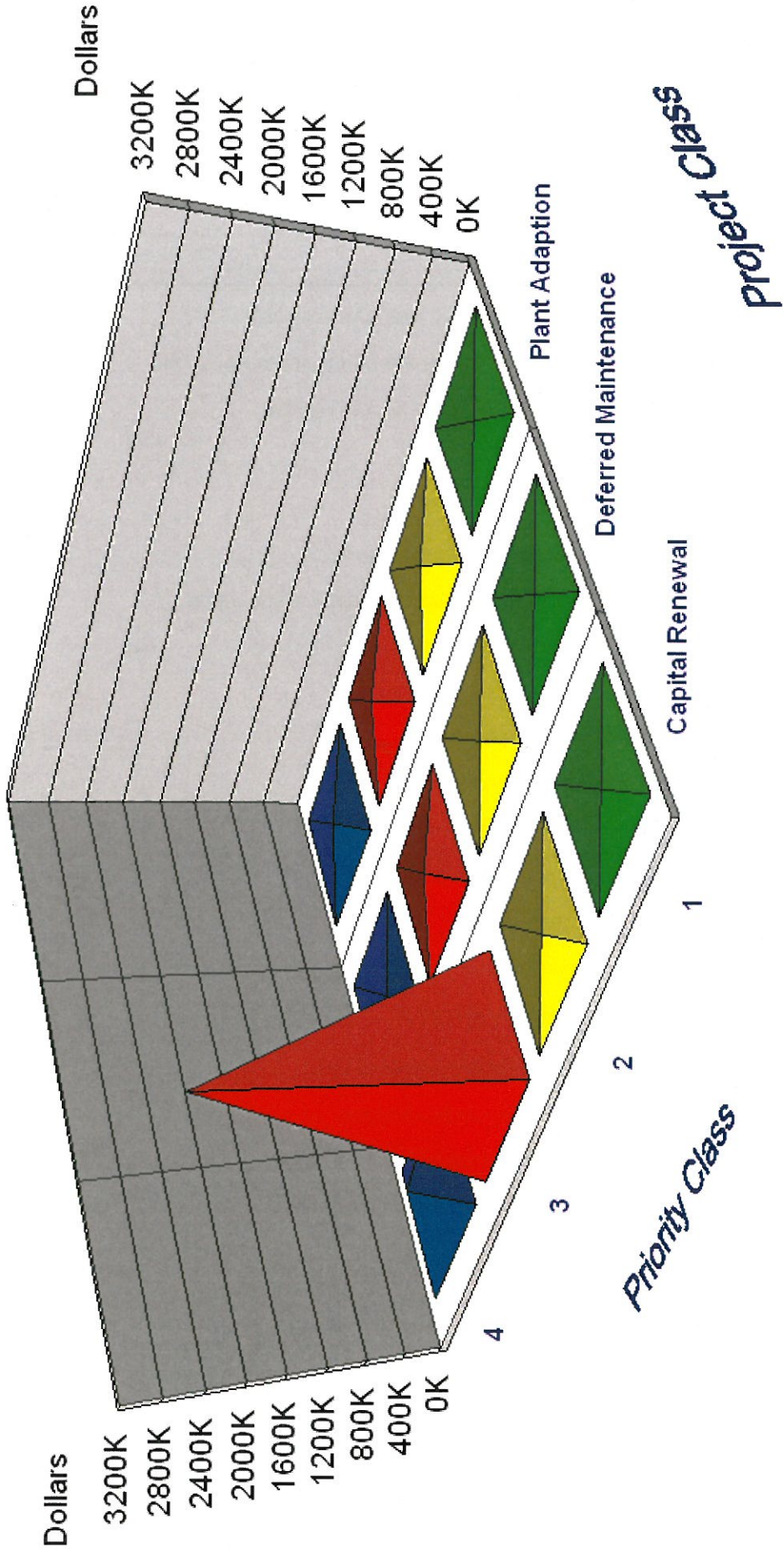
Project Class	Priority Classes				Subtotal
	1	2	3	4	
Capital Renewal	0	8,753	2,949,857	347,933	3,306,542
Deferred Maintenance	0	17,159	84,474	0	101,633
Plant Adaption	0	51,690	95,554	50,997	198,240
TOTALS	\$0	\$77,601	\$3,129,885	\$398,930	\$3,606,415

Facility Replacement Cost	\$14,248,490
Facility Condition Needs Index	0.25

Gross Square Feet 53,420

Total Cost Per Square Foot \$67.51

FACILITY CONDITION ANALYSIS
Project Class by Priority Class
ED : GRADUATE SCHOOL OF EDUCATION



Detailed Project Summary
Facility Condition Analysis
Section Two
Priority Class - Priority Sequence
ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	EDFS05	2	1	INSTALL ADDITIONAL FIRE ALARM DEVICES	42,620	6,819	49,439
FS1A	EDFS03	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	7,546	1,207	8,753
FS6A	EDFS01	2	3	CAGE AND GATE ROOF ACCESS LADDER	1,940	310	2,251
ES4A	EDES01	2	4	ROOF REPAIRS	14,792	2,367	17,159
Totals for Priority Class 2					66,897	10,704	77,601
FS3A	EDFS02	3	5	FIRE SPRINKLER HEAD RENEWAL	23,019	3,683	26,702
FS5E	EDFS04	3	6	COMPLIANT HANDRAIL / GUARDRAIL INSTALLATION	15,048	2,408	17,456
AC3C	EDAC01	3	7	DOOR HARDWARE AND DOORS	57,227	9,156	66,383
AC3D	EDAC02	3	8	COMPLIANT SIGNAGE	10,098	1,616	11,714
HV3A	EDHV01	3	9	HVAC MODERNIZATION	1,696,431	271,429	1,967,860
EL5A	EDEL03	3	10	EMERGENCY GENERATOR RENEWAL	52,333	8,373	60,706
EL2A	EDEL01	3	11	UPGRADE MAIN SWITCHBOARD	113,589	18,174	131,763
EL3B	EDEL02	3	12	ELECTRICAL SYSTEM REPAIRS	72,823	11,652	84,474
IS1A	EDIS01	3	13	FLOOR FINISHES	354,559	56,729	411,289
VT7A	EDVT01	3	14	COMPREHENSIVE ELEVATOR MODERNIZATION	303,049	48,488	351,537
Totals for Priority Class 3					2,698,176	431,708	3,129,885
AC3F	EDAC03	4	15	DUAL LEVEL DRINKING FOUNTAINS	43,963	7,034	50,997
IS3B	EDIS02	4	16	ACOUSTICAL CEILING UPGRADE	274,814	43,970	318,784
PL1G	EDPL01	4	17	REPLACE CHROME FAUCET ASSEMBLIES	15,126	2,420	17,547
PL1E	EDPL02	4	18	UPGRADE DOMESTIC WATER HEATER	10,002	1,600	11,602
Totals for Priority Class 4					343,905	55,025	398,930
Grand Total:					3,108,979	497,437	3,606,415

Detailed Project Summary
Facility Condition Analysis
Section Two
Priority Class - Priority Sequence - Projects < 100,000
ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	EDFS05	2	1	INSTALL ADDITIONAL FIRE ALARM DEVICES	42,620	6,819	49,439
FS1A	EDFS03	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	7,546	1,207	8,753
FS6A	EDFS01	2	3	CAGE AND GATE ROOF ACCESS LADDER	1,940	310	2,251
ES4A	EDES01	2	4	ROOF REPAIRS	14,792	2,367	17,159
Totals for Priority Class 2					66,897	10,704	77,601
FS3A	EDFS02	3	5	FIRE SPRINKLER HEAD RENEWAL	23,019	3,683	26,702
FS5E	EDFS04	3	6	COMPLIANT HANDRAIL / GUARDRAIL INSTALLATION	15,048	2,408	17,456
AC3C	EDAC01	3	7	DOOR HARDWARE AND DOORS	57,227	9,156	66,383
AC3D	EDAC02	3	8	COMPLIANT SIGNAGE	10,098	1,616	11,714
EL5A	EDEL03	3	10	EMERGENCY GENERATOR RENEWAL	52,333	8,373	60,706
EL3B	EDEL02	3	12	ELECTRICAL SYSTEM REPAIRS	72,823	11,652	84,474
Totals for Priority Class 3					230,548	36,888	267,436
AC3F	EDAC03	4	15	DUAL LEVEL DRINKING FOUNTAINS	43,963	7,034	50,997
PL1G	EDPL01	4	17	REPLACE CHROME FAUCET ASSEMBLIES	15,126	2,420	17,547
PL1E	EDPL02	4	18	UPGRADE DOMESTIC WATER HEATER	10,002	1,600	11,602
Totals for Priority Class 4					69,091	11,055	80,145
Grand Totals For Projects < 100,000					366,537	58,646	425,183

Detailed Project Summary
 Facility Condition Analysis
 Section Two

Priority Class - Priority Sequence - Projects $\geq 100,000$ and $< 500,000$
 ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
EL2A	EDEL01	3	11	UPGRADE MAIN SWITCHBOARD	113,589	18,174	131,763
IS1A	EDIS01	3	13	FLOOR FINISHES	354,559	56,729	411,289
VT7A	EDVT01	3	14	COMPREHENSIVE ELEVATOR MODERNIZATION	303,049	48,488	351,537
Totals for Priority Class 3					771,197	123,392	894,589
IS3B	EDIS02	4	16	ACOUSTICAL CEILING UPGRADE	274,814	43,970	318,784
Totals for Priority Class 4					274,814	43,970	318,784
Grand Totals For Projects $\geq 100,000$ and $< 500,000$					1,046,011	167,362	1,213,373

Detailed Project Summary
Facility Condition Analysis
Section Two
Priority Class - Priority Sequence - Projects >= 500,000
ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV3A	EDHV01	3	9	HVAC MODERNIZATION	1,696,431	271,429	1,967,860
Totals for Priority Class 3					1,696,431	271,429	1,967,860
Grand Totals For Projects >= 500,000					1,696,431	271,429	1,967,860
Grand Total for All Projects:					3,108,979	497,437	3,606,415

Detailed Project Summary
Facility Condition Analysis
Section Two
Project Classification
 ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Priority Sequence	Project Classification	Priority Class	Project Title	Total Cost
FS1A	EDFS03	2	Capital Renewal	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	8,753
FS3A	EDFS02	5	Capital Renewal	3	FIRE SPRINKLER HEAD RENEWAL	26,702
HV3A	EDHV01	9	Capital Renewal	3	HVAC MODERNIZATION	1,967,860
EL5A	EDEL03	10	Capital Renewal	3	EMERGENCY GENERATOR RENEWAL	60,706
EL2A	EDEL01	11	Capital Renewal	3	UPGRADE MAIN SWITCHBOARD	131,763
IS1A	EDIS01	13	Capital Renewal	3	FLOOR FINISHES	411,289
VT7A	EDVT01	14	Capital Renewal	3	COMPREHENSIVE ELEVATOR MODERNIZATION	351,537
IS3B	EDIS02	16	Capital Renewal	4	ACOUSTICAL CEILING UPGRADE	318,784
PL1G	EDPL01	17	Capital Renewal	4	REPLACE CHROME FAUCET ASSEMBLIES	17,547
PL1E	EDPL02	18	Capital Renewal	4	UPGRADE DOMESTIC WATER HEATER	11,602
Totals for Capital Renewal						3,306,542
ES4A	EDES01	4	Deferred Maintenance	2	ROOF REPAIRS	17,159
EL3B	EDEL02	12	Deferred Maintenance	3	ELECTRICAL SYSTEM REPAIRS	84,474
Totals for Deferred Maintenance						101,633
FS2A	EDFS05	1	Plant Adaption	2	INSTALL ADDITIONAL FIRE ALARM DEVICES	49,439
FS6A	EDFS01	3	Plant Adaption	2	CAGE AND GATE ROOF ACCESS LADDER	2,251
FS5E	EDFS04	6	Plant Adaption	3	COMPLIANT HANDRAIL / GUARDRAIL INSTALLATION	17,456
AC3C	EDAC01	7	Plant Adaption	3	DOOR HARDWARE AND DOORS	66,383
AC3D	EDAC02	8	Plant Adaption	3	COMPLIANT SIGNAGE	11,714
AC3F	EDAC03	15	Plant Adaption	4	DUAL LEVEL DRINKING FOUNTAINS	50,997
Totals for Plant Adaption						198,240
Grand Total:						3,606,415

Detailed Project Summary
Facility Condition Analysis
Section Two
Energy Conservation
 ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
FS1A	EDFS03	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	8,753	427	20.49
Totals for Priority Class 2					8,753	427	20.49
Grand Total:					8,753	427	20.49

Detailed Project Summary
Facility Condition Analysis
Section Two
Category/System Code
ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC3C	EDAC01	3	7	DOOR HARDWARE AND DOORS	57,227	9,156	66,383
AC3D	EDAC02	3	8	COMPLIANT SIGNAGE	10,098	1,616	11,714
AC3F	EDAC03	4	15	DUAL LEVEL DRINKING FOUNTAINS	43,963	7,034	50,997
Totals for System Code ACCESSIBILITY					111,288	17,806	129,094
EL5A	EDEL03	3	10	EMERGENCY GENERATOR RENEWAL	52,333	8,373	60,706
EL2A	EDEL01	3	11	UPGRADE MAIN SWITCHBOARD	113,589	18,174	131,763
EL3B	EDEL02	3	12	ELECTRICAL SYSTEM REPAIRS	72,823	11,652	84,474
Totals for System Code ELECTRICAL					238,744	38,199	276,943
ES4A	EDES01	2	4	ROOF REPAIRS	14,792	2,367	17,159
Totals for System Code EXTERIOR					14,792	2,367	17,159
FS2A	EDFS05	2	1	INSTALL ADDITIONAL FIRE ALARM DEVICES	42,620	6,819	49,439
FS1A	EDFS03	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	7,546	1,207	8,753
FS6A	EDFS01	2	3	CAGE AND GATE ROOF ACCESS LADDER	1,940	310	2,251
FS3A	EDFS02	3	5	FIRE SPRINKLER HEAD RENEWAL	23,019	3,683	26,702
FS5E	EDFS04	3	6	COMPLIANT HANDRAIL / GUARDRAIL INSTALLATION	15,048	2,408	17,456
Totals for System Code FIRE/LIFE SAFETY					90,173	14,428	104,601
HV3A	EDHV01	3	9	HVAC MODERNIZATION	1,696,431	271,429	1,967,860
Totals for System Code HVAC					1,696,431	271,429	1,967,860
IS1A	EDIS01	3	13	FLOOR FINISHES	354,559	56,729	411,289
IS3B	EDIS02	4	16	ACOUSTICAL CEILING UPGRADE	274,814	43,970	318,784
Totals for System Code INTERIOR/FINISH SYS.					629,373	100,700	730,073
PL1G	EDPL01	4	17	REPLACE CHROME FAUCET ASSEMBLIES	15,126	2,420	17,547
PL1E	EDPL02	4	18	UPGRADE DOMESTIC WATER HEATER	10,002	1,600	11,602

Detailed Project Summary
Facility Condition Analysis
Section Two
Category/System Code
 ED : GRADUATE SCHOOL OF EDUCATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
Totals for System Code PLUMBING					25,128	4,021	29,149
VT7A	EDVT01	3	14	COMPREHENSIVE ELEVATOR MODERNIZATION	303,049	48,488	351,537
Totals for System Code VERT. TRANSPORTATION					303,049	48,488	351,537
Grand Total:					3,108,979	497,437	3,606,415

FACILITY CONDITION ANALYSIS

SECTION 3

**SPECIFIC PROJECT DETAILS
ILLUSTRATING DESCRIPTION / COST**

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDFS05	Title:	INSTALL ADDITIONAL FIRE ALARM DEVICES
Priority Sequence:	1		
Priority Class:	2		
Category Code:	FS2A	System:	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA	72	
	ADAAG	702.1	
	IBC	907	
Project Class:	Plant Adaption		
Project Date:	03/31/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

The Silent Knight addressable fire alarm system is in good condition. However, it is lacking xenon strobes and audible annunciators, primarily in the egress corridors. The installation of additional fire alarm devices is recommended. Coordinate this installation with other recommended interior finish upgrade projects.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDF505

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install visual and audible fire alarm devices, includes rough-in	SF	53,420	\$0.30	\$16,026	\$0.35	\$18,697	\$34,723
Project Totals:				\$16,026		\$18,697	\$34,723

Material/Labor Cost		\$34,723
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$35,516
		<hr/>
General Contractor Mark Up at 20.0%	+	\$7,103
Inflation	+	\$0
		<hr/>
Construction Cost		\$42,620
		<hr/>
Professional Fees at 16.0%	+	\$6,819
		<hr/>
Total Project Cost		\$49,439
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDFS03	Title:	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS1A	System:	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Energy Conservation	\$427.28	
Code Application:	NFPA 101-47		
	IBC 1003.2.10		
Project Class:	Capital Renewal		
Project Date:	03/28/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

The original incandescent / compact fluorescent exit signs are timeworn, and scheduled replacement is recommended. Additionally, office suites 602 and 204 require additional exit signs. Replace the existing exit signs, and install additional signs as required by code. LED exit signs are recommended for their low maintenance and energy efficiency. New exit signs should be connected to the emergency circuit

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDFS03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replacement of existing exit signs with LED units	EA	26	\$84.00	\$2,184	\$74.00	\$1,924	\$4,108
Installation of new LED exit signs, including all connections	EA	6	\$118	\$708	\$222	\$1,332	\$2,040
Project Totals:				\$2,892		\$3,256	\$6,148

Material/Labor Cost		\$6,148
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		<u>\$6,288</u>
General Contractor Mark Up at 20.0%	+	\$1,258
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$7,546</u>
Professional Fees at 16.0%	+	<u>\$1,207</u>
Total Project Cost		<u><u>\$8,753</u></u>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDFS01	Title:	CAGE AND GATE ROOF ACCESS LADDER
Priority Sequence:	3		
Priority Class:	2		
Category Code:	FS6A	System:	FIRE/LIFE SAFETY
		Component:	GENERAL
		Element:	OTHER
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	OSHA	1910.27	
Project Class:	Plant Adaption		
Project Date:	03/27/2008		
Project Location:	Item Only: Floor(s) R		

Project Description

The general public, as well as students, can access the roof access ladder on the sixth floor. For increased safety, this high ladder should be fitted with a safety cage. For increased security, it should also be fitted with a locked gate that can only be opened by authorized personnel.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDF501

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Safety cage and gate	LF	18	\$60.00	\$1,080	\$28.00	\$504	\$1,584
Project Totals:				\$1,080		\$504	\$1,584

Material/Labor Cost		\$1,584
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$1,617
		<hr/>
General Contractor Mark Up at 20.0%	+	\$323
Inflation	+	\$0
		<hr/>
Construction Cost		\$1,940
		<hr/>
Professional Fees at 16.0%	+	\$310
		<hr/>
Total Project Cost		\$2,251
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDES01	Title:	ROOF REPAIRS
Priority Sequence:	4		
Priority Class:	2		
Category Code:	ES4A	System:	EXTERIOR
		Component:	ROOF
		Element:	REPAIR
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	03/30/2008		
Project Location:	Floor-wide: Floor(s) R		

Project Description

There is a roof leak outside the south roof access door, and roof walkpads are damaged or missing. In addition, there is evidence of water penetration in the elevator machine room. Replace walkpads, and repair the leaking membrane roof. Also address former or ongoing water penetration problems in the elevator machine room, and then clean and repaint damaged interior finishes.

**Specific Project Details
Facility Condition Analysis
Section Three**

Project Cost

Project Number: EDES01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Estimated allowance for roof repairs	LOT	1	\$4,850	\$4,850	\$7,195	\$7,195	\$12,045
Project Totals:				\$4,850		\$7,195	\$12,045

Material/Labor Cost		\$12,045
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$12,327
		<hr/>
General Contractor Mark Up at 20.0%	+	\$2,465
Inflation	+	\$0
		<hr/>
Construction Cost		\$14,792
		<hr/>
Professional Fees at 16.0%	+	\$2,367
		<hr/>
Total Project Cost		\$17,159
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDFS02	Title:	FIRE SPRINKLER HEAD RENEWAL
Priority Sequence:	5		
Priority Class:	3		
Category Code:	FS3A	System:	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 13		
	IBC 903		
Project Class:	Capital Renewal		
Project Date:	03/28/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

The fusible link sprinkler heads appear to have been in service for over twenty years. The statistical life cycle for a sprinkler head is approximately twenty years. Scale can accumulate inside the head and cause it to malfunction when needed. It is recommended that the sprinkler heads be replaced to ensure that the proper protection is available.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDF502

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire sprinkler head replacement	SF	53,420	\$0.04	\$2,137	\$0.31	\$16,560	\$18,697
Project Totals:				\$2,137		\$16,560	\$18,697

Material/Labor Cost		\$18,697
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$19,183
		<hr/>
General Contractor Mark Up at 20.0%	+	\$3,837
Inflation	+	\$0
		<hr/>
Construction Cost		\$23,019
		<hr/>
Professional Fees at 16.0%	+	\$3,683
		<hr/>
Total Project Cost		\$26,702
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDFS04	Title:	COMPLIANT HANDRAIL / GUARDRAIL INSTALLATION
Priority Sequence:	6		
Priority Class:	3		
Category Code:	FS5E	System:	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	STAIRS AND RAILING
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	505	
Project Class:	Plant Adaption		
Project Date:	03/30/2008		
Project Location:	Floor-wide: Floor(s) 2, 3, 4, 5, 6		

Project Description

The handrail / guardrail system is not fully compliant in this 1981 structure. Current regulations require guardrails to meet height and sphere test specifications. To improve both safety and compliance, install new railings in the stairwells, including the library stair.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDF504

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Handrail / guardrail upgrade	FLR	6	\$1,246	\$7,476	\$800	\$4,800	\$12,276
Project Totals:				\$7,476		\$4,800	\$12,276

Material/Labor Cost		\$12,276
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		<u>\$12,540</u>
General Contractor Mark Up at 20.0%	+	\$2,508
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$15,048</u>
Professional Fees at 16.0%	+	<u>\$2,408</u>
Total Project Cost		<u><u>\$17,456</u></u>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDAC01	Title:	DOOR HARDWARE AND DOORS
Priority Sequence:	7		
Priority Class:	3		
Category Code:	AC3C	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DOORS AND HARDWARE
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	404	
Project Class:	Plant Adaption		
Project Date:	03/27/2008		
Project Location:	Area Wide: Floor(s) 2, 3, 4, 5, 6		

Project Description

As in the contiguous School of Business Administration, only a percentage of interior of interior doors have been fitted with accessible lever hardware. In addition, a few damaged doors should be upgraded. To facilitate handicapped use of this structure, install lever door hardware where it is lacking. Also replace damaged doors and frames with new doors fitted with accessible hardware.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDAC01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Accessible lever hardware	EA	90	\$262	\$23,580	\$67.00	\$6,030	\$29,610
Rated interior door and frame	EA	12	\$645	\$7,740	\$780	\$9,360	\$17,100
Project Totals:				\$31,320		\$15,390	\$46,710

Material/Labor Cost		\$46,710
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		<u>\$47,689</u>
General Contractor Mark Up at 20.0%	+	\$9,538
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$57,227</u>
Professional Fees at 16.0%	+	<u>\$9,156</u>
Total Project Cost		<u><u>\$66,383</u></u>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDAC02	Title:	COMPLIANT SIGNAGE
Priority Sequence:	8		
Priority Class:	3		
Category Code:	AC3D	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	SIGNAGE
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	703.1	

Project Class: Plant Adaption

Project Date: 03/27/2008

Project Location: Floor-wide: Floor(s) 2, 3, 4, 5, 6

Project Description

A relatively small percentage of this facility has been updated with accessible signage. Current legislation requires that permanent spaces in public buildings be identified with ADA compliant signage. Create and install a new signage package that meets these requirements. These new signs should be mounted in the correct location and should contain such code required elements as Braille and high contrast, raised lettering.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDAC02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA signage	EA	125	\$51.00	\$6,375	\$15.00	\$1,875	\$8,250
Project Totals:				\$6,375		\$1,875	\$8,250

Material/Labor Cost		\$8,250
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		<u>\$8,415</u>
General Contractor Mark Up at 20.0%	+	\$1,683
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$10,098</u>
Professional Fees at 16.0%	+	<u>\$1,616</u>
Total Project Cost		<u><u>\$11,714</u></u>

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDHV01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air handlers, ductwork, VAVs, VFDs, DDCs, piping, electrical connections, and demolition of existing equipment	SF	53,420	\$11.64	\$621,809	\$14.23	\$760,167	\$1,381,975
Project Totals:				\$621,809		\$760,167	\$1,381,975

Material/Labor Cost		\$1,381,975
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$1,413,692
		<hr/>
General Contractor Mark Up at 20.0%	+	\$282,738
Inflation	+	\$0
		<hr/>
Construction Cost		\$1,696,431
		<hr/>
Professional Fees at 16.0%	+	\$271,429
		<hr/>
Total Project Cost		\$1,967,860
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDEL03	Title:	EMERGENCY GENERATOR RENEWAL
Priority Sequence:	10		
Priority Class:	3		
Category Code:	EL5A	System:	ELECTRICAL
		Component:	EMERGENCY POWER SYSTEM
		Element:	GENERATION/DISTRIBUTION
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	700, 701, 702	
Project Class:	Capital Renewal		
Project Date:	03/31/2008		
Project Location:	Item Only: Floor(s) R Room(s) Roof		

Project Description

Emergency power for the life safety equipment is provided by an aging, 20 kW, Onan, diesel emergency generator located on the roof. The related automatic transfer switch is located in first floor electrical room 104. Replace the existing emergency generator set with an appropriately sized unit based on current facility requirements. Replacement costs include demolition of the existing equipment and the installation of a new generator, automatic transfer switches (ATS), diesel fuel tank, battery and charger, exhaust system, and necessary electrical connections.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDEL03

Task Cost Estimate

Task Description	Unit	Qty	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, demolition, and disposal	KW	75	\$435	\$32,625	\$135	\$10,125	\$42,750
Project Totals:				\$32,625		\$10,125	\$42,750

Material/Labor Cost		\$42,750
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		<u>\$43,611</u>
General Contractor Mark Up at 20.0%	+	\$8,722
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$52,333</u>
Professional Fees at 16.0%	+	<u>\$8,373</u>
Total Project Cost		<u><u>\$60,706</u></u>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDEL01	Title:	UPGRADE MAIN SWITCHBOARD
Priority Sequence:	11		
Priority Class:	3		
Category Code:	EL2A	System:	ELECTRICAL
		Component:	MAIN DISTRIBUTION PANELS
		Element:	CONDITION UPGRADE
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	230	
Project Class:	Capital Renewal		
Project Date:	03/28/2008		
Project Location:	Item Only: Floor(s) 1 Room(s) M104		

Project Description

The aging switchboard, manufactured by Westinghouse, is recommended for replacement. The existing aged circuit breakers could pose a potential fire hazard should they fail to interrupt a circuit in an overload or short circuit condition. The existing switchboard should be replaced in its entirety. New switchgear components should include a ground fault main circuit breaker, draw-out distribution breakers for ease of maintenance, digital metering for remote control / monitoring, and transient surge protection. The cost estimate is based on a 3,000 amp switchboard.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDEL01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Switchboard, includes switchboard, circuit breakers, feeders, digital metering, transient surge protector, and demolition of existing equipment	AMP	3,000	\$16.79	\$50,370	\$14.08	\$42,240	\$92,610
Project Totals:				\$50,370		\$42,240	\$92,610

Material/Labor Cost		\$92,610
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		<u>\$94,657</u>
General Contractor Mark Up at 20.0%	+	\$18,931
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$113,589</u>
Professional Fees at 16.0%	+	<u>\$18,174</u>
Total Project Cost		<u><u>\$131,763</u></u>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDEL02	Title:	ELECTRICAL SYSTEM REPAIRS
Priority Sequence:	12		
Priority Class:	3		
Category Code:	EL3B	System:	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	Chapters 1-4	
Project Class:	Deferred Maintenance		
Project Date:	03/28/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

Aging devices, including wall switches and receptacles, are potential shock and fire hazards. Replace all worn or damaged switches, receptacles, and cover plates. Install GFCI receptacles where required by code. Test power panels for proper operation, replacing faulty breakers as needed. Update power panel directories for circuit identification.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDEL02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Switches, receptacles, cover plates, breakers, and miscellaneous materials	SF	53,420	\$0.44	\$23,505	\$0.67	\$35,791	\$59,296
Project Totals:				\$23,505		\$35,791	\$59,296

Material/Labor Cost		\$59,296
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$60,686
		<hr/>
General Contractor Mark Up at 20.0%	+	\$12,137
Inflation	+	\$0
		<hr/>
Construction Cost		\$72,823
		<hr/>
Professional Fees at 16.0%	+	\$11,652
		<hr/>
Total Project Cost		\$84,474
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDIS01	Title:	FLOOR FINISHES
Priority Sequence:	13		
Priority Class:	3		
Category Code:	IS1A	System:	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	03/27/2008		
Project Location:	Floor-wide: Floor(s) 2, 3, 4, 5, 6		

Project Description

The carpeting in this building varies in age and condition, with older carpeting in offices and high traffic spaces being in the worst condition. Since these floor finishes will continue to deteriorate, they are recommended for replacement within the next five years. In addition, the furniture in room 302 is badly damaging the floor finish. Either replace the furniture and install new vinyl tile floor, or provide a more durable floor finish.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDIS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet replacement	SF	40,600	\$5.15	\$209,090	\$1.92	\$77,952	\$287,042
Vinyl tile installation	SF	432	\$3.39	\$1,464	\$2.40	\$1,037	\$2,501
Project Totals:				\$210,554		\$78,989	\$289,543

Material/Labor Cost		\$289,543
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		\$295,466
General Contractor Mark Up at 20.0%	+	\$59,093
Inflation	+	\$0
Construction Cost		\$354,559
Professional Fees at 16.0%	+	\$56,729
Total Project Cost		\$411,289

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDVT01	Title:	COMPREHENSIVE ELEVATOR MODERNIZATION
Priority Sequence:	14		
Priority Class:	3		
Category Code:	VT7A	System:	VERT. TRANSPORTATION
		Component:	GENERAL
		Element:	OTHER
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	ASME	A17.1	

Project Class: Capital Renewal

Project Date: 03/28/2008

Project Location: Item Only: Floor(s) 1, 2, 3, 4, 5, 6, 7

Project Description

The traction elevators in this building are approaching the end of their useful service life. Comprehensive modernization will need to take place within the next two to five years. Modernization should include replacing or rebuilding the traction elevator hoist machine and installing a new AC motor, installing new digital controls, rebuilding the drive and secondary sheaves, and replacing the ropes, travel cables, selector, and all non-compliant code related items in the hoistway and pit as needed. Install new hoistway door hardware. Verify that rail bracket spacing is compliant with current code. Renovate the cab interior, including all finishes and the ceiling, floor, and fixtures. Upgrade the car operating panel, including fire service and instructions. Install a ventilation fan and car doors, including hardware, door operators, and door restrictors. Hall fixtures should be replaced. All work and equipment are to meet ADA and code requirements in place at the time of modernization. Additional work may be required in the machine room to meet code.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDVT01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Comprehensive modernization	LOT	2	\$53,877	\$107,754	\$69,546	\$139,092	\$246,846
Project Totals:				\$107,754		\$139,092	\$246,846

Material/Labor Cost		\$246,846
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$252,541
		<hr/>
General Contractor Mark Up at 20.0%	+	\$50,508
Inflation	+	\$0
		<hr/>
Construction Cost		\$303,049
		<hr/>
Professional Fees at 16.0%	+	\$48,488
		<hr/>
Total Project Cost		\$351,537
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDAC03	Title:	DUAL LEVEL DRINKING FOUNTAINS
Priority Sequence:	15		
Priority Class:	4		
Category Code:	AC3F	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DRINKING FOUNTAINS
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	211, 602	
Project Class:	Plant Adaption		
Project Date:	03/27/2008		
Project Location:	Floor-wide: Floor(s) 2, 3, 4, 5, 6		

Project Description

The single level drinking fountains in this building do not equally accommodate all potential users. As these units reach the end of their useful life, replace them with new dual level, refrigerated units. These new drinking fountains should be located in code compliant alcoves that are identified with new signage.

**Specific Project Details
Facility Condition Analysis
Section Three**

Project Cost

Project Number: EDAC03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dual level drinking fountain	EA	6	\$1,168	\$7,008	\$359	\$2,154	\$9,162
Alcove construction	EA	6	\$842	\$5,052	\$3,594	\$21,564	\$26,616
Project Totals:				\$12,060		\$23,718	\$35,778

Material/Labor Cost		\$35,778
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		\$36,635
General Contractor Mark Up at 20.0%	+	\$7,327
Inflation	+	\$0
Construction Cost		\$43,963
Professional Fees at 16.0%	+	\$7,034
Total Project Cost		\$50,997

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDIS02	Title:	ACOUSTICAL CEILING UPGRADE
Priority Sequence:	16		
Priority Class:	4		
Category Code:	IS3B	System:	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	03/27/2008		
Project Location:	Floor-wide: Floor(s) 2, 3, 4, 5, 6		

Project Description

The acoustical ceilings in this 1981 building are approaching the end of their average life expectancy. Within the next ten years, it is anticipated that these ceilings will need to be replaced. To maintain a reasonable interior aesthetic, schedule these timeworn ceilings for low priority upgrade.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDIS02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Acoustical ceiling replacement	SF	45,675	\$2.04	\$93,177	\$2.86	\$130,631	\$223,808
Project Totals:				\$93,177		\$130,631	\$223,808

Material/Labor Cost		\$223,808
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$229,012
		<hr/>
General Contractor Mark Up at 20.0%	+	\$45,802
Inflation	+	\$0
		<hr/>
Construction Cost		\$274,814
		<hr/>
Professional Fees at 16.0%	+	\$43,970
		<hr/>
Total Project Cost		\$318,784
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDPL01	Title:	REPLACE CHROME FAUCET ASSEMBLIES
Priority Sequence:	17		
Priority Class:	4		
Category Code:	PL1G	System:	PLUMBING
		Component:	DOMESTIC WATER
		Element:	FIXTURES
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	IPC	Chapter P4	
Project Class:	Capital Renewal		
Project Date:	03/28/2008		
Project Location:	Item Only: Floor(s) 1, 2, 3, 4, 5, 6		

Project Description

The water-conserving plumbing fixtures are in good condition and should outlast the ten-year purview of this assessment. Automatic flush valves are utilized. For additional water conservation, specify automatic, hands-free faucet assemblies for the lavatories. These should be hard-wired, not battery-type.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDPL01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Automatic lavatory faucets, traps, supplies, and demolition	EA	29	\$315	\$9,135	\$111	\$3,219	\$12,354
Project Totals:				\$9,135		\$3,219	\$12,354

Material/Labor Cost		\$12,354
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$12,605
		<hr/>
General Contractor Mark Up at 20.0%	+	\$2,521
Inflation	+	\$0
		<hr/>
Construction Cost		\$15,126
		<hr/>
Professional Fees at 16.0%	+	\$2,420
		<hr/>
Total Project Cost		\$17,547
		<hr/> <hr/>

Specific Project Details
Facility Condition Analysis
Section Three

Project Description

Project Number:	EDPL02	Title:	UPGRADE DOMESTIC WATER HEATER
Priority Sequence:	18		
Priority Class:	4		
Category Code:	PL1E	System:	PLUMBING
		Component:	DOMESTIC WATER
		Element:	HEATING
Building Code:	ED		
Building Name:	GRADUATE SCHOOL OF EDUCATION		
Subclass/Savings:	Not Applicable		
Code Application:	IPC	Chapter P5	

Project Class: Capital Renewal

Project Date: 03/28/2008

Project Location: Item Only: Floor(s) 1
Room(s) M103

Project Description

Domestic hot water is produced by an original National Electric water heater. As it ages, a water heater's efficiency is reduced by internal tube scaling and weakening of heat transfer support surfaces. Based on historical life cycles, the domestic water heater will reach life cycle depletion within the next ten years. In kind replacement is recommended.

Specific Project Details
Facility Condition Analysis
Section Three

Project Cost

Project Number: EDPL02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Electric, commercial-grade water heater replacement, including demolition	GAL	100	\$73.34	\$7,334	\$8.46	\$846	\$8,180
Project Totals:				\$7,334		\$846	\$8,180

Material/Labor Cost		\$8,180
Material Index		101.8%
Labor Index		102.7%
		<hr/>
Material/Labor Indexed Cost		\$8,335
		<hr/>
General Contractor Mark Up at 20.0%	+	\$1,667
Inflation	+	\$0
		<hr/>
Construction Cost		\$10,002
		<hr/>
Professional Fees at 16.0%	+	\$1,600
		<hr/>
Total Project Cost		\$11,602
		<hr/> <hr/>

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

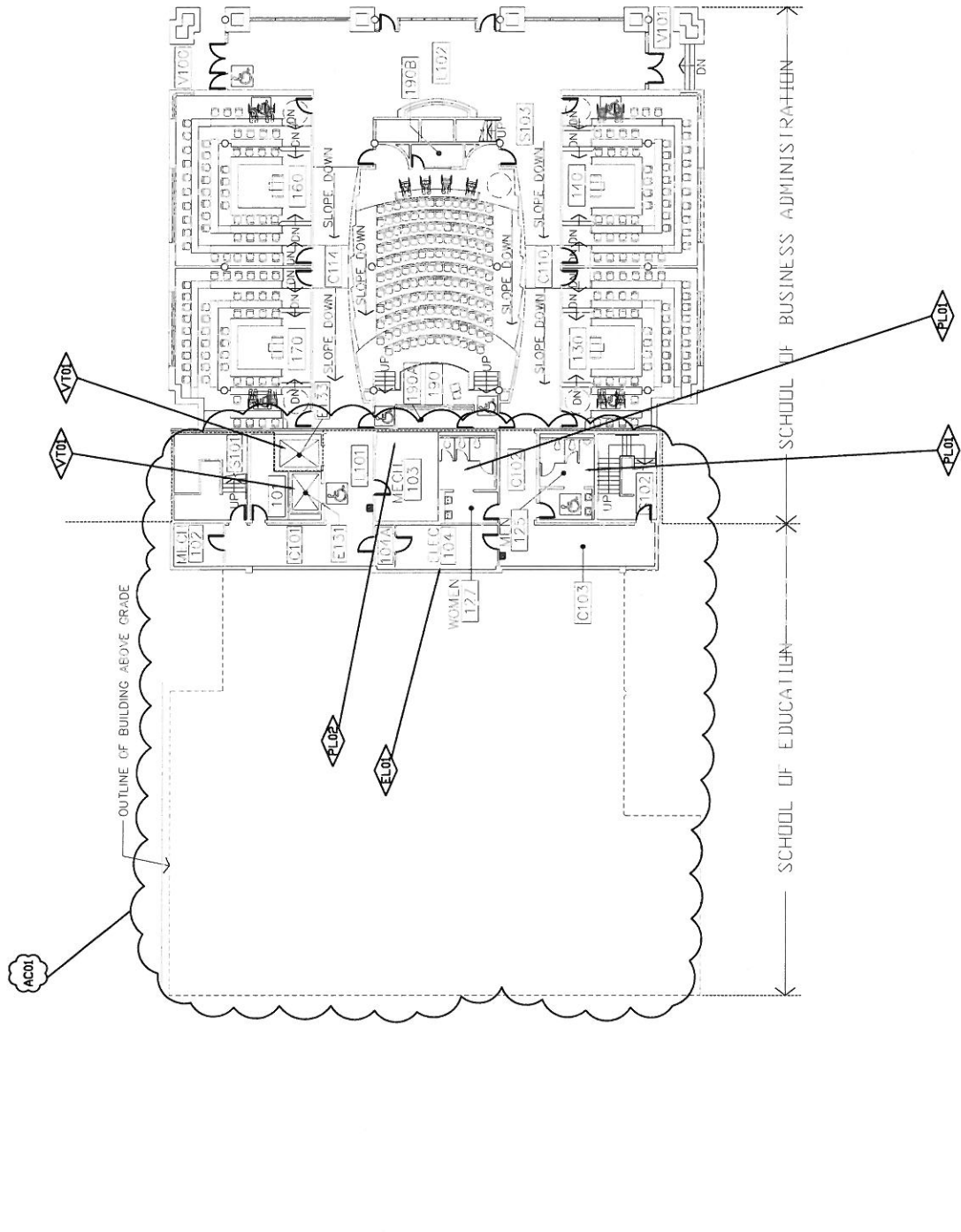


FACILITY
CONDITION
ANALYSIS
3165 S.W. Park Court, Suite 100
Beaverton, OR 97007
(773) 876-8776

- PROJECT NUMBER APPLIED TO ONE ROOM ONLY
- PROJECT NUMBER APPLIED TO ONE FLOOR ONLY
- PROJECT NUMBER APPLIED TO ENTIRE BUILDING
- PROJECT NUMBER APPLIED TO ENTIRE FLOOR
- PROJECT NUMBER APPLIED TO A SITUATION OF IMPROVED EXTENTS
- PROJECT NUMBER APPLIED TO AN AREA AS NOTED

PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
 Drawn: J.T.Y.
 Project No. 08-006
 Drawing: PS_ED_P01
 FIRST FLOOR PLAN
 Sheet No.



GRADUATE SCHOOL OF EDUCATION

BLDG NO. ED



FACILITY CONDITION ANALYSIS

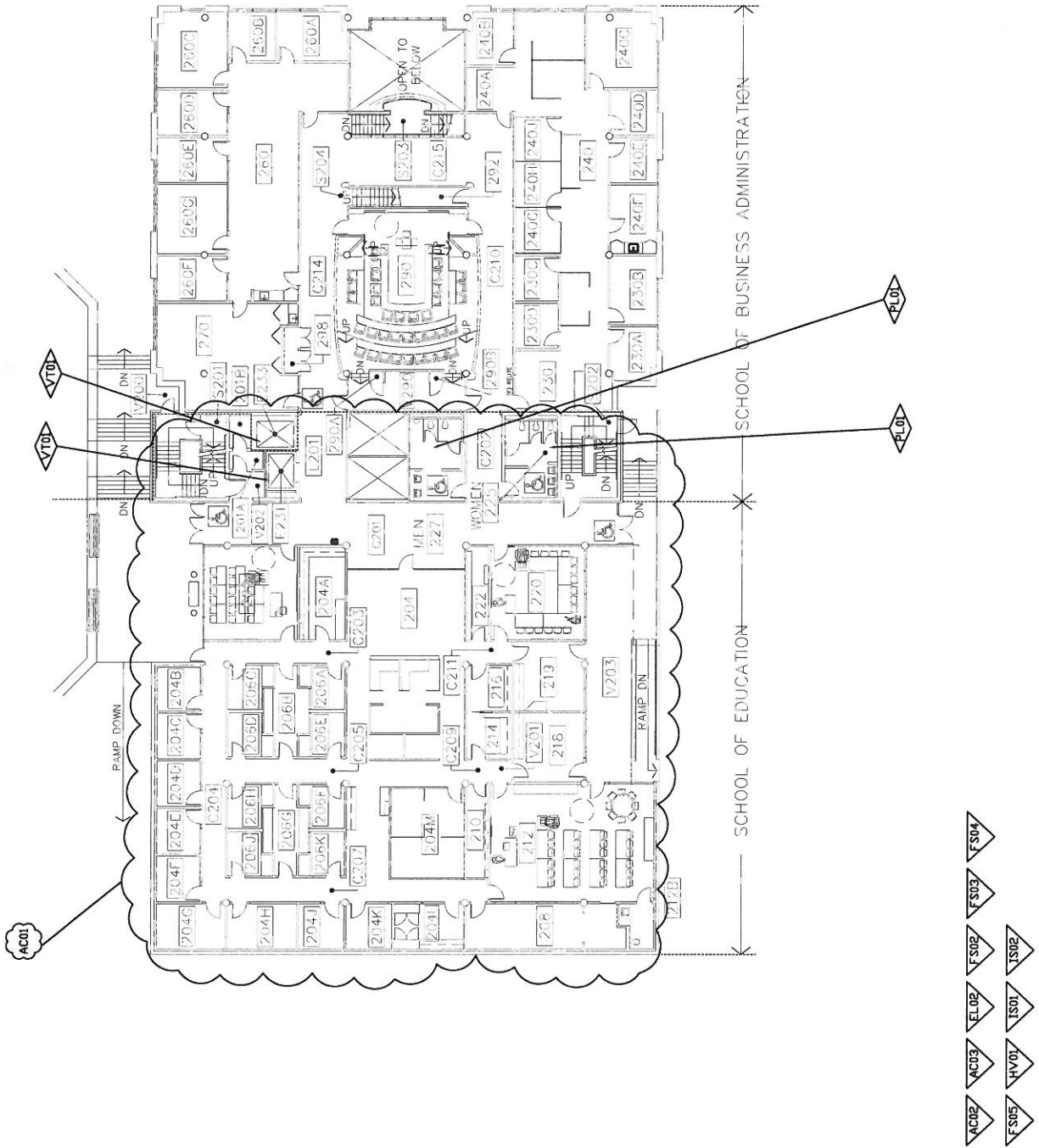
2108 1/2 SW 3rd Street, Corvallis, OR 97331
 Phone: 541-325-2200
 Fax: 541-325-2201
 Website: www.icescorp.com

- PROJECT NUMBER APPLIES TO ONE ROOM ONLY
- PROJECT NUMBER APPLIES TO ENTIRE BUILDING
- PROJECT NUMBER APPLIES TO ENTIRE FLOOR
- PROJECT NUMBER APPLIES TO A PORTION OF ROOMS OUTSIDE
- PROJECT NUMBER APPLIES TO AREA AS NOTED

PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/06/08
 Drawn: T.T.Y.
 Project No. 06-006
 Drawing: PG_ED_F02

SECOND FLOOR PLAN
 Sheet No.



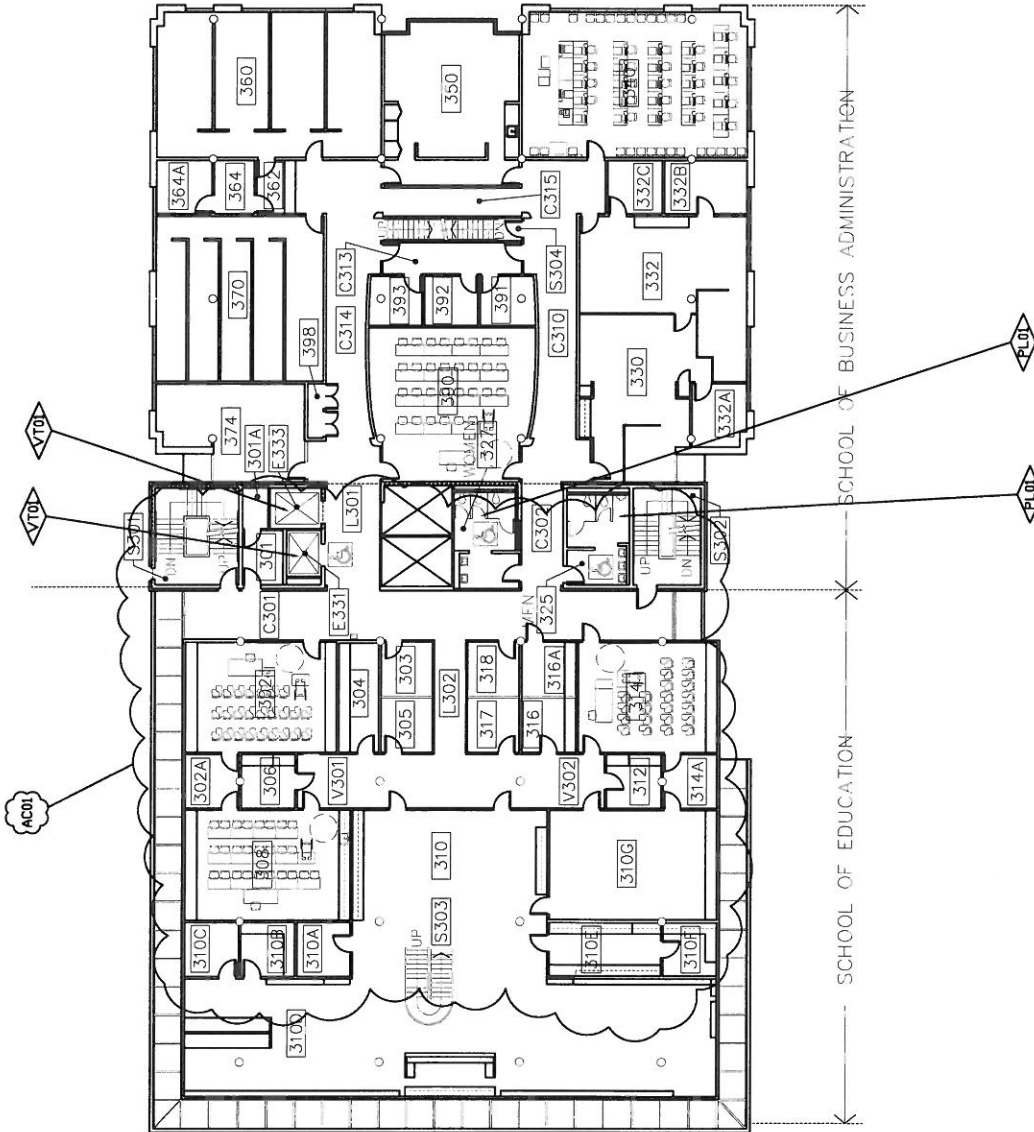


FACILITY CONCEPT ANALYSIS
 818 West Park Court, Suite 110
 Portland, Oregon 97201
 (770) 676-7070

- PRIORITY 1
APPLIES TO ONE ROOM ONLY
- PRIORITY 2
APPLIES TO ONE FLOOR ONLY
- PRIORITY 3
APPLIES TO ENTIRE BUILDING
- PRIORITY 4
APPLIES TO ENTIRE FLOOR
- PRIORITY 5
APPLIES TO A SUBSET OF UNFINISHED EXTERIOR
- PRIORITY 6
APPLIES TO ENTIRE AREA AS NOTED

PRIORITY LAYERS	
S11	S12
S13	S14
ES1	ES2
ES3	ES4
IS1	IS2
IS3	IS4
AC1	AC2
AC3	AC4
HE1	HE2
HE3	HE4
FS1	FS2
FS3	FS4
HV1	HV2
HV3	HV4
PL1	PL2
PL3	PL4
EL1	EL2
EL3	EL4
VT1	VT2
VT3	VT4
SS1	SS2
SS3	SS4

Date: 04/09/08
 Drawn: J.T.V.
 Project No. 08-005
 Drawing: PS_ED_F03
 THIRD FLOOR PLAN
 Sheet No.



- AC01
- AC02
- AC03
- EL02
- EL03
- FS01
- FS02
- FS03
- FS04
- HV01
- IS01
- IS02
- VT01
- VT02

GRADUATE SCHOOL
OF EDUCATION

BLDG NO. ED



FACILITY
CONDITION
ANALYSIS

ICES Bldg. Plan - Check Bldg. #
Broomfield, CO 80007
(778) 878-9778

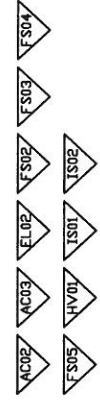
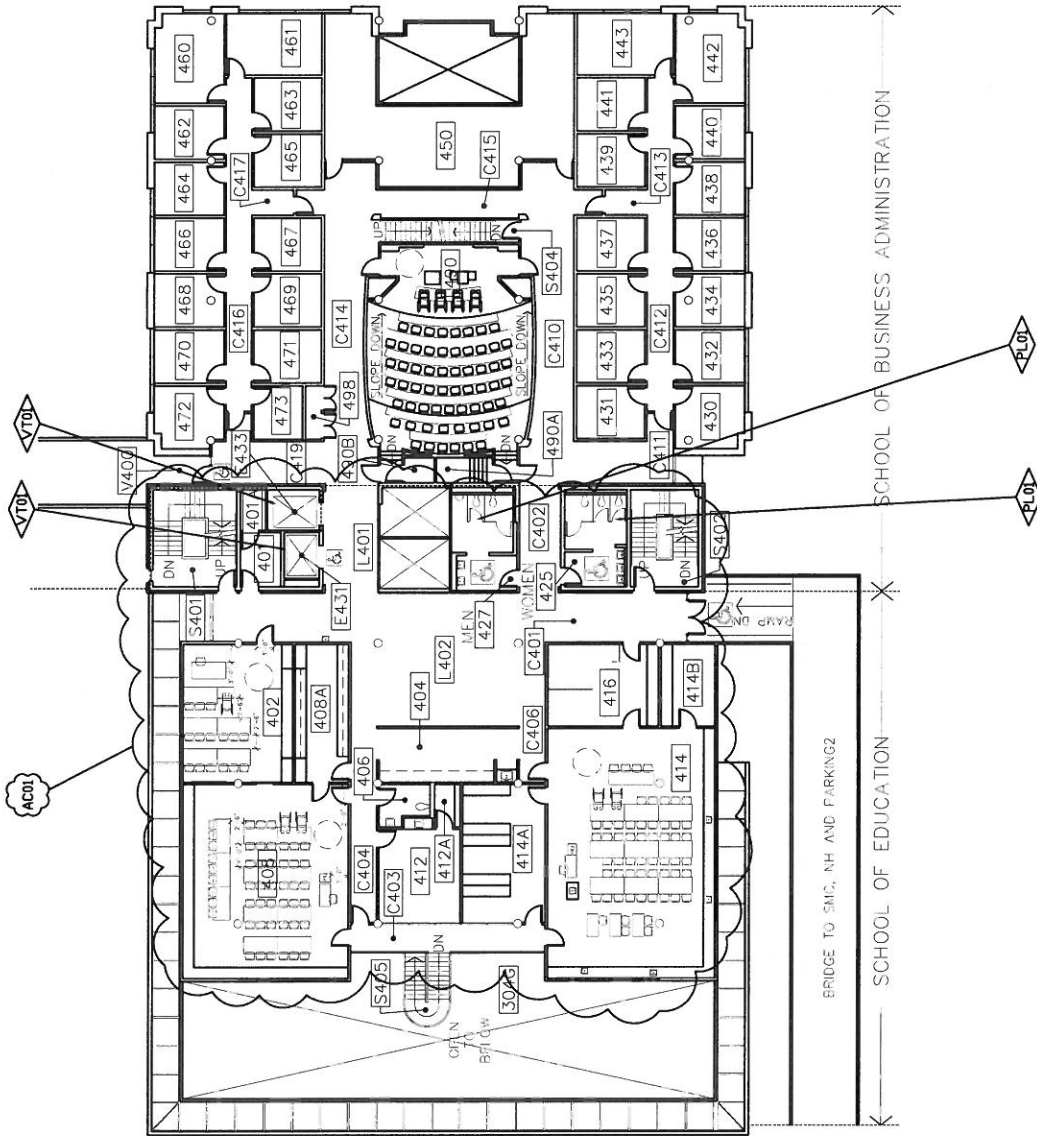
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- PROJECT NUMBER APPLIES TO ENTIRE BUILDING
- PROJECT NUMBER APPLIES TO ENTIRE FLOOR
- PROJECT NUMBER APPLIES TO A PORTION OF ASSIGNED FLOOR
- PROJECT NUMBER APPLIES TO ONE OR MORE ROOMS IN ONE OR MORE FLOORS

PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 08-005
Drawing: PG_ED_F04

FOURTH
FLOOR
PLAN

Sheet No.

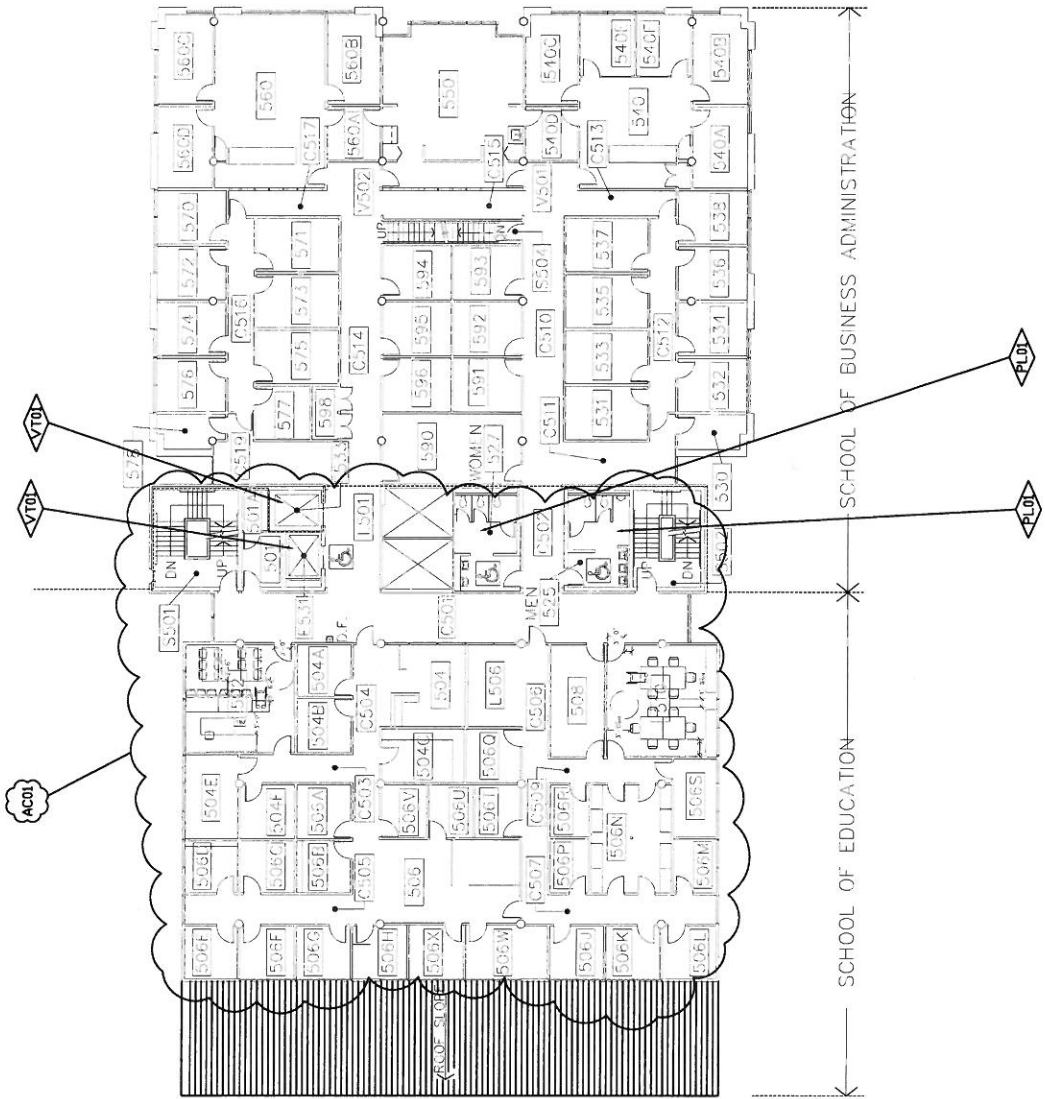




- PROJECT MARKER APPLIED TO ONE ROOM ONLY
- PROJECT MARKER APPLIED TO ONE FLOOR ONLY
- PROJECT MARKER APPLIED TO ENTIRE BUILDING
- PROJECT MARKER APPLIED TO ENTIRE FLOOR
- PROJECT MARKER APPLIED TO A SUBSECTION OF UNIFORMS EXTENTS
- PROJECT MARKER APPLIED TO A SUBSECTION OF UNIFORMS EXTENTS

PRIORITY LAYERS			
S11	S12	S13	S14
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/09/08
 Drawn: J.T.V.
 Project No. 08-005
 Drawing: FS_ED_F05
 FIFTH FLOOR PLAN
 Sheet No.



- AC02
- AC03
- EL02
- FS02
- FS03
- FS04
- FS05
- HV01
- IS01
- IS02



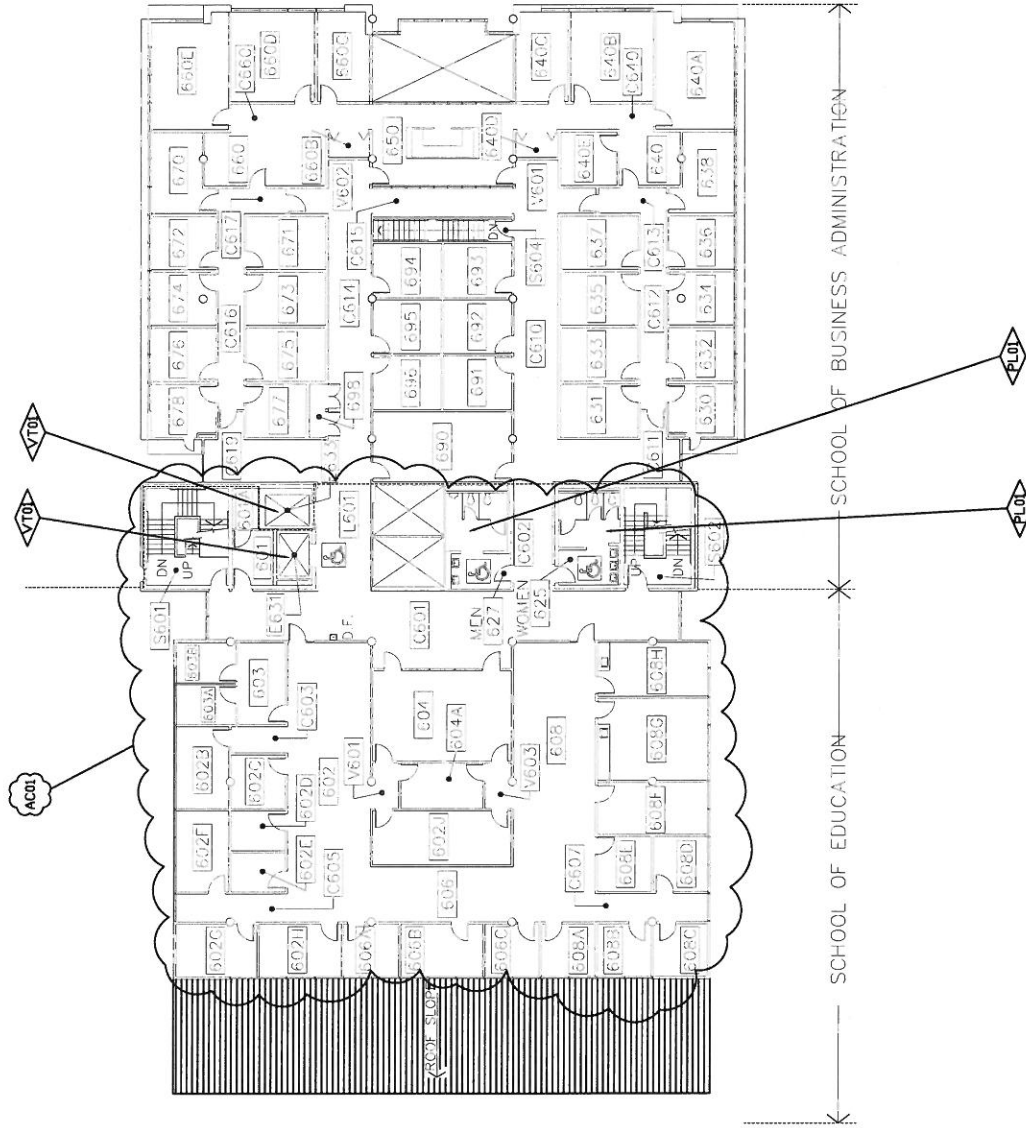
FACILITY CONDITION ANALYSIS
 8105 Reed Park Court, Suite #11
 Beaverton, OR 97007
 (503) 879-7976

- PROJECT NUMBER APPLIES TO ONE ROOM ONLY
- PROJECT NUMBER APPLIES TO ONE FLOOR ONLY
- PROJECT NUMBER APPLIES TO ENTIRE BUILDING
- PROJECT NUMBER APPLIES TO ENTIRE FLOOR
- PROJECT NUMBER APPLIES TO A SITUATION OF UNUSUAL OCCURRENCE
- PROJECT NUMBER APPLIES TO ROOMS TO BE RENTED

PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/09/06
 Drawn: T.T.Y.
 Project No. 06-006
 Drawing: PS_ED_F06

SIXTH FLOOR PLAN
 Sheet No.



- AC02
- AC03
- AC05
- EL02
- FS02
- FS03
- FS04
- HV01
- IS01
- IS02
- PL01
- PL02
- PL03
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- VT02
- VT03
- VT04
- SS01
- SS02
- SS03
- SS04



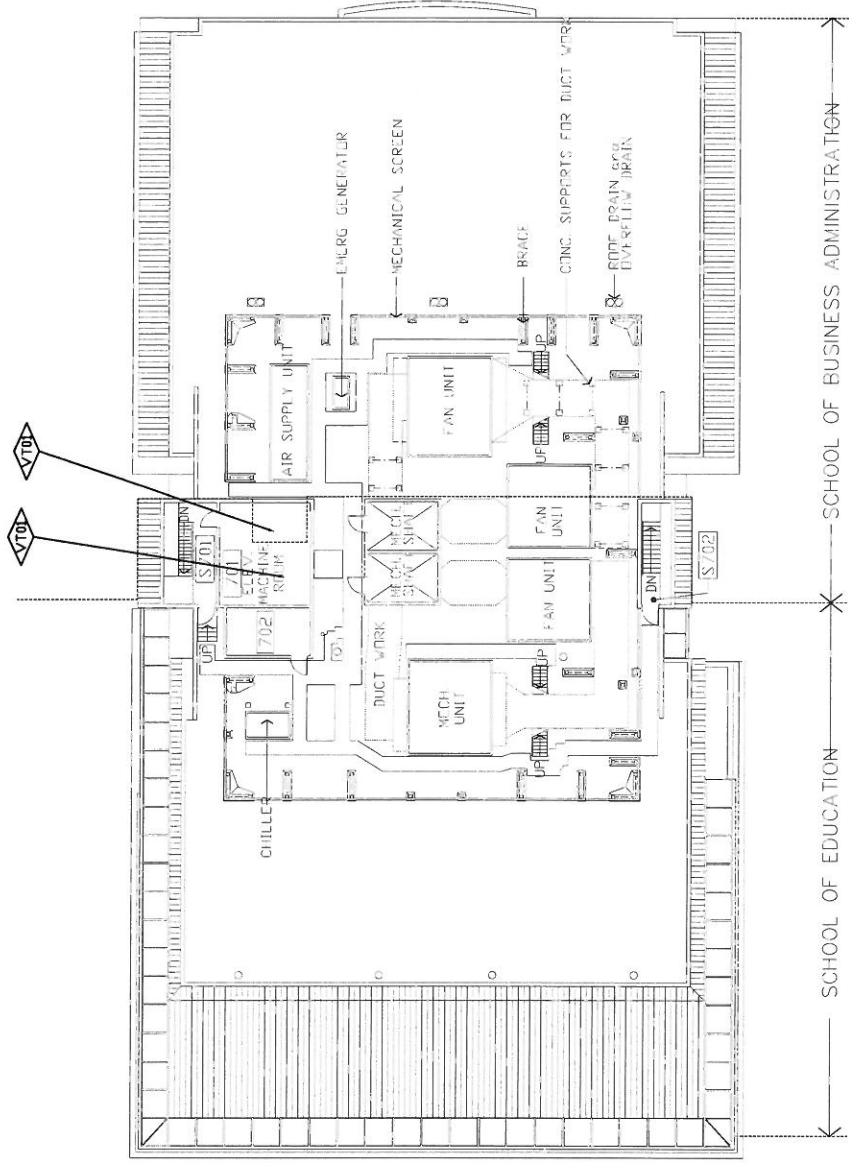
FACILITY CONSULTING ANALYSTS

8105 N.W. Park Court, Suite 100
Beaverton, Oregon 97007
(503) 670-0700

- PROJECT MARKER APPLIED TO THE ROOM ONLY
- PROJECT MARKER APPLIED TO THE FLOOR ONLY
- PROJECT MARKER APPLIED TO THE ENTIRE BUILDING
- PROJECT MARKER APPLIED TO THE ENTIRE FLOOR
- PROJECT MARKER APPLIED TO A SECTION OF UNFINISHED EXTERIOR
- PROJECT MARKER APPLIED TO A SECTION OF UNFINISHED EXTERIOR
- PROJECT MARKER APPLIED TO A SECTION OF UNFINISHED EXTERIOR

PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/08/08
 Drawn: J.T.Y.
 Project No. 08-005
 Drawing: PS_ED_007
 SEVENTH FLOOR PLAN
 Sheet No.



SCHOOL OF EDUCATION SCHOOL OF BUSINESS ADMINISTRATION

- EL02
- FS02
- FS03
- FS05
- HV01



GRADUATE SCHOOL
OF EDUCATION

BLDG NO. ED



FACILITY
CONDITION
ANALYSIS

8100 NE 4th Blvd., Corvallis, OR 97331
Phone: 503.754.2007
(770) 878-1278

- PROJECT NUMBER APPLIES TO ONE ROOM ONLY
- PROJECT NUMBER APPLIES TO ONE FLOOR ONLY
- PROJECT NUMBER APPLIES TO ENTIRE BUILDING
- PROJECT NUMBER APPLIES TO ENTIRE FLOOR
- PROJECT NUMBER APPLIES TO A SUBSECTION OF UNDEVELOPED FLOOR
- PROJECT NUMBER APPLIES TO ENTIRE BUILDING OR LIMITED

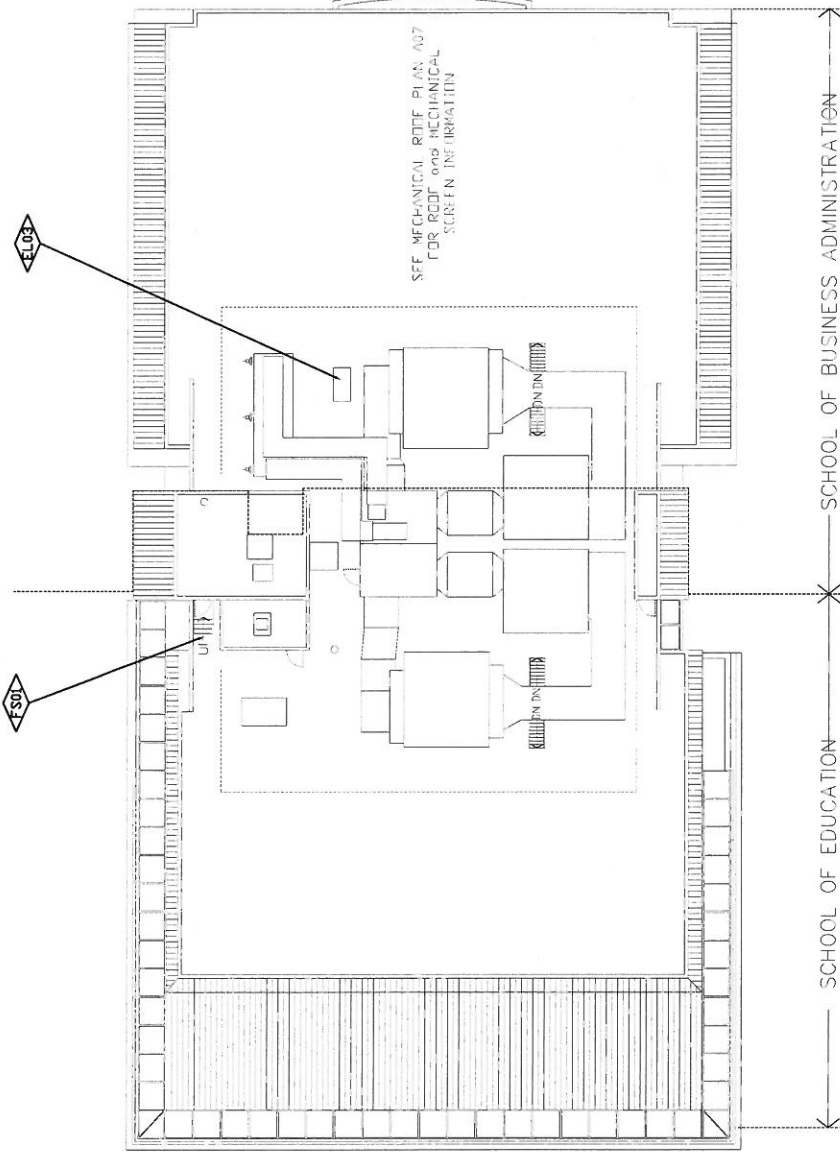
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IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: Z.T.Y.
Project No. 08-005
Drawing: PS_ED_F08

ROOF
FLOOR
PLAN

Sheet No.

8 of 8



FACILITY CONDITION ANALYSIS

SECTION 5

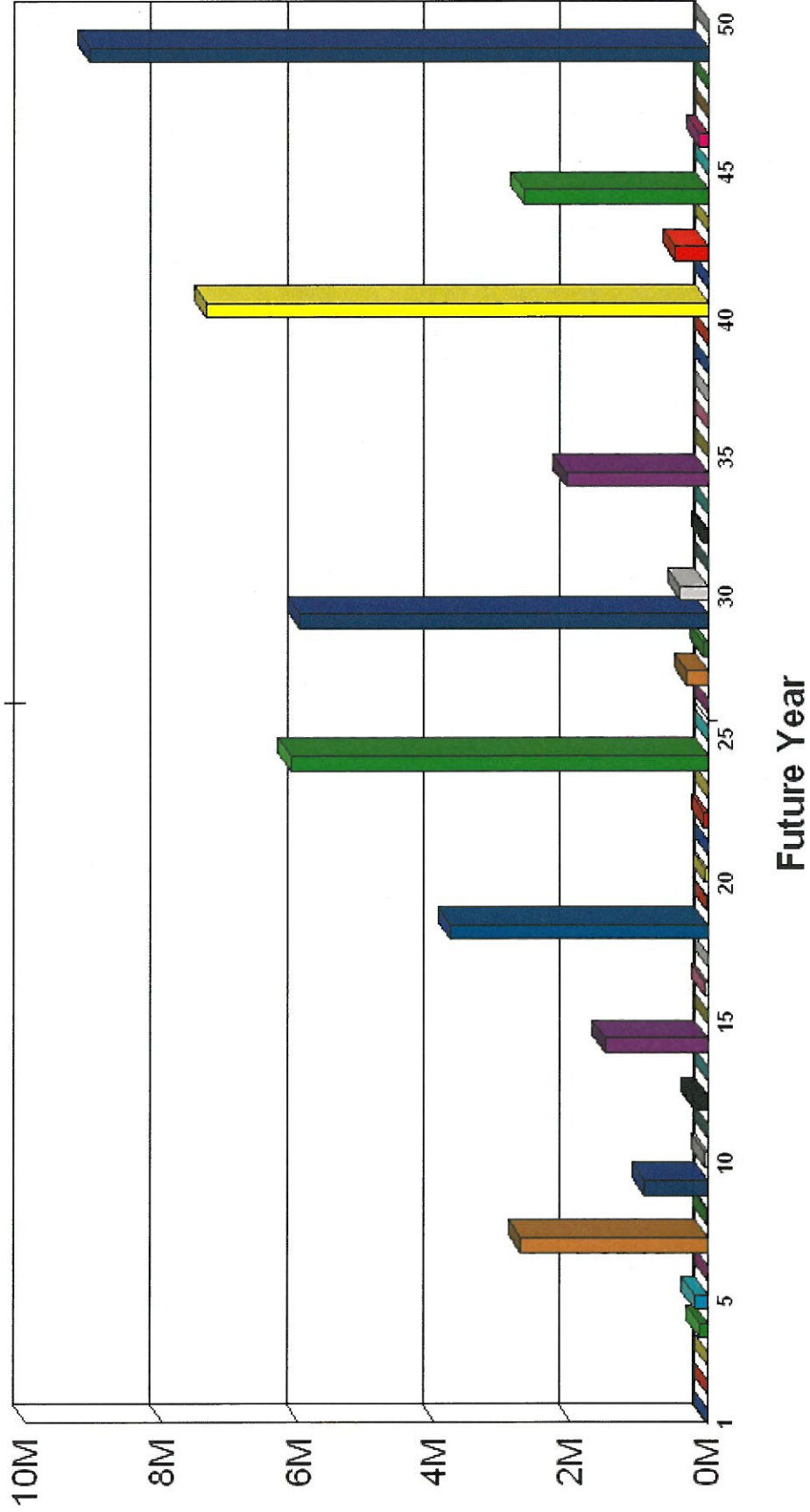
**LIFE CYCLE MODEL SUMMARY AND
PROJECTIONS**

Life Cycle Model
 Building Component Summary
 ED : GRADUATE SCHOOL OF EDUCATION

Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp
B2010	BRICK MASONRY SURFACES	1,817	SF	\$34.22		\$62,178	1981	55
B2010	GALVANIZED STEEL SIDING	16,352	SF	\$11.52		\$188,375	1981	35
B2020	WINDOW REPLACEMENT (OPERABLE)	3,206	SF	\$82.13		\$263,309	1981	55
B2030	EXTERIOR METAL DOORS INCL. HARDWARE	18	EA	\$3,661.44		\$65,906	1981	30
B3010	BALLASTED SINGLE-PLY ROOFING SYSTEM	8,903	SF	\$7.35		\$65,437	1981	20
C3010	INTERIOR FINISH - CLASSROOM / ACADEMIC	53,420	SF	\$41.60		\$2,222,272	1981	11
D1010	ELEVATOR MODERNIZATION - TRACTION - LOW RISE	1	EA	\$171,728.66		\$171,729	1981	25
D1010	ELEVATOR MODERNIZATION - TRACTION - LOW RISE	1	EA	\$171,728.66		\$171,729	1987	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	\$36,760.03		\$36,760	1981	12
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	\$36,760.03		\$36,760	1987	12
D2010	PLUMBING FIXTURES - CLASSROOM / ACADEMIC	53,420	SF	\$5.37		\$286,865	1981	35
D2020	WATER PIPING - CLASSROOM / ACADEMIC	53,420	SF	\$4.38		\$233,980	1981	35
D2020	WATER HEATER (COMMERCIAL, ELECTRIC)	100	GAL	\$113.36		\$11,336	1981	20
D2030	DRAIN PIPING - CLASSROOM / ACADEMIC	53,420	SF	\$6.59		\$352,038	1981	40
D2050	AIR COMPRESSOR PACKAGE (AVERAGE SIZE)	1	SYS	\$5,530.88		\$5,531	1981	25
D3040	CONDENSATE RECEIVER	1	SYS	\$10,370.14		\$10,370	1981	15
D3040	HVAC SYSTEM - CLASSROOM / ACADEMIC	53,420	SF	\$36.00		\$1,923,120	1981	25
D3040	BASE MTD. PUMP - UP TO 15 HP	15	HP	\$1,852.35		\$27,785	1981	20
D4010	FIRE SPRINKLER SYSTEM	53,420	SF	\$6.09		\$325,328	1981	80
D4010	FIRE SPRINKLER HEADS	53,420	SF	\$0.50		\$26,710	1981	20
D5010	ELECTRICAL SYSTEM - CLASSROOM / ACADEMIC	53,420	SF	\$16.91		\$903,332	1981	50
D5010	ELECTRICAL SWITCHGEAR 120/208V	2,000	AMP	\$35.75		\$71,500	1981	20
D5010	VARIABLE FREQUENCY DRIVE (OVER 50 HP)	100	HP	\$257.80		\$25,780	2003	12
D5020	EXIT SIGNS (CENTRAL POWER)	26	EA	\$235.36		\$6,119	1981	20
D5020	LIGHTING - CLASSROOM / ACADEMIC	53,420	SF	\$8.28		\$442,318	1981	20
D5030	FIRE ALARM SYSTEM	53,420	SF	\$2.63		\$140,495	2004	15
D5040	GENERATOR, DIESEL (UP TO 50 KW)	20	KW	\$1,047.36		\$20,947	1981	25
						\$8,098,008		

Life Cycle Model Expenditure Projections

ED : GRADUATE SCHOOL OF EDUCATION



Average Annual Renewal Cost per SqFt \$7.03

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo Log - Facility Condition Analysis
ED : GRADUATE SCHOOL OF EDUCATION

Photo ID No.	Description	Location
ED001a	Ballasted membrane roof	Roof
ED001e	Traction elevator motors	Elevator room
ED002a	Additional view of ballasted roof, as well as mechanical screen	Roof
ED002e	Control air compressor	Penthouse
ED003a	Broken walkpads	Roof
ED003e	Liquid air-cooled chiller	Roof
ED004a	Water damaged wall finish	Elevator machine room
ED004e	Rooftop air handling unit	Roof
ED005a	Evidence of water penetration	Upper area of elevator machine room
ED005e	ABB variable frequency drive	Inside AHU1
ED006a	Ungated and uncaged access ladder	Roof access
ED006e	PACE rooftop air handling unit ASU-3	Roof
ED007a	Vinyl tile, lay-in ceiling, and single level drinking fountain	Sixth floor, corridor
ED007e	Onan generator	Roof
ED008a	Water damaged ceiling tiles	Sixth floor, corridor
ED008e	Vertical electrical bus duct	Room 601A
ED009a	Built-in cabinetry	Sixth floor, staff break room
ED009e	Concrete slop sink	Janitor's closet
ED010a	Ceramic tile finishes and accessible water closet	Sixth floor, men's restroom
ED010e	Aged exit sign	Sixth floor exit
ED011a	Evidence of water penetration from roof leak	Sixth floor
ED011e	Fusible link sprinkler head	Office suite 602
ED012a	Section of roof that is leaking	Roof
ED012e	Pneumatic thermostat	Fifth floor
ED013a	Additional example of damaged ceiling tile	Sixth floor
ED013e	Typical acrylic lens T8 lighting	Classroom 402
ED014a	Typical cabinetry	Fifth floor, room 504C
ED014e	Indirect lighting	Library
ED015a	Damaged vinyl tile floor	Room 302
ED015e	Damaged LED exit sign	Near room 318
ED016a	Void	Void
ED016e	Vertical bus duct	Room 398

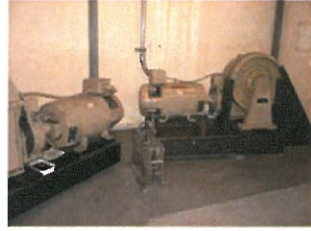
Photo Log - Facility Condition Analysis
ED : GRADUATE SCHOOL OF EDUCATION

Photo ID No.	Description	Location
ED017a	Lay-in ceiling and general level of finish, including guardrail configuration	Third floor, library
ED017e	Typical fire pull	North lobby
ED018a	Non-accessible pay phone	Second floor, corridor
ED018e	Main chilled water and steam from central plant	Mechanical room 102
ED019a	Brick pattern floor finish and exterior doors	Second floor, corridor
ED019e	Condensate return unit	Mechanical room 102
ED020a	Lever hardware and carpeting	Second floor, corridor
ED020e	Main 2,000 amp switchboard	Electrical room 104
ED021a	Exterior concrete and perimeter landscaping	North elevation
ED021e	Onan automatic transfer switch	Electrical room 104
ED022a	Exterior facade	West elevation
ED022e	Silent Knight addressable panel	Electrical room 104
ED023a	Exterior elevation	Partial south facade
ED023e	Backflow preventer for domestic water main	Stairwell S102
ED024e	Backflow preventer for fire water	Stairwell S102
ED025e	Fire alarm annunciator	Near room 190
ED026e	New heat exchanger	Mechanical room M103
ED027e	Base-mounted chilled water pump	Mechanical room M103
ED028e	Hot water circulating pump	Mechanical room M103
ED029e	Domestic water heater	Mechanical room M103

Facility Condition Analysis - Photo Log



ED001A.jpg



ED001E.jpg



ED002A.jpg



ED002E.jpg



ED003A.jpg



ED003E.jpg



ED004A.jpg



ED004E.jpg



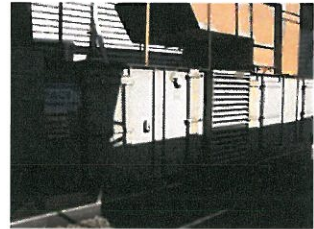
ED005A.jpg



ED005E.jpg



ED006A.jpg



ED006E.jpg



ED007A.jpg



ED007E.jpg



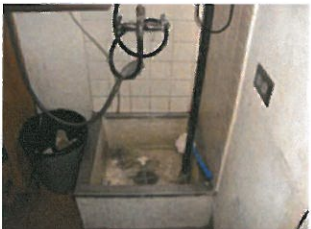
ED008A.jpg



ED008E.jpg



ED009A.jpg



ED009E.jpg



ED010A.jpg



ED010E.jpg

Facility Condition Analysis - Photo Log



ED011A.jpg



ED011E.jpg



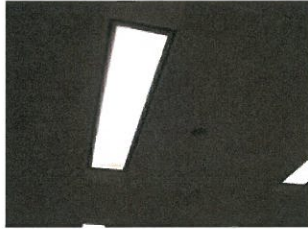
ED012A.jpg



ED012E.jpg



ED013A.jpg



ED013E.jpg



ED014A.jpg



ED014E.jpg



ED015A.jpg



ED015E.jpg



ED016E.jpg



ED017A.jpg



ED017E.jpg



ED018A.jpg



ED018E.jpg



ED019A.jpg



ED019E.jpg



ED020A.jpg



ED020E.jpg



ED021A.jpg

Facility Condition Analysis - Photo Log



ED021E.jpg



ED022A.jpg



ED022E.jpg



ED023A.jpg



ED023E.jpg



ED024E.jpg



ED025E.jpg



ED026E.jpg



ED027E.jpg



ED028E.jpg



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