

EAST CAROLINA UNIVERSITY

BELK RESIDENCE HALL

ASSET CODE: BELK

FACILITY CONDITION ANALYSIS

OCTOBER 30, 2009



EAST CAROLINA UNIVERSITY
Facility Condition Analysis

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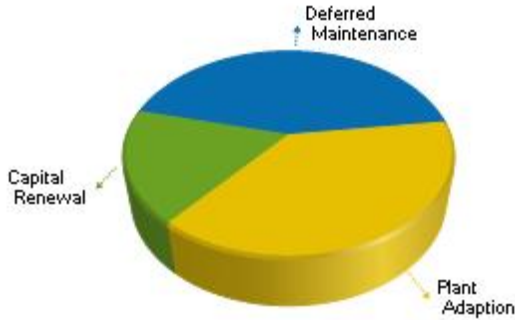
FACILITY CONDITION ANALYSIS

SECTION 1

GENERAL ASSET INFORMATION

EXECUTIVE SUMMARY - BELK RESIDENCE HALL

PROJECT COSTS BY CLASSIFICATION



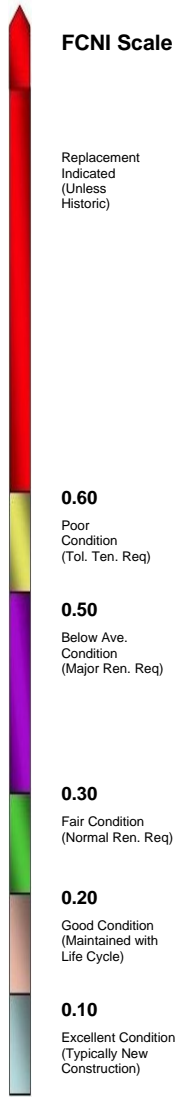
Building Code: BELK
Building Name: BELK RESIDENCE HALL
Year Built: 1966
Building Use: Dormitory / Apartments
Square Feet: 80,950

Project Costs by Priority

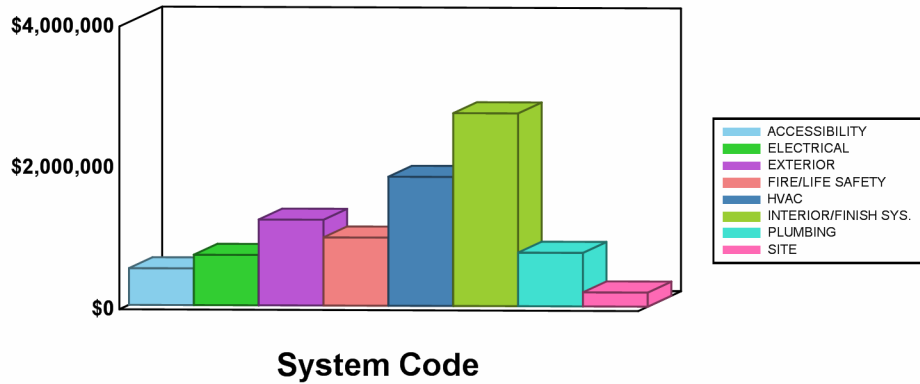
Priority 1: \$8,029
Priority 2: \$1,057,352
Priority 3: \$6,371,652
Priority 4: \$1,481,755
Total Project Costs: **\$8,918,788**

Facility Replacement Cost: **\$25,144,000**

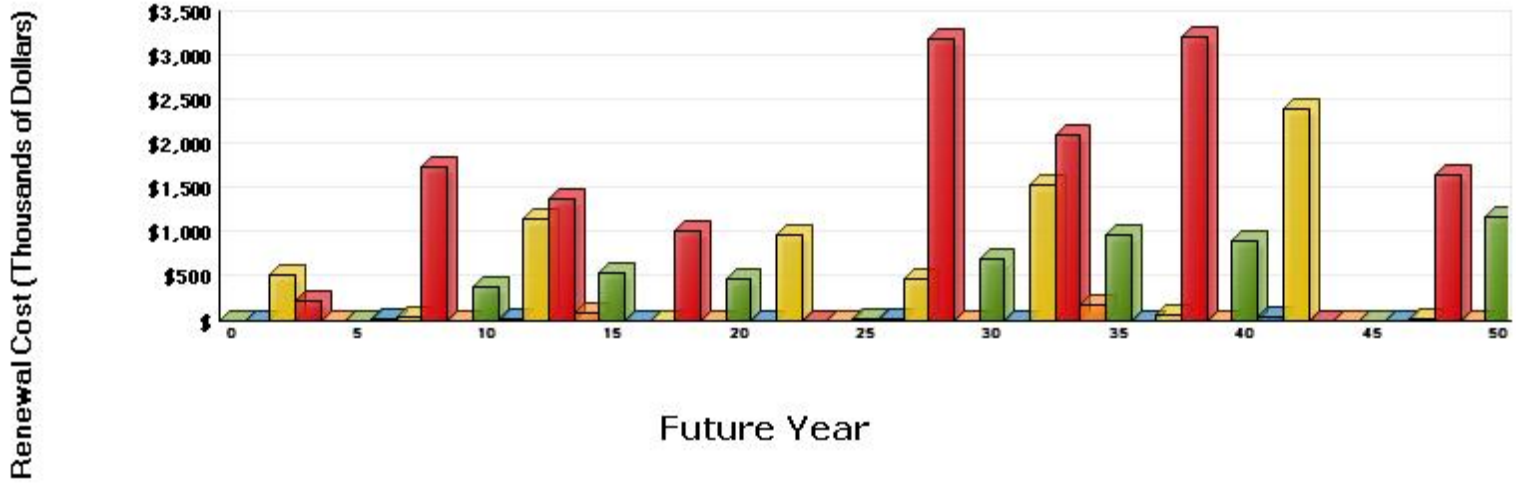
Facility Condition Needs Index (FCNI): **0.35**
 (Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt \$3.06

B. ASSET SUMMARY

Built in 1966, Belk Residence Hall has four floors and a partial basement. It has a concrete structure on a concrete foundation and a concrete vault basement. The exterior is brick, with a modified bitumen roof. This dormitory consists of three wings connected by an exterior corridor. Each wing houses suites that are accessed from the exterior corridor. The suites have four dorm rooms and a shared bath. The first floor houses suites, a coordinator apartment, mailroom, and offices. The basement is located in the central wing and houses a kitchen, laundry room, study area, and recreation room. Mechanical spaces are also located at the basement level. Belk Residence totals 80,950 square feet and is located on the main campus of East Carolina University in Greenville, North Carolina.

The information in this report was gathered during a site visit that concluded on September 10, 2009.

SITE

Landscaping around the building consists of grassy lawns, ornamental shrubs, a sand volleyball court, and some mature trees. The landscaping is in average condition, but should outlast the ten-year scope of this report with routine maintenance. Pedestrian paving systems are in overall average condition and will need replacement in the next ten years. Vehicular paving systems are in poor condition and will need major upgrades.

EXTERIOR STRUCTURE

Brick veneer is the primary exterior finish. Exposure to the elements has caused some deterioration of the mortar joints and expansion joints, and some damage has occurred. Cleaning, surface preparation, selective repairs, and applied finish or penetrating sealant upgrades are recommended to restore the aesthetics and integrity of the building envelope.

It is recommended that the single-pane, metal windows be upgraded to thermal-pane systems, which will reduce the energy required to operate the building. Repair or replacement of the windowsills and trim may also be necessary.

The built-up roofing system was replaced in the early 2000s and is in good condition. This system should last twenty years and is not expected to need replacement before then. No roof replacement project is recommended at this time.

It is recommended that aged and inefficient primary and secondary entrance and service doors be replaced. The replacement units should maintain the architectural design aspects of this facility and should be modern, energy-efficient applications.

INTERIOR FINISHES / SYSTEMS

Floor finishes in this building include carpet, ceramic tile, and vinyl tile. Walls are painted plaster or concrete, as are the ceilings. The interior finishes vary in age and condition from area to area. Floor, wall, and ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

The condition of the interior door systems is such that door system replacements are recommended as part of a comprehensive renovation effort. Complete demolition of the door systems and replacement according to a code compliant plan to properly protect egress passages is recommended. Lever door hardware and Braille signage should be included in this effort.

The restroom fixtures and finishes are mostly original to the year of construction or latest renovation. The fixtures are sound but aged and inefficient, and the finishes are outdated. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended. While not all of the restrooms are required to be accessible, at least one accessible facility should be designed on each floor.

ACCESSIBILITY

There is currently no handicapped accessible entrance to the building. The main entrance is accessed via a set of stairs, and secondary entrances are also above grade. Once inside, there is no vertical transportation to travel between floors, including the basement area. Doors are equipped with knob hardware and non-complaint signage. Interior and exterior doors are recommended for replacement, which should include new hardware and proper signage. Restrooms were not designed with accessibility in mind. Not all restrooms are required to be accessible, but the restroom renovation project in the Interior section of this report should include at least one accessible facility per floor.

Current accessibility legislation requires that building entrances be wheelchair accessible. To comply with the intent of this legislation, it is recommended that a wheelchair ramp be installed at the main entrance to the first floor lobby. This work should include the installation of ADA compliant, painted metal handrails at all entrances as required.

Building amenities are required to be generally accessible to all persons. The configurations of the break room kitchenettes and drinking fountains are barriers to accessibility. The installation of wheelchair accessible kitchenette cabinetry and refrigerated, dual level drinking fountains is recommended where applicable.

Accessibility legislation requires that wheelchair access be provided to all floors in a building over two stories in height. There is no wheelchair access to the upper floors or basement of this building. The installation of an exterior traction elevator is proposed within the purview of this analysis.

Current accessibility legislation requires that stairs have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread / riser angle). The finishes on the stairs have deteriorated or are otherwise unsafe.

Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future renovation efforts should include comprehensive stair railing and finish upgrades.

HEALTH

There were no reports or evidence of any asbestos-containing material or lead based paint. No other health related issues were noted during the inspection.

FIRE / LIFE SAFETY

Structural fire separations are not maintained according to code requirements for new construction in select areas of this facility. Primarily, data cabling has been routed with little regard for fire-rated separations. Intumescent passive firestopping and some minor structural separation repairs should be accomplished promptly. Also, recommended door upgrades should include properly rated units.

The facility is served by a dated zoned fire alarm system that was installed in 1966. The system utilizes antiquated smoke detectors and pull stations for activation, while old-style annunciators are present for notification. It is recommended that the existing system be replaced with a modern fire alarm system that includes a point addressable, Class A, supervised fire alarm panel with battery backup and an annunciator. It should also include pull stations, audible / visible devices, smoke detectors, and heat detectors. Include a dial-up device or transponder to notify an applicable receiving fire station of trouble or activation. Design and install the system in accordance with current NFPA and ADA requirements.

This facility incorporates manual chemical-type fire extinguishers. It is recommended by the NFPA that buildings contain fire sprinkler systems. Light hazard, wet-pipe fire suppression should be installed throughout the structure, including piping, sprinkler heads (as required by code), and pipe bracing. Install flow switches and sensors that interface with the fire alarm system. This installation will reduce overall liability and risk of loss.

Exit signs are illuminated with fluorescent lamps and have battery backup power. Emergency lighting is available through unitary fixtures with battery backup power. Replace the existing exit signage throughout the building, and install new exit signs as needed. The new units should be connected to the proposed emergency power network. LED type exit signs are recommended, because they are energy efficient and require minimal maintenance.

HVAC

The facility is connected to the campus steam loop. Steam is supplied to heat exchangers in the main mechanical room that produce heating hot water. The hot water is then circulated throughout the building by pumps to the associated HVAC equipment. The heat exchangers are aged and appear to have reached the end of their life cycle. Replace the equipment to ensure a proper flow of heating hot water.

This facility is served by an original, aging hydronic heating system. There is no central cooling available, and minimal fresh air is introduced to the interior spaces. Individual dorm rooms are served by window air conditioners for cooling, while common areas on the first and basement floors are served by split

systems. An upgrade of the HVAC system is recommended. Install a new modern HVAC system with variable air volume and constant volume air distribution as needed. Specify direct digital controls for the new equipment. Install local, water-cooled chilled water generation for building cooling. Include an associated cooling tower to perform heat rejection.

ELECTRICAL

Power is supplied from an oil-filled transformer located on-site. The unit is rated at 500 kVA and has an install date of 2002. Power is then fed at a rate of 120/208 volts to the main switchgear device located in the basement. The unit was manufactured by Cutler Hammer and installed in 2002. The switchgear provides an electrical service of 2,000 amps. The main incoming electrical service appears to be in good condition and should continue to provide adequate service over the scope of this report.

The secondary electrical system consists of panelboards located throughout the facility. This General Electric system is original and showing signs of deterioration. An upgrade is recommended to maintain a reliable electrical service.

Interior spaces are illuminated by fixtures that utilize compact and T8 fluorescent lamps. The fluorescent fixtures are predominantly surface-mounted applications with acrylic lenses. Energy-efficient ballasts and lamps were retrofitted into the light fixtures, although some are still fitted with inefficient incandescent lamps. The interior lighting is in good condition. With proper care, it will outlast the purview of this report.

The exterior lighting scheme consists of can-type fixtures and HID fixtures mounted on the roof and walls of the facility. Additional lighting is provided by pole-mounted fixtures located on the site or next to the roadway. The overall exterior lighting scheme appears to provide adequate coverage. However, some of the fixtures are showing signs of age. Replace all aged lighting to ensure a lighting scheme that promotes a safe environment.

Emergency power is provided by battery backup devices that serve life safety needs in the facility. It is recommended that an appropriately sized diesel emergency generator be installed. The work includes the installation of a diesel generator set, fuel tank, battery, charger, exhaust, and automatic transfer switches.

PLUMBING

The main incoming domestic water enters the facility on the basement floor. Copper piping is utilized to distribute water throughout the facility. The system appears to be in average condition, with a combination of new and aged piping. An upgrade is recommended to replace the original or aged domestic water piping. Additionally, no backflow preventer was observed during the inspection. Install backflow preventers as needed to protect the water supply.

The drain piping network is mainly cast-iron with bell-and-spigot connections. It appears to be original to the 1966 building construction date. The life cycle for this type of system is generally forty years, so this system has served beyond its intended life. Remove the existing sanitary and storm drain piping. Install new cast-iron drain piping networks with copper run-outs to all fixtures. Install new floor drains, roof drains, and traps as needed.

The plumbing fixtures are ceramic and appear to be original. They utilize manual controls, with no upgrades for accessibility. It is recommended that the plumbing fixtures be upgraded. This action is detailed in the Interior section of this report.

Domestic hot water is produced by a heat exchanger located in the basement mechanical room. It is believed to be original to the 1966 building construction. Deterioration was observed at pipe connections. Life cycle for this type of equipment is generally twenty-four years. It is recommended that the heat exchanger be replaced to ensure a proper supply of domestic hot water. A duplex sump pump system is present outside the main mechanical room on the basement floor. This system appears to be in good condition, so no upgrade is recommended at this time.

VERTICAL TRANSPORTATION

This five-story facility is not served by vertical transportation equipment. The installation of an elevator is recommended as part of the previously mentioned accessibility upgrades.

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

C. INSPECTION TEAM DATA

DATE OF INSPECTION: September 10, 2009

INSPECTION TEAM PERSONNEL:

<u>NAME</u>	<u>POSITION</u>	<u>SPECIALTY</u>
Thomas Ferguson, AIA, LEED® AP	Project Architect	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Rob Gasaway, Q.E.I.	Facility Analyst	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
John Holder, Q.E.I.	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Imelda Jordan	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
James Lewis	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Carl Mason, PE, BSCP	Project Engineer	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Paul Southwell	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Norm Teahan, RA, AIA, NCARB	Project Architect	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

FACILITY CONTACTS:

<u>NAME</u>	<u>POSITION</u>
William Bagwell	Associate Vice Chancellor, Campus Operations

REPORT DEVELOPMENT:

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

Contact: Kyle Thompson, 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 University 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

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:

	<u>PRIORITY CLASS 1</u>	
CODE	PROJECT NO.	PRIORITY SEQUENCE
HV2C	0001HV04	01
PL1D	0001PL02	02

	<u>PRIORITY CLASS 2</u>	
CODE	PROJECT NO.	PRIORITY SEQUENCE
IS1E	0001IS06	03
EL4C	0001EL03	04

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 Greenville City Index and are adjusted for material and labor cost factors (2009). Refer to the project related labor report found later in this section.

Global Markup Percentages

R.S. MEANS

Local Labor Index:	51.3 %	of National Average
Local Materials Index:	100.7 %	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

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.

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

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.

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.

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere including finish and structural work on freestanding boiler stacks.
SYSTEM DESCRIPTION: FIRE / LIFE SAFETY			
FS1A	LIGHTING	EGRESS LIGHTING/EXIT SIGNAGE	R & R work on exit signage and packaged AC/DC emergency lighting.
FS2A	DETECTION/ALARM	GENERAL	Repair or replacement of fire alarm/detection system/components including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.
FS3A	SUPPRESSION	SPRINKLERS	Repair or installation of water 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.

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HE6A	HAZARDOUS MATERIAL	STRUCTURAL ASBESTOS	Testing, abatement and disposal of structural and building finish materials containing asbestos.
HE6B	HAZARDOUS MATERIAL	MECHANICAL ASBESTOS	Testing, abatement and disposal of mechanical insulation materials containing asbestos.
HE6C	HAZARDOUS MATERIAL	PCBs	Includes testing, demolition, disposal and cleanup of PCB contaminated substances.
HE6D	HAZARDOUS MATERIAL	FUEL STORAGE	Includes monitoring, removal and replacement of above and below ground fuel storage and distribution systems. Also includes testing and disposal of contaminated soils.
HE6E	HAZARDOUS MATERIAL	LEAD PAINT	Testing, removal and disposal of lead-based paint systems.
HE6F	HAZARDOUS MATERIAL	OTHER	Handling, storage, and disposal of other hazardous materials.
HE7A	GENERAL	OTHER	Health related issues not catalogued elsewhere.
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	Replacement of HVAC control systems.

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
		UPGRADE	
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	CABINETY	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			

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.
PL1B	DOMESTIC WATER	PUMPS	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	DOMESTIC WATER	STORAGE/ TREATMENT	Equipment or vessels for storage or treatment of domestic water.
PL1D	DOMESTIC WATER	METERING	Installation, repair, or replacement of water meters.
PL1E	DOMESTIC WATER	HEATING	Domestic water heaters including gas, oil, and electric water heaters, shell and tube heat exchangers, tank type and instantaneous.
PL1F	DOMESTIC WATER	COOLING	Central systems for cooling and distributing drinking water.
PL1G	DOMESTIC WATER	FIXTURES	Plumbing fixtures including sinks, drinking fountains, water closets, urinals, etc.
PL1H	DOMESTIC WATER	CONSERVATION	Alternations made to the water distribution system to conserve water.
PL1I	DOMESTIC WATER	BACKFLOW PROTECTION	Backflow protection devices including backflow preventers, vacuum breakers, etc.
PL2A	WASTEWATER	PIPING NETWORK	Repair or replacement of building wastewater piping network.
PL2B	WASTEWATER	PUMPS	Pump systems used to lift wastewater including sewage ejectors and other sump systems.
PL3A	SPECIAL SYSTEMS	PROCESS GAS/FLUIDS	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.
PL4A	INFRASTRUCTURE	POTABLE WATER STORAGE/ TREATMENT	Storage and treatment of potable water for distribution.
PL4B	INFRASTRUCTURE	INDUSTRIAL WATER DISTRIBUTION/ TREATMENT	Storage and treatment of industrial water for distribution.
PL4C	INFRASTRUCTURE	SANITARY WATER COLLECTION	Sanitary water collection systems, 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.

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SS2A	SITE	FENCING	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.
SS2B	SITE	GENERAL	Hidden areas due to foliage, fencing, parking, walls, etc.
SS3A	COMMUNICATIONS	EMERGENCY PHONES	Access, locations, visibility, function, reliability, etc.
SS4A	ACCESS CONTROL	DOORS	Access, locks, keys, two way speakers, reliability, redundancy, etc.
SS4B	ACCESS CONTROL	WINDOWS	Locks, screens, access, reliability, etc.
SS4C	ACCESS CONTROL	SYSTEMS	Card key, proximity devices, data control, data use, reliability, system design, etc.
SS5A	MONITORING	SYSTEMS	Cameras, audio communication, monitoring stations, locations, system design, etc.
SS6A	CIRCULATION	PEDESTRIAN	On campus as well as to and from off campus housing and class locations, etc.
SS6B	CIRCULATION	VEHICULAR	Guard gates, access, systems, data control and use, identification, etc.
SS7A	GENERAL	OTHER	General information/projects pertaining to security issues.
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
 BELK : BELK RESIDENCE HALL**

System Code	System Description	Priority Classes				Subtotal
		1	2	3	4	
AC	ACCESSIBILITY	0	0	0	519,385	519,385
EL	ELECTRICAL	0	106,471	595,959	9,862	712,293
ES	EXTERIOR	0	0	260,887	952,508	1,213,395
FS	FIRE/LIFE SAFETY	8,029	950,881	5,017	0	963,926
HV	HVAC	0	0	1,825,041	0	1,825,041
IS	INTERIOR/FINISH SYS.	0	0	2,726,865	0	2,726,865
PL	PLUMBING	0	0	757,983	0	757,983
SI	SITE	0	0	199,900	0	199,900
	TOTALS	8,029	1,057,352	6,371,652	1,481,755	8,918,788

Facility Replacement Cost	\$25,144,000
Facility Condition Needs Index	0.35

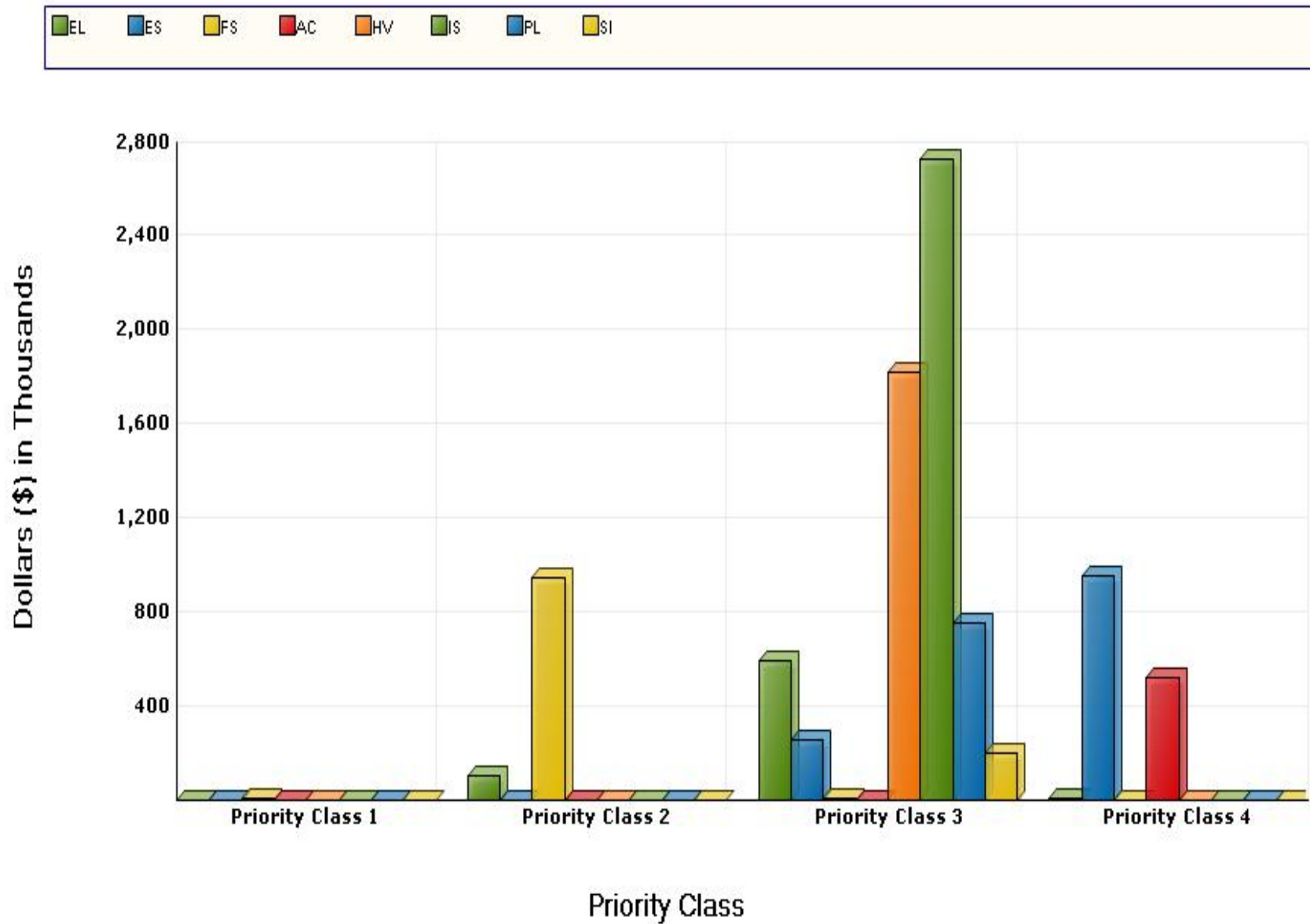
Gross Square Feet	80,950
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Total Cost Per Square Foot	\$110.18
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FACILITY CONDITION ANALYSIS

System Code by Priority Class

BELK : BELK RESIDENCE HALL



**Detailed Project Totals
 Facility Condition Analysis
 System Code by Project Class
 BELK : BELK RESIDENCE HALL**

System Code	System Description	Project Classes				Subtotal
		Capital Renewal	Deferred Maintenance	FCAP	Plant Adaption	
AC	ACCESSIBILITY	0	0	0	519,385	519,385
EL	ELECTRICAL	9,862	595,959	0	106,471	712,293
ES	EXTERIOR	952,508	260,887	0	0	1,213,395
FS	FIRE/LIFE SAFETY	0	5,017	0	958,910	963,926
HV	HVAC	0	0	0	1,825,041	1,825,041
IS	INTERIOR/FINISH SYS.	629,000	2,097,865	0	0	2,726,865
PL	PLUMBING	0	757,983	0	0	757,983
SI	SITE	0	199,900	0	0	199,900
	TOTALS	1,591,370	3,917,611	0	3,409,806	8,918,788

Facility Replacement Cost	\$25,144,000
Facility Condition Needs Index	0.35

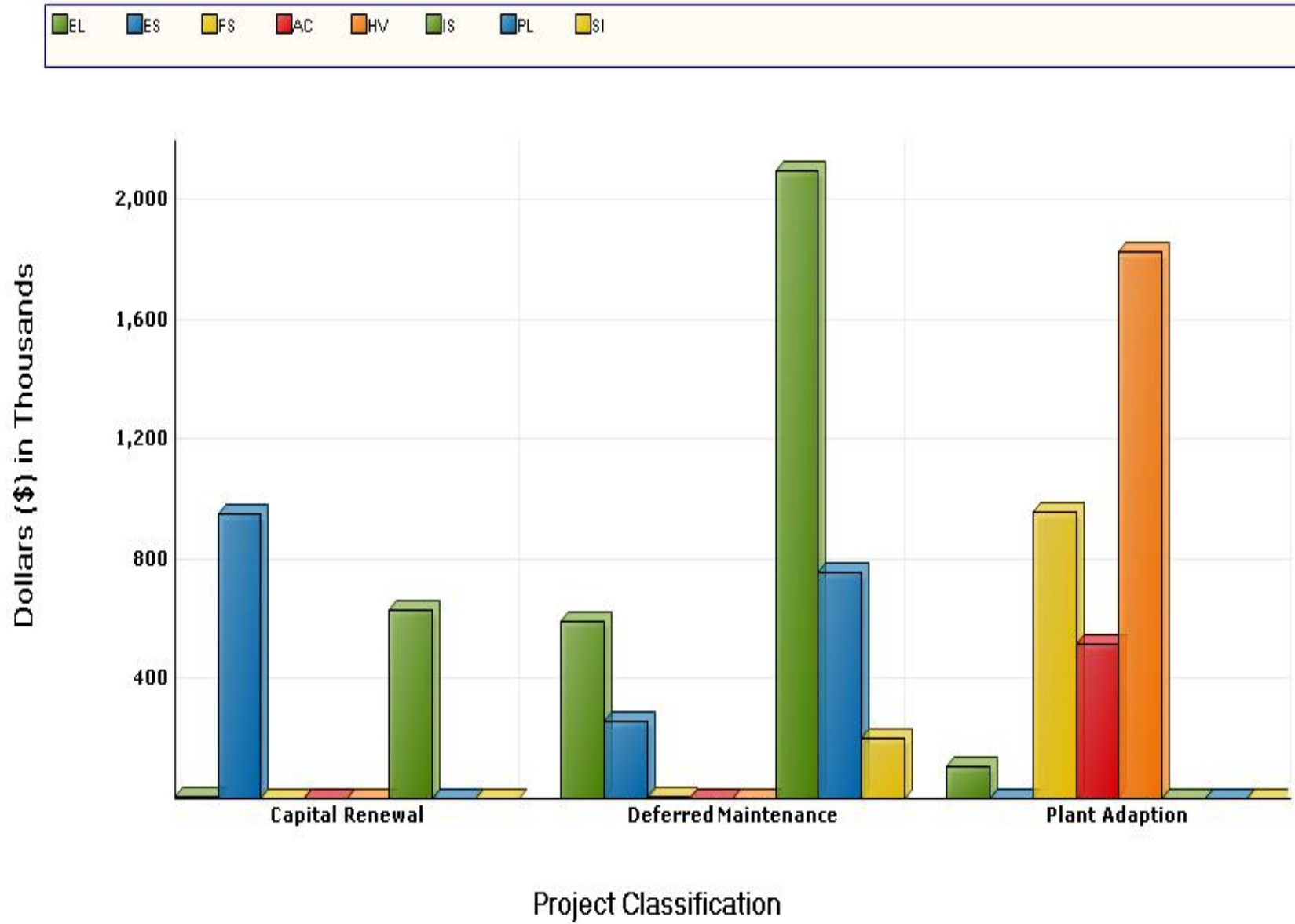
Gross Square Feet	80,950
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Total Cost Per Square Foot	\$110.18
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FACILITY CONDITION ANALYSIS

System Code by Project Class

BELK : BELK RESIDENCE HALL



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
BELK : BELK RESIDENCE HALL

Project Class	Priority Classes				Subtotal
	1	2	3	4	
Capital Renewal	0	0	629,000	962,370	1,591,370
Deferred Maintenance	0	0	3,917,611	0	3,917,611
Plant Adaption	8,029	1,057,352	1,825,041	519,385	3,409,806
TOTALS	8,029	1,057,352	6,371,652	1,481,755	8,918,788

Facility Replacement Cost	\$25,144,000
Facility Condition Needs Index	0.35

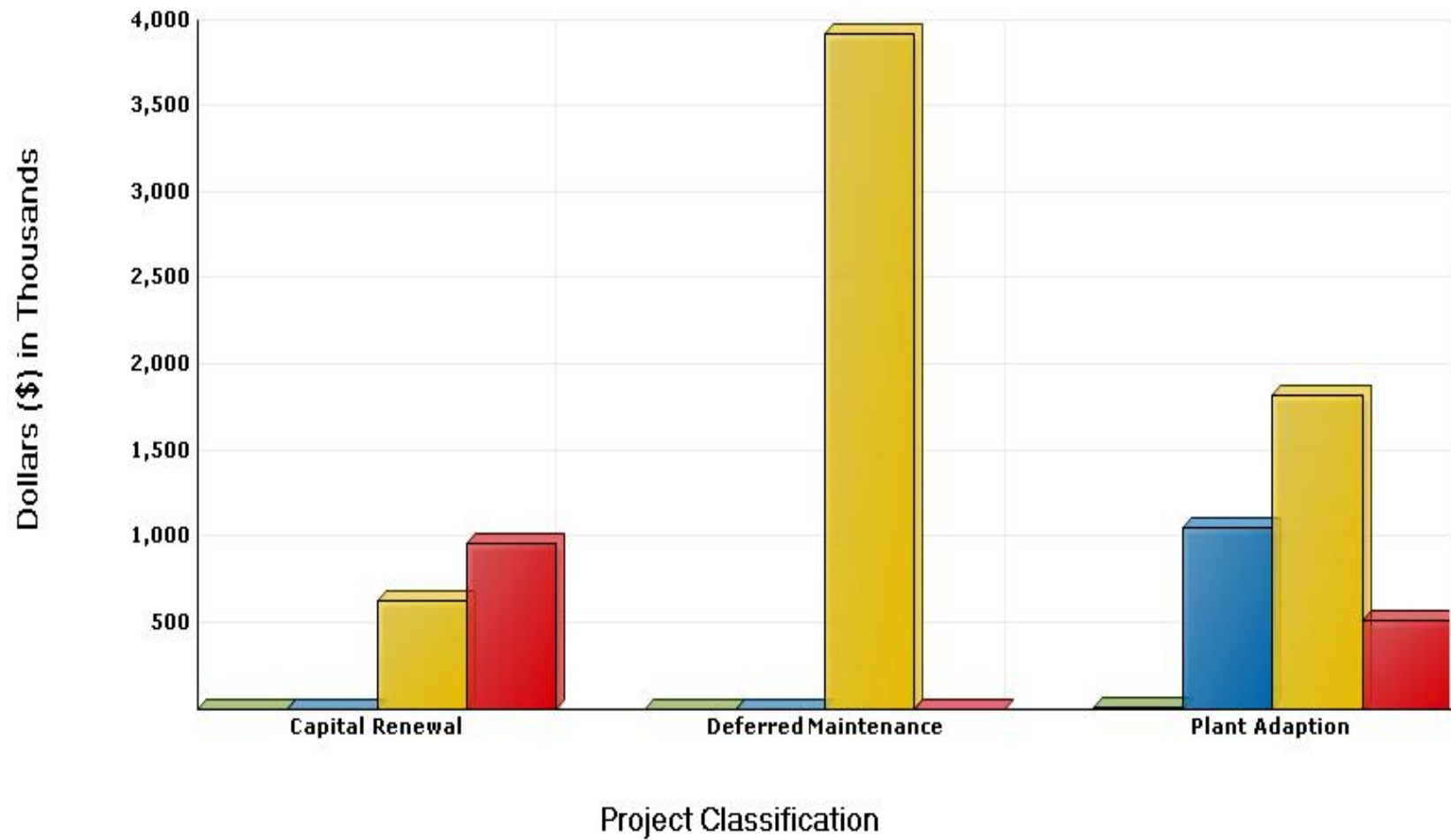
Gross Square Feet	80,950
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Total Cost Per Square Foot	\$110.18
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FACILITY CONDITION ANALYSIS

Project Class by Priority Class

BELK : BELK RESIDENCE HALL



Detailed Project Summary
Facility Condition Analysis
Priority Class - Priority Sequence
BELK : BELK RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5C	BELKFS04	1	1	ELIMINATE FIRE RATING COMPROMISES	6,921	1,107	8,029
Totals for Priority Class 1					6,921	1,107	8,029
FS2A	BELKFS01	2	2	FIRE ALARM SYSTEM REPLACEMENT	187,168	29,947	217,115
FS3A	BELKFS02	2	3	FIRE SPRINKLER SYSTEM INSTALLATION	632,557	101,209	733,766
EL5A	BELKEL01	2	4	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	91,785	14,686	106,471
Totals for Priority Class 2					911,510	145,842	1,057,352
FS1A	BELKFS03	3	5	REPLACE EXIT SIGNS	4,325	692	5,017
ES5A	BELKES02	3	6	EXTERIOR DOOR REPLACEMENT	166,045	26,567	192,612
ES2B	BELKES01	3	7	RESTORE BRICK VENEER	58,858	9,417	68,275
HV3A	BELKHV01	3	8	HVAC SYSTEM INSTALLATION	1,368,446	218,951	1,587,398
HV2A	BELKHV02	3	9	INSTALL CHILLED WATER GENERATION EQUIPMENT	204,865	32,778	237,643
EL3B	BELKEL02	3	10	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	513,758	82,201	595,959
IS2B	BELKIS02	3	11	REFINISH WALLS	157,013	25,122	182,135
IS3B	BELKIS03	3	12	REFINISH CEILINGS	45,595	7,295	52,890
IS4A	BELKIS04	3	13	REPLACE INTERIOR DOORS	444,738	71,158	515,896
IS6D	BELKIS05	3	14	RESTROOM RENOVATION	1,161,158	185,785	1,346,943
IS1A	BELKIS01	3	15	REFINISH FLOORING	542,241	86,759	629,000
PL1A	BELKPL02	3	16	WATER SUPPLY PIPING REPLACEMENT	253,538	40,566	294,104
PL2A	BELKPL03	3	17	DRAIN PIPING REPLACEMENT	384,857	61,577	446,434
PL1E	BELKPL01	3	18	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	15,039	2,406	17,445
SI4A	BELKSI01	3	19	SITE PAVING UPGRADES	172,327	27,572	199,900
Totals for Priority Class 3					5,492,803	878,849	6,371,652
AC2A	BELKAC01	4	20	BUILDING ENTRY ACCESSIBILITY UPGRADES	33,708	5,393	39,101
AC4A	BELKAC02	4	21	INTERIOR AMENITY ACCESSIBILITY UPGRADES	17,270	2,763	20,034
AC3A	BELKAC03	4	22	ELEVATOR INSTALLATION	327,606	52,417	380,023
AC3B	BELKAC04	4	23	STAIR SAFETY UPGRADES	69,161	11,066	80,227
ES5B	BELKES03	4	24	WINDOW REPLACEMENT	821,127	131,380	952,508

Detailed Project Summary
Facility Condition Analysis
Priority Class - Priority Sequence
 BELK : BELK RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
EL4A	BELKEL03	4	25	EXTERIOR LIGHTING REPLACEMENT	8,502	1,360	9,862
Totals for Priority Class 4					1,277,375	204,380	1,481,755
Grand Total:					7,688,610	1,230,178	8,918,788

Detailed Project Summary
Facility Condition Analysis
Project Cost Range
BELK : BELK RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5C	BELKFS04	1	1	ELIMINATE FIRE RATING COMPROMISES	6,921	1,107	8,029
Totals for Priority Class 1					6,921	1,107	8,029
FS1A	BELKFS03	3	5	REPLACE EXIT SIGNS	4,325	692	5,017
PL1E	BELKPL01	3	18	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	15,039	2,406	17,445
ES2B	BELKES01	3	7	RESTORE BRICK VENEER	58,858	9,417	68,275
IS3B	BELKIS03	3	12	REFINISH CEILINGS	45,595	7,295	52,890
Totals for Priority Class 3					123,816	19,811	143,627
EL4A	BELKEL03	4	25	EXTERIOR LIGHTING REPLACEMENT	8,502	1,360	9,862
AC2A	BELKAC01	4	20	BUILDING ENTRY ACCESSIBILITY UPGRADES	33,708	5,393	39,101
AC4A	BELKAC02	4	21	INTERIOR AMENITY ACCESSIBILITY UPGRADES	17,270	2,763	20,034
AC3B	BELKAC04	4	23	STAIR SAFETY UPGRADES	69,161	11,066	80,227
Totals for Priority Class 4					128,641	20,583	149,224
Grand Totals for Projects < 100,000					259,379	41,501	300,880

Detailed Project Summary
Facility Condition Analysis
Project Cost Range
 BELK : BELK RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	BELKFS01	2	2	FIRE ALARM SYSTEM REPLACEMENT	187,168	29,947	217,115
EL5A	BELKEL01	2	4	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	91,785	14,686	106,471
Totals for Priority Class 2					278,954	44,633	323,586
HV2A	BELKHV02	3	9	INSTALL CHILLED WATER GENERATION EQUIPMENT	204,865	32,778	237,643
PL1A	BELKPL02	3	16	WATER SUPPLY PIPING REPLACEMENT	253,538	40,566	294,104
PL2A	BELKPL03	3	17	DRAIN PIPING REPLACEMENT	384,857	61,577	446,434
ES5A	BELKES02	3	6	EXTERIOR DOOR REPLACEMENT	166,045	26,567	192,612
IS2B	BELKIS02	3	11	REFINISH WALLS	157,013	25,122	182,135
SI4A	BELKSI01	3	19	SITE PAVING UPGRADES	172,327	27,572	199,900
Totals for Priority Class 3					1,338,646	214,183	1,552,829
AC3A	BELKAC03	4	22	ELEVATOR INSTALLATION	327,606	52,417	380,023
Totals for Priority Class 4					327,606	52,417	380,023
Grand Totals for Projects >= 100,000 and < 500,000					1,945,206	311,233	2,256,439

Detailed Project Summary
Facility Condition Analysis
Project Cost Range
 BELK : BELK RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS3A	BELKFS02	2	3	FIRE SPRINKLER SYSTEM INSTALLATION	632,557	101,209	733,766
Totals for Priority Class 2					632,557	101,209	733,766
HV3A	BELKHV01	3	8	HVAC SYSTEM INSTALLATION	1,368,446	218,951	1,587,398
EL3B	BELKEL02	3	10	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	513,758	82,201	595,959
IS1A	BELKIS01	3	15	REFINISH FLOORING	542,241	86,759	629,000
IS4A	BELKIS04	3	13	REPLACE INTERIOR DOORS	444,738	71,158	515,896
IS6D	BELKIS05	3	14	RESTROOM RENOVATION	1,161,158	185,785	1,346,943
Totals for Priority Class 3					4,030,341	644,855	4,675,196
ES5B	BELKES03	4	24	WINDOW REPLACEMENT	821,127	131,380	952,508
Totals for Priority Class 4					821,127	131,380	952,508
Grand Totals for Projects >= 500,000					5,484,025	877,444	6,361,469
Grand Totals For All Projects:					7,688,610	1,230,178	8,918,788

Detailed Project Summary
Facility Condition Analysis
Project Classification
 BELK : BELK RESIDENCE HALL

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
IS1A	BELKIS01	15	Capital Renewal	3	REFINISH FLOORING	629,000
ES5B	BELKES03	24	Capital Renewal	4	WINDOW REPLACEMENT	952,508
EL4A	BELKEL03	25	Capital Renewal	4	EXTERIOR LIGHTING REPLACEMENT	9,862
Totals for Capital Renewal						1,591,370
FS1A	BELKFS03	5	Deferred Maintenance	3	REPLACE EXIT SIGNS	5,017
ES5A	BELKES02	6	Deferred Maintenance	3	EXTERIOR DOOR REPLACEMENT	192,612
ES2B	BELKES01	7	Deferred Maintenance	3	RESTORE BRICK VENEER	68,275
EL3B	BELKEL02	10	Deferred Maintenance	3	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	595,959
IS2B	BELKIS02	11	Deferred Maintenance	3	REFINISH WALLS	182,135
IS3B	BELKIS03	12	Deferred Maintenance	3	REFINISH CEILINGS	52,890
IS4A	BELKIS04	13	Deferred Maintenance	3	REPLACE INTERIOR DOORS	515,896
IS6D	BELKIS05	14	Deferred Maintenance	3	RESTROOM RENOVATION	1,346,943
PL1A	BELKPL02	16	Deferred Maintenance	3	WATER SUPPLY PIPING REPLACEMENT	294,104
PL2A	BELKPL03	17	Deferred Maintenance	3	DRAIN PIPING REPLACEMENT	446,434
PL1E	BELKPL01	18	Deferred Maintenance	3	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	17,445
SI4A	BELKSI01	19	Deferred Maintenance	3	SITE PAVING UPGRADES	199,900
Totals for Deferred Maintenance						3,917,611
FS5C	BELKFS04	1	Plant Adaption	1	ELIMINATE FIRE RATING COMPROMISES	8,029
FS2A	BELKFS01	2	Plant Adaption	2	FIRE ALARM SYSTEM REPLACEMENT	217,115
FS3A	BELKFS02	3	Plant Adaption	2	FIRE SPRINKLER SYSTEM INSTALLATION	733,766
EL5A	BELKEL01	4	Plant Adaption	2	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	106,471
HV3A	BELKHV01	8	Plant Adaption	3	HVAC SYSTEM INSTALLATION	1,587,398
HV2A	BELKHV02	9	Plant Adaption	3	INSTALL CHILLED WATER GENERATION EQUIPMENT	237,643
AC2A	BELKAC01	20	Plant Adaption	4	BUILDING ENTRY ACCESSIBILITY UPGRADES	39,101
AC4A	BELKAC02	21	Plant Adaption	4	INTERIOR AMENITY ACCESSIBILITY UPGRADES	20,034
AC3A	BELKAC03	22	Plant Adaption	4	ELEVATOR INSTALLATION	380,023
AC3B	BELKAC04	23	Plant Adaption	4	STAIR SAFETY UPGRADES	80,227
Totals for Plant Adaption						3,409,806

Detailed Project Summary
Facility Condition Analysis
Project Classification
BELK : BELK RESIDENCE HALL

Grand Total:

8,918,788

Detailed Project Summary
Facility Condition Analysis
Energy Conservation
 BELK : BELK RESIDENCE HALL

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
FS1A	BELKFS03	3	5	REPLACE EXIT SIGNS	5,017	250	20.07
Totals for Priority Class 3					5,017	250	20.07
ES5B	BELKES03	4	24	WINDOW REPLACEMENT	952,508	1,900	501.32
EL4A	BELKEL03	4	25	EXTERIOR LIGHTING REPLACEMENT	9,862	650	15.17
Totals for Priority Class 4					962,370	2,550	377.4
Grand Total:					967,387	2,800	345.5

Detailed Project Summary
Facility Condition Analysis
Category/System Code
BELK : BELK RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC2A	BELKAC01	4	20	BUILDING ENTRY ACCESSIBILITY UPGRADES	33,708	5,393	39,101
AC4A	BELKAC02	4	21	INTERIOR AMENITY ACCESSIBILITY UPGRADES	17,270	2,763	20,034
AC3A	BELKAC03	4	22	ELEVATOR INSTALLATION	327,606	52,417	380,023
AC3B	BELKAC04	4	23	STAIR SAFETY UPGRADES	69,161	11,066	80,227
Totals for System Code: ACCESSIBILITY					447,746	71,639	519,385
EL5A	BELKEL01	2	4	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	91,785	14,686	106,471
EL3B	BELKEL02	3	10	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	513,758	82,201	595,959
EL4A	BELKEL03	4	25	EXTERIOR LIGHTING REPLACEMENT	8,502	1,360	9,862
Totals for System Code: ELECTRICAL					614,045	98,247	712,293
ES5A	BELKES02	3	6	EXTERIOR DOOR REPLACEMENT	166,045	26,567	192,612
ES2B	BELKES01	3	7	RESTORE BRICK VENEER	58,858	9,417	68,275
ES5B	BELKES03	4	24	WINDOW REPLACEMENT	821,127	131,380	952,508
Totals for System Code: EXTERIOR					1,046,030	167,365	1,213,395
FS5C	BELKFS04	1	1	ELIMINATE FIRE RATING COMPROMISES	6,921	1,107	8,029
FS2A	BELKFS01	2	2	FIRE ALARM SYSTEM REPLACEMENT	187,168	29,947	217,115
FS3A	BELKFS02	2	3	FIRE SPRINKLER SYSTEM INSTALLATION	632,557	101,209	733,766
FS1A	BELKFS03	3	5	REPLACE EXIT SIGNS	4,325	692	5,017
Totals for System Code: FIRE/LIFE SAFETY					830,971	132,955	963,926
HV3A	BELKHV01	3	8	HVAC SYSTEM INSTALLATION	1,368,446	218,951	1,587,398
HV2A	BELKHV02	3	9	INSTALL CHILLED WATER GENERATION EQUIPMENT	204,865	32,778	237,643
Totals for System Code: HVAC					1,573,311	251,730	1,825,041
IS2B	BELKIS02	3	11	REFINISH WALLS	157,013	25,122	182,135
IS3B	BELKIS03	3	12	REFINISH CEILINGS	45,595	7,295	52,890
IS4A	BELKIS04	3	13	REPLACE INTERIOR DOORS	444,738	71,158	515,896
IS6D	BELKIS05	3	14	RESTROOM RENOVATION	1,161,158	185,785	1,346,943
IS1A	BELKIS01	3	15	REFINISH FLOORING	542,241	86,759	629,000
Totals for System Code: INTERIOR/FINISH SYS.					2,350,746	376,119	2,726,865
PL1A	BELKPL02	3	16	WATER SUPPLY PIPING REPLACEMENT	253,538	40,566	294,104
PL2A	BELKPL03	3	17	DRAIN PIPING REPLACEMENT	384,857	61,577	446,434
PL1E	BELKPL01	3	18	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	15,039	2,406	17,445
Totals for System Code: PLUMBING					653,434	104,549	757,983

Detailed Project Summary
Facility Condition Analysis
Category/System Code
 BELK : BELK RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
SI4A	BELKSI01	3	19	SITE PAVING UPGRADES	172,327	27,572	199,900
Totals for System Code: SITE					172,327	27,572	199,900
Grand Total:					7,688,610	1,230,178	8,918,788

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS
ILLUSTRATING DESCRIPTION / COST

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKFS04	Title:	ELIMINATE FIRE RATING COMPROMISES
Priority Sequence:	1		
Priority Class:	1		
Category Code:	FS5C	System:	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	SEPARATION RATING
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IBC	711.3	
Project Class:	Plant Adaption		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

Structural fire separations are not maintained according to code requirements for new construction in select areas of this facility. Primarily, data cabling has been routed with little regard for fire-rated separations. Intumescent passive firestopping and some minor structural separation repairs should be accomplished promptly.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKFS04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Minor passive firestopping efforts	SF	80,950	\$0.03	\$2,429	\$0.08	\$6,476	\$8,905
Project Totals:				\$2,429		\$6,476	\$8,905

Material/Labor Cost		\$8,905
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$5,768
General Contractor Mark Up at 20.0%	+	\$1,154
Construction Cost		\$6,921
Professional Fees at 16.0%	+	\$1,107
Total Project Cost		\$8,029

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKFS01	Title:	FIRE ALARM SYSTEM REPLACEMENT
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS2A	System:	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	702.1	
	NFPA	1, 101	
Project Class:	Plant Adaption		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

Upgrade the existing fire alarm system with a modern application. Specify a point addressable supervised main fire alarm panel with an annunciator. This work includes pull stations, audible and visible alarms, smoke and heat detectors, and a wiring network. Install all devices in accordance with current NFPA and ADA requirements. The system should be monitored to report activation or trouble to an applicable receiving station.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKFS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, cut and patching materials	SF	80,950	\$1.46	\$118,187	\$0.89	\$72,046	\$190,233
Project Totals:				\$118,187		\$72,046	\$190,233

Material/Labor Cost		\$190,233
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$155,974</u>
General Contractor Mark Up at 20.0%	+	<u>\$31,195</u>
Construction Cost		<u>\$187,168</u>
Professional Fees at 16.0%	+	<u>\$29,947</u>
Total Project Cost		<u>\$217,115</u>

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKFS02	Title:	FIRE SPRINKLER SYSTEM INSTALLATION
Priority Sequence:	3		
Priority Class:	2		
Category Code:	FS3A	System:	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA	1, 13, 13R, 101	
Project Class:	Plant Adaption		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

Install an automatic fire sprinkler system in unprotected areas throughout the facility. This includes piping, valves, sprinkler heads, and piping supports. Install flow switches and sensors to interface with the fire alarm system. Cost has been included in this project for the installation of a fire pump, if necessary.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKFS02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install a wet-pipe sprinkler system, including valves, piping, sprinkler heads, piping supports, etc.	SF	80,950	\$3.08	\$249,326	\$3.77	\$305,182	\$554,508
Fire pump, controls, piping, valves, and connections	GPM	1,000	\$115	\$115,410	\$6.40	\$6,400	\$121,810
Project Totals:				\$364,736		\$311,582	\$676,318

Material/Labor Cost		\$676,318
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$527,130
General Contractor Mark Up at 20.0%	+	\$105,426
Construction Cost		\$632,557
Professional Fees at 16.0%	+	\$101,209
Total Project Cost		\$733,766

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKEL01	Title:	INSTALL EMERGENCY GENERATOR AND POWER NETWORK
Priority Sequence:	4		
Priority Class:	2		
Category Code:	EL5A	System:	ELECTRICAL
		Component:	EMERGENCY POWER SYSTEM
		Element:	GENERATION/DISTRIBUTION
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	Articles 700, 701, 702	
Project Class:	Plant Adaption		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

The installation of an appropriately sized emergency natural gas-fired generator, associated automatic transfer switches (ATS), and an emergency distribution network is recommended in order to provide emergency power for the life safety and specific non-essential loads. Loads considered as life safety include egress lighting, exit signs, elevators, and fire alarm systems. Non-essential loads include HVAC equipment, refrigeration equipment, computer equipment, etc.

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKEL01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Generator, battery, charger, exhaust, transfer switches, all connections	KW	100	\$390	\$39,000	\$133	\$13,300	\$52,300
Emergency power network, to include power panels, raceways, all connections, and terminations	SF	80,950	\$0.22	\$17,809	\$0.30	\$24,285	\$42,094
Project Totals:				\$56,809		\$37,585	\$94,394

Material/Labor Cost		\$94,394
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$76,488
General Contractor Mark Up at 20.0%	+	\$15,298
Construction Cost		\$91,785
Professional Fees at 16.0%	+	\$14,686
Total Project Cost		\$106,471

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKFS03	Title:	REPLACE EXIT SIGNS
Priority Sequence:	5		
Priority Class:	3		
Category Code:	FS1A	System:	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Energy Conservation	\$250	
Code Application:	NFPA	101-47	
	IBC	1011	
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

Replace the existing exit signage throughout the building, and install new exit signs as needed. The new units should be connected to the proposed emergency power network. LED type exit signs are recommended, because they are energy efficient and require minimal maintenance.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKFS03

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	30	\$76.00	\$2,280	\$85.00	\$2,550	\$4,830
Project Totals:				\$2,280		\$2,550	\$4,830

Material/Labor Cost		\$4,830
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$3,604
General Contractor Mark Up at 20.0%	+	\$721
Construction Cost		\$4,325
Professional Fees at 16.0%	+	\$692
Total Project Cost		\$5,017

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKES02	Title:	EXTERIOR DOOR REPLACEMENT
Priority Sequence:	6		
Priority Class:	3		
Category Code:	ES5A	System:	EXTERIOR
		Component:	FENESTRATIONS
		Element:	DOORS
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

It is recommended that aged and inefficient primary and secondary entrance and service doors be replaced. The replacement units should maintain the architectural design aspects of this facility and should be modern, energy-efficient applications.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKES02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High traffic door system	LEAF	3	\$1,978	\$5,934	\$1,999	\$5,997	\$11,931
Low traffic door system	LEAF	77	\$1,031	\$79,387	\$1,250	\$96,250	\$175,637
Project Totals:				\$85,321		\$102,247	\$187,568

Material/Labor Cost		\$187,568
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$138,371
General Contractor Mark Up at 20.0%	+	\$27,674
Construction Cost		\$166,045
Professional Fees at 16.0%	+	\$26,567
Total Project Cost		\$192,612

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKES01	Title:	RESTORE BRICK VENEER
Priority Sequence:	7		
Priority Class:	3		
Category Code:	ES2B	System:	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

Brick veneer is the primary exterior finish. Exposure to the elements has caused some deterioration of the mortar joints and expansion joints, and some damage has occurred. Cleaning, surface preparation, selective repairs, and applied finish or penetrating sealant upgrades are recommended to restore the aesthetics and integrity of the building envelope.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKES01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cleaning and surface preparation	SF	35,840	\$0.11	\$3,942	\$0.22	\$7,885	\$11,827
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	3,584	\$2.45	\$8,781	\$4.99	\$17,884	\$26,665
Applied finish or sealant	SF	35,840	\$0.22	\$7,885	\$0.82	\$29,389	\$37,274
Project Totals:				\$20,608		\$55,158	\$75,766

Material/Labor Cost		\$75,766
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$49,048
General Contractor Mark Up at 20.0%	+	\$9,810
Construction Cost		\$58,858
Professional Fees at 16.0%	+	\$9,417
Total Project Cost		\$68,275

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKHV01	Title:	HVAC SYSTEM INSTALLATION
Priority Sequence:	8		
Priority Class:	3		
Category Code:	HV3A	System:	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE	62-2004	
Project Class:	Plant Adaption		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B, R		

Project Description

It is recommended that a central HVAC system be installed to serve this facility. Install a new modern HVAC system with variable air volume and constant volume air distribution as needed. This includes new air handlers, exhaust fans, ductwork, terminal units, heat exchangers, pumps, piping, controls, and related electrical components. Coordinate this project with the proposed chilled water generation system installation. Specify direct digital controls for the new equipment. Incorporate variable frequency drives into the new HVAC design as applicable.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKHV01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air handlers, exhaust fans, ductwork, VAVs, VFDs, DDCs, heat exchangers, pumps, piping, electrical connections, and demolition of existing equipment	SF	80,950	\$8.62	\$697,789	\$10.54	\$853,213	\$1,551,002
Project Totals:				\$697,789		\$853,213	\$1,551,002

Material/Labor Cost		\$1,551,002
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$1,140,372
General Contractor Mark Up at 20.0%	+	\$228,074
Construction Cost		\$1,368,446
Professional Fees at 16.0%	+	\$218,951
Total Project Cost		\$1,587,398

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKHV02	Title:	INSTALL CHILLED WATER GENERATION EQUIPMENT
Priority Sequence:	9		
Priority Class:	3		
Category Code:	HV2A	System:	HVAC
		Component:	COOLING
		Element:	CHILLERS/CONTROLS
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE	15-2004	
Project Class:	Plant Adaption		
Project Date:	10/9/2009		
Project Location:	Item Only: Floor(s) 1		

Project Description

In conjunction with the proposed HVAC system installation, it is recommended that local chilled water generation equipment is installed. This includes an appropriately sized chiller with an associated cooling tower. Specify new energy-efficient systems that contain the latest, non-CFC refrigerant. This project cost includes electrical and piping connections and related controls and programming. Install refrigeration safety systems in accordance with the ASHRAE safety code for mechanical refrigeration. This includes refrigerant leak detection equipment and an interconnected emergency exhaust system. Specify a cooling tower with a galvanized steel enclosure. The project cost includes all piping, balancing valves, condenser control system, programming, and start-up.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKHV02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Chiller installation	TON	250	\$409	\$102,178	\$180	\$44,955	\$147,133
Install new galvanized cooling tower	TON	330	\$104	\$34,267	\$60.60	\$19,998	\$54,265
Project Totals:				\$136,445		\$64,953	\$201,398

Material/Labor Cost		\$201,398
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$170,721
General Contractor Mark Up at 20.0%	+	\$34,144
Construction Cost		\$204,865
Professional Fees at 16.0%	+	\$32,778
Total Project Cost		\$237,643

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKEL02	Title:	UPGRADE ELECTRICAL DISTRIBUTION NETWORK
Priority Sequence:	10		
Priority Class:	3		
Category Code:	EL3B	System:	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	Articles 110, 210, 220, 230	
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

An upgrade of the building electrical system is recommended. Aging components, such as the circuit breakers, could serve as fire hazards if they fail to open a circuit in an overload or short circuit condition. Remove existing aged electrical components and branch circuitry. Install new power panels, switches, raceways, conductors, and devices. Provide molded case thermal magnetic circuit breakers and HACR circuit breakers for HVAC equipment. Redistribute the electrical loads to the appropriate areas to ensure safe and reliable power to building occupants. Provide ground fault circuit interrupter (GFCI) protection where required, and clearly label all panels for circuit identification.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKEL02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Power panels, conductors, raceways, devices, demolition, and cut and patching materials	SF	80,950	\$2.98	\$241,231	\$4.46	\$361,037	\$602,268
Project Totals:				\$241,231		\$361,037	\$602,268

Material/Labor Cost		\$602,268
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$428,132
General Contractor Mark Up at 20.0%	+	\$85,626
Construction Cost		\$513,758
Professional Fees at 16.0%	+	\$82,201
Total Project Cost		\$595,959

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKIS02	Title:	REFINISH WALLS
Priority Sequence:	11		
Priority Class:	3		
Category Code:	IS2B	System:	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

Interior wall finishes are painted plaster or concrete. The applications vary in age and condition from area to area. Wall finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details
Facility Condition Analysis
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 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKIS02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Standard wall finish (paint, wall covering, etc.)	SF	223,010	\$0.17	\$37,912	\$0.81	\$180,638	\$218,550
Project Totals:				\$37,912		\$180,638	\$218,550

Material/Labor Cost		\$218,550
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$130,844
General Contractor Mark Up at 20.0%	+	\$26,169
Construction Cost		\$157,013
Professional Fees at 16.0%	+	\$25,122
Total Project Cost		\$182,135

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKIS03	Title:	REFINISH CEILINGS
Priority Sequence:	12		
Priority Class:	3		
Category Code:	IS3B	System:	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT

Building Code: BELK
Building Name: BELK RESIDENCE HALL
Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance
Project Date: 10/16/2009

Project Location: Floor-wide: Floor(s) 1, 2, 3, 4, B

Project Description

Ceiling finishes are painted plaster or concrete. The applications vary in age and condition from area to area. Ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKIS03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Painted ceiling finish application	SF	64,760	\$0.17	\$11,009	\$0.81	\$52,456	\$63,465
Project Totals:				\$11,009		\$52,456	\$63,465

Material/Labor Cost		\$63,465
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$37,996</u>
General Contractor Mark Up at 20.0%	+	<u>\$7,599</u>
Construction Cost		<u>\$45,595</u>
Professional Fees at 16.0%	+	<u>\$7,295</u>
Total Project Cost		<u>\$52,890</u>

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKIS04	Title:	REPLACE INTERIOR DOORS
Priority Sequence:	13		
Priority Class:	3		
Category Code:	IS4A	System:	INTERIOR/FINISH SYS.
		Component:	DOORS
		Element:	GENERAL
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

The condition of the interior door systems is such that door system replacements are recommended as part of a comprehensive renovation effort. Complete demolition of the door systems and replacement according to a code compliant plan to properly protect egress passages is recommended. Lever door hardware and Braille signage should be included in this effort.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKIS04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Rated door and rated metal frame, including all hardware and accessible signage	EA	339	\$672	\$227,808	\$812	\$275,268	\$503,076
Project Totals:				\$227,808		\$275,268	\$503,076

Material/Labor Cost		\$503,076
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$370,615
General Contractor Mark Up at 20.0%	+	\$74,123
Construction Cost		\$444,738
Professional Fees at 16.0%	+	\$71,158
Total Project Cost		\$515,896

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKIS05	Title:	RESTROOM RENOVATION
Priority Sequence:	14		
Priority Class:	3		
Category Code:	IS6D	System:	INTERIOR/FINISH SYS.
		Component:	GENERAL
		Element:	OTHER
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

The restroom fixtures and finishes are mostly original to the year of construction or latest renovation. The fixtures are sound but aged and inefficient, and the finishes are outdated. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended. While not all of the restrooms are required to be accessible, at least one accessible facility should be designed on each floor.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKIS05

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Major restroom renovation, including fixtures, finishes, partitions, accessories, and expansion if necessary (assumes 55 square feet of restroom area per fixture)	FIXT	339	\$1,969	\$667,491	\$1,699	\$575,961	\$1,243,452
Project Totals:				\$667,491		\$575,961	\$1,243,452

Material/Labor Cost		\$1,243,452
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$967,631
General Contractor Mark Up at 20.0%	+	\$193,526
Construction Cost		\$1,161,158
Professional Fees at 16.0%	+	\$185,785
Total Project Cost		\$1,346,943

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKIS01	Title:	REFINISH FLOORING
Priority Sequence:	15		
Priority Class:	3		
Category Code:	IS1A	System:	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY

Building Code: BELK
Building Name: BELK RESIDENCE HALL
Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal
Project Date: 10/16/2009

Project Location: Floor-wide: Floor(s) 1, 2, 3, 4, B

Project Description

Interior floor finishes include carpet, ceramic tile, and vinyl tile. The applications vary in age and condition from area to area. Floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKIS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	55,050	\$5.36	\$295,068	\$2.00	\$110,100	\$405,168
Vinyl floor tile	SF	3,240	\$3.53	\$11,437	\$2.50	\$8,100	\$19,537
Ceramic tile	SF	6,480	\$7.24	\$46,915	\$10.63	\$68,882	\$115,798
Project Totals:				\$353,420		\$187,082	\$540,503

Material/Labor Cost		\$540,503
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$451,868
General Contractor Mark Up at 20.0%	+	\$90,374
Construction Cost		\$542,241
Professional Fees at 16.0%	+	\$86,759
Total Project Cost		\$629,000

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKPL02	Title:	WATER SUPPLY PIPING REPLACEMENT
Priority Sequence:	16		
Priority Class:	3		
Category Code:	PL1A	System:	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IPC	Chapter 6	
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

Replacement of the aging water piping network is recommended. Failure to replace the water piping will result in frequent leaks and escalating maintenance costs. Remove the existing water supply network. Install new copper water supply piping with fiberglass insulation. Install isolation valves, pressure regulators, shock absorbers, backflow preventers, and vacuum breakers as needed.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKPL02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Copper pipe and fittings, valves, backflow prevention devices, insulation, hangers, demolition, and cut and patching materials	SF	80,950	\$1.14	\$92,283	\$2.85	\$230,708	\$322,991
Project Totals:				\$92,283		\$230,708	\$322,991

Material/Labor Cost		\$322,991
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$211,282
General Contractor Mark Up at 20.0%	+	\$42,256
Construction Cost		\$253,538
Professional Fees at 16.0%	+	\$40,566
Total Project Cost		\$294,104

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKPL03	Title:	DRAIN PIPING REPLACEMENT
Priority Sequence:	17		
Priority Class:	3		
Category Code:	PL2A	System:	PLUMBING
		Component:	WASTEWATER
		Element:	PIPING NETWORK
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IPC	Chapters 7-11	
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

Replacement of the aging drain piping is recommended throughout the facility. Failure to replace the old piping will result in frequent leaks and escalating maintenance costs. Remove sanitary and storm drain piping as needed. Install new cast-iron drain piping networks with copper run-outs to the fixtures. Install new floor drains, roof drains, and traps.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKPL03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cast-iron drain piping and fittings, copper pipe and fittings, floor / roof drains, traps, hangers, demolition, and cut and patching materials	SF	80,950	\$1.81	\$146,520	\$4.17	\$337,562	\$484,081
Project Totals:				\$146,520		\$337,562	\$484,081

Material/Labor Cost		\$484,081
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$320,714
General Contractor Mark Up at 20.0%	+	\$64,143
Construction Cost		\$384,857
Professional Fees at 16.0%	+	\$61,577
Total Project Cost		\$446,434

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKPL01	Title:	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT
Priority Sequence:	18		
Priority Class:	3		
Category Code:	PL1E	System:	PLUMBING
		Component:	DOMESTIC WATER
		Element:	HEATING
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Item Only: Floor(s) B		

Project Description

Replacement of the domestic hot water converter is recommended. With age, heat exchanger efficiency is reduced by internal tube scaling. Internal wear will eventually lead to failure, allowing contaminants to enter the water system. Remove the existing system. Install a new heat exchanger, pumps, piping, and controls as needed.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKPL01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Heat exchanger, pumps, piping, valves, controls, insulation, demolition	GPM	48	\$183	\$8,789	\$150	\$7,177	\$15,966
Project Totals:				\$8,789		\$7,177	\$15,966

Material/Labor Cost		\$15,966
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$12,532
General Contractor Mark Up at 20.0%	+	\$2,506
Construction Cost		\$15,039
Professional Fees at 16.0%	+	\$2,406
Total Project Cost		\$17,445

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKSI01	Title:	SITE PAVING UPGRADES
Priority Sequence:	19		
Priority Class:	3		
Category Code:	SI4A	System:	SITE
		Component:	GENERAL
		Element:	OTHER
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

Pedestrian paving systems are in overall average condition and will likely need replacement in the next ten years. Vehicular paving systems are in poor condition and will need major upgrades.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKSI01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Concrete pedestrian paving	SF	6,000	\$2.97	\$17,820	\$3.64	\$21,840	\$39,660
Asphalt vehicular paving system replacement	SY	6,500	\$12.82	\$83,330	\$9.16	\$59,540	\$142,870
Project Totals:				\$101,150		\$81,380	\$182,530

Material/Labor Cost		\$182,530
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$143,606</u>
General Contractor Mark Up at 20.0%	+	<u>\$28,721</u>
Construction Cost		<u>\$172,327</u>
Professional Fees at 16.0%	+	<u>\$27,572</u>
Total Project Cost		<u>\$199,900</u>

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKAC01	Title:	BUILDING ENTRY ACCESSIBILITY UPGRADES
Priority Sequence:	20		
Priority Class:	4		
Category Code:	AC2A	System:	ACCESSIBILITY
		Component:	BUILDING ENTRY
		Element:	GENERAL
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	403.6, 405, 505	
Project Class:	Plant Adaption		
Project Date:	10/16/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

Current accessibility legislation requires that building entrances be wheelchair accessible. To comply with the intent of this legislation, it is recommended that a wheelchair ramp be installed at the main entrance to the first floor lobby. This work should include the installation of ADA compliant, painted metal handrails at all entrances as required.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKAC01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Ramp, including handrails	VFT	7	\$1,770	\$12,390	\$1,999	\$13,993	\$26,383
Freestanding handrail system, painted	LF	50	\$91.11	\$4,556	\$150	\$7,500	\$12,056
Project Totals:				\$16,946		\$21,493	\$38,439

Material/Labor Cost		\$38,439
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$28,090
General Contractor Mark Up at 20.0%	+	\$5,618
Construction Cost		\$33,708
Professional Fees at 16.0%	+	\$5,393
Total Project Cost		\$39,101

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKAC02	Title:	INTERIOR AMENITY ACCESSIBILITY UPGRADES
Priority Sequence:	21		
Priority Class:	4		
Category Code:	AC4A	System:	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	211, 602, 804	
Project Class:	Plant Adaption		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, B		

Project Description

Building amenities are required to be generally accessible to all persons. The configurations of the break room kitchenettes and drinking fountains are barriers to accessibility. The installation of wheelchair accessible kitchenette cabinetry and refrigerated, dual level drinking fountains is recommended where applicable.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKAC02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant kitchenette unit with base cabinetry, overhead cabinetry, and amenities	SYS	1	\$4,894	\$4,894	\$1,999	\$1,999	\$6,893
Dual level drinking fountain	EA	2	\$1,216	\$2,432	\$374	\$748	\$3,180
Alcove construction including finishes	EA	2	\$877	\$1,754	\$3,742	\$7,484	\$9,238
Project Totals:				\$9,080		\$10,231	\$19,311

Material/Labor Cost		\$19,311
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$14,392
General Contractor Mark Up at 20.0%	+	\$2,878
Construction Cost		\$17,270
Professional Fees at 16.0%	+	\$2,763
Total Project Cost		\$20,034

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKAC03	Title:	ELEVATOR INSTALLATION
Priority Sequence:	22		
Priority Class:	4		
Category Code:	AC3A	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	LIFTS/RAMPS/ELEVATORS
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ASME	A17.1	
	ADAAG	407	
Project Class:	Plant Adaption		
Project Date:	10/16/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

Accessibility legislation requires that wheelchair access be provided to all floors in a building over two stories in height. There is no wheelchair access to the upper floors or basement of this building. The installation of an exterior traction elevator is proposed within the purview of this analysis.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKAC03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Elevator installation outside the current building footprint (two stops)	SYS	1	\$160,360	\$160,360	\$79,659	\$79,659	\$240,019
Each additional stop	FLR	3	\$9,278	\$27,834	\$27,699	\$83,097	\$110,931
Project Totals:				\$188,194		\$162,756	\$350,950

Material/Labor Cost		\$350,950
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$273,005</u>
General Contractor Mark Up at 20.0%	+	<u>\$54,601</u>
Construction Cost		<u>\$327,606</u>
Professional Fees at 16.0%	+	<u>\$52,417</u>
Total Project Cost		<u>\$380,023</u>

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKAC04	Title:	STAIR SAFETY UPGRADES
Priority Sequence:	23		
Priority Class:	4		
Category Code:	AC3B	System:	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	STAIRS AND RAILINGS
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IBC	1003.3	
	ADAAG	505	
Project Class:	Plant Adaption		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, B		

Project Description

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

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKAC04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Wall-mounted handrail system per floor	FLR	13	\$573	\$7,449	\$521	\$6,773	\$14,222
Center handrail / guardrail system per floor	FLR	13	\$1,297	\$16,861	\$833	\$10,829	\$27,690
Stair tread and landing finish upgrades per floor	FLR	13	\$1,449	\$18,837	\$773	\$10,049	\$28,886
Project Totals:				\$43,147		\$27,651	\$70,798

Material/Labor Cost		\$70,798
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$57,634</u>
General Contractor Mark Up at 20.0%	+	<u>\$11,527</u>
Construction Cost		<u>\$69,161</u>
Professional Fees at 16.0%	+	<u>\$11,066</u>
Total Project Cost		<u>\$80,227</u>

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKES03	Title:	WINDOW REPLACEMENT
Priority Sequence:	24		
Priority Class:	4		
Category Code:	ES5B	System:	EXTERIOR
		Component:	FENESTRATIONS
		Element:	WINDOWS
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Energy Conservation	\$1,900	
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/16/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

It is recommended that the single-pane, metal windows be upgraded to thermal-pane systems, which will reduce the energy required to operate the building. Repair or replacement of the windowsills and trim may also be necessary.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKES03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Typical standard glazing applications	SF	8,960	\$57.27	\$513,139	\$36.45	\$326,592	\$839,731
Project Totals:				\$513,139		\$326,592	\$839,731

Material/Labor Cost		\$839,731
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$684,273
General Contractor Mark Up at 20.0%	+	\$136,855
Construction Cost		\$821,127
Professional Fees at 16.0%	+	\$131,380
Total Project Cost		\$952,508

Specific Project Details
Facility Condition Analysis
Section Three
BELK : BELK RESIDENCE HALL

Project Description

Project Number:	BELKEL03	Title:	EXTERIOR LIGHTING REPLACEMENT
Priority Sequence:	25		
Priority Class:	4		
Category Code:	EL4A	System:	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING
Building Code:	BELK		
Building Name:	BELK RESIDENCE HALL		
Subclass/Savings:	Energy Conservation	\$650	
Code Application:	NEC	410	
Project Class:	Capital Renewal		
Project Date:	10/9/2009		
Project Location:	Building-wide: Floor(s) 1, 2, 3, 4, B, R		

Project Description

The exterior lighting scheme consists of can-type fixtures and HID fixtures mounted on the roof and walls of the facility. Additional lighting is provided by pole-mounted fixtures located on the site or next to the roadway. The overall exterior lighting scheme appears to provide adequate coverage. However, some of the fixtures are showing signs of age. Replace all aged lighting to ensure a lighting scheme that promotes a safe environment.

Specific Project Details
Facility Condition Analysis
Section Three
 BELK : BELK RESIDENCE HALL

Project Cost

Project Number: BELKEL03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
HID wall-mount fixture and demolition of existing fixture	EA	10	\$406	\$4,060	\$190	\$1,900	\$5,960
Compact fluorescent, wall-mount exterior light and demolition of existing light	EA	10	\$131	\$1,310	\$137	\$1,370	\$2,680
Project Totals:				\$5,370		\$3,270	\$8,640

Material/Labor Cost		\$8,640
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$7,085
General Contractor Mark Up at 20.0%	+	\$1,417
Construction Cost		\$8,502
Professional Fees at 16.0%	+	\$1,360
Total Project Cost		\$9,862

FACILITY CONDITION ANALYSIS

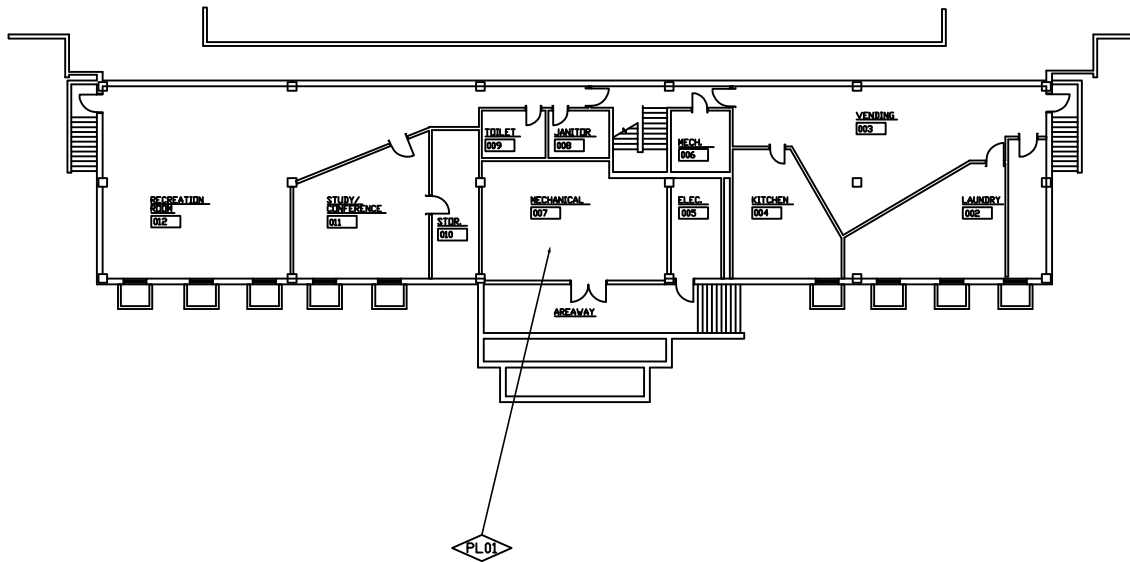
SECTION 4

**DRAWINGS
AND PROJECT LOCATIONS**



FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376



PROJECT NUMBER
APPLIES TO
ONE ROOM ONLY

PROJECT NUMBER
APPLIES TO
ONE ITEM ONLY

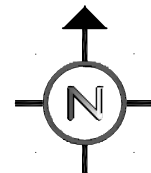
PROJECT NUMBER
APPLIES TO
ENTIRE BUILDING

PROJECT NUMBER
APPLIES TO
ENTIRE FLOOR

PROJECT NUMBER
APPLIES TO A SITUATION
OF UNDEFINED EXTENTS

PROJECT NUMBER
APPLIES TO AREA
AS NOTED

- | | | | | | |
|------|------|------|------|------|------|
| AC02 | AC04 | EL01 | EL02 | FS01 | FS02 |
| FS03 | FS04 | HV01 | IS01 | IS02 | IS03 |
| IS04 | IS05 | PL02 | PL03 | | |



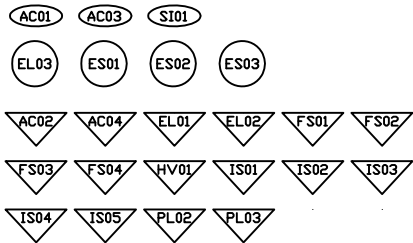
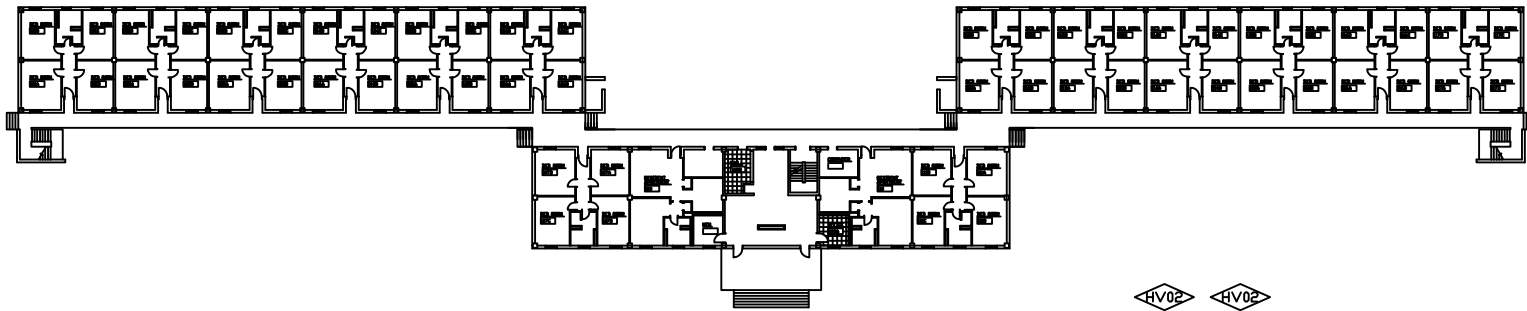
Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

BASEMENT
FLOOR
PLAN



FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376



PROJECT NUMBER
APPLIES TO
ONE ROOM ONLY

PROJECT NUMBER
APPLIES TO
ONE ITEM ONLY

PROJECT NUMBER
APPLIES TO
ENTIRE BUILDING

PROJECT NUMBER
APPLIES TO
ENTIRE FLOOR

PROJECT NUMBER
APPLIES TO A SITUATION
OF UNDEFINED EXTENTS

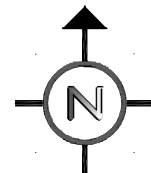
PROJECT NUMBER
APPLIES TO AREA
AS NOTED

Date: 10/30/09

Drawn by: J.T.V.

Project No. 09-041

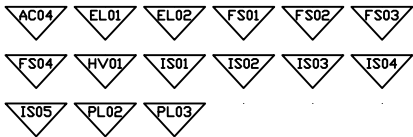
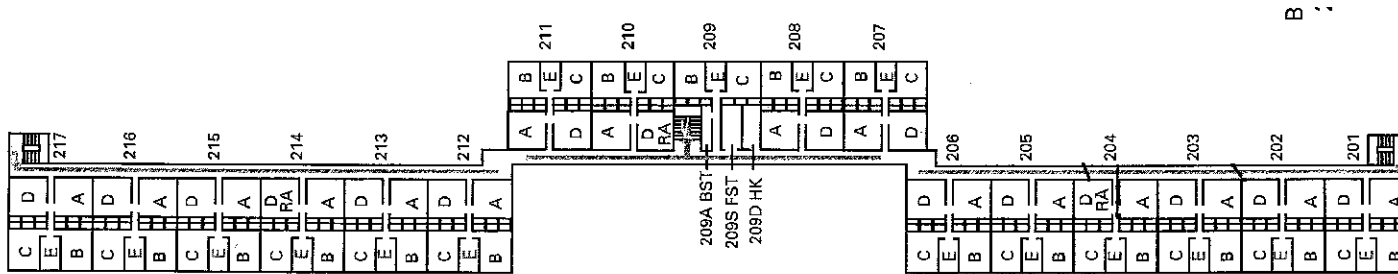
FIRST
FLOOR
PLAN





FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376



PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

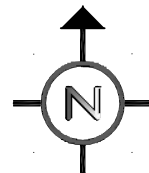
PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

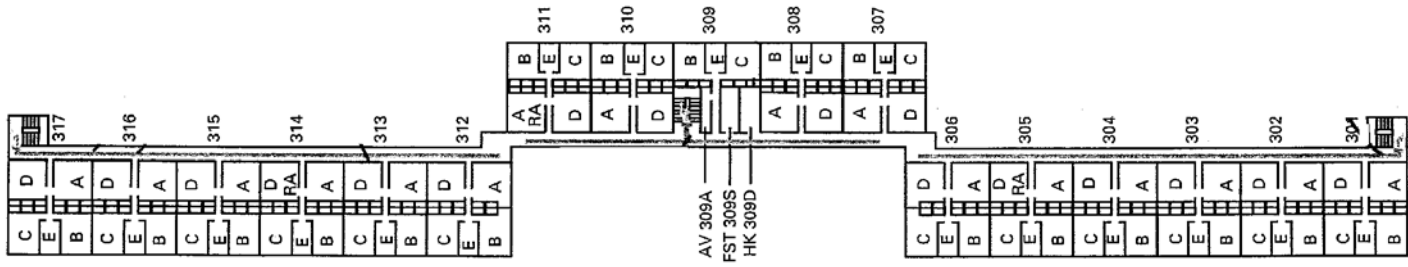
SECOND
FLOOR
PLAN





FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376



PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

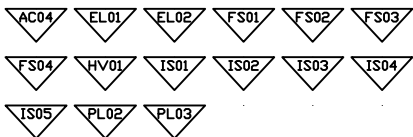
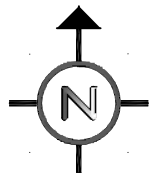
PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

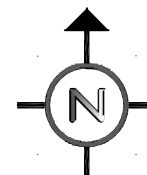
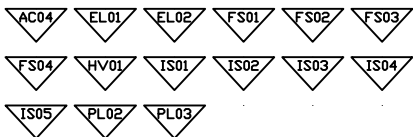
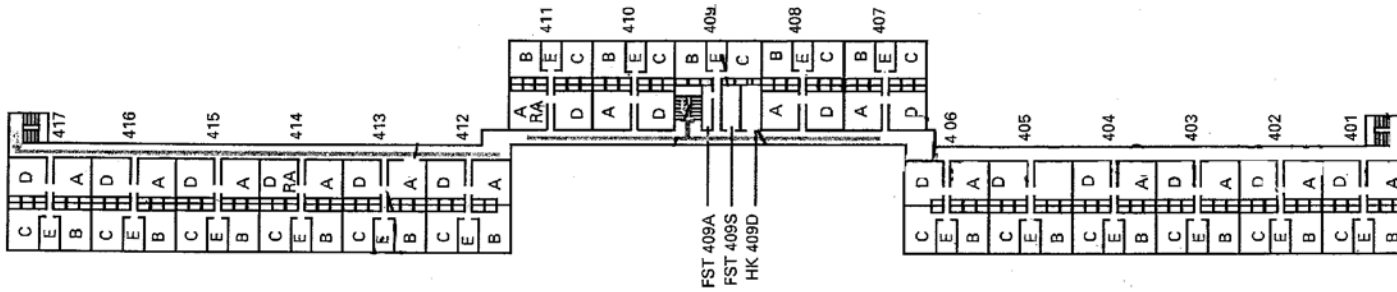
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

THIRD
FLOOR
PLAN

Sheet No.
4 of 5





BELK
RESIDENCE
HALL

BLDG NO. BELK



FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09

Drawn by: J.T.V.

Project No. 09-041

FOURTH
FLOOR
PLAN

Sheet No.

5 of 5

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY
AND PROJECTIONS

Life Cycle Model
Building Component Summary
BELK : BELK RESIDENCE HALL

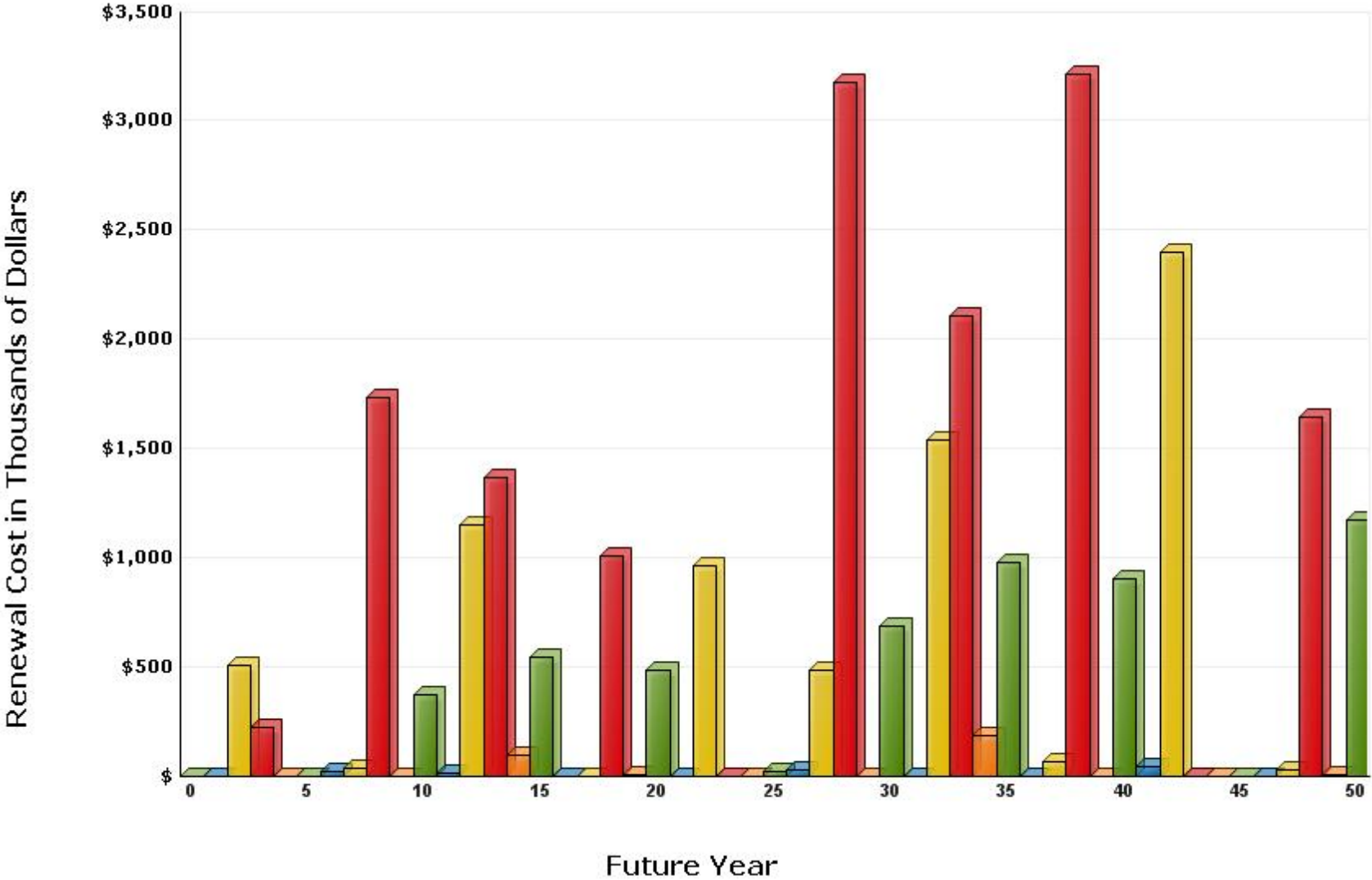
Unifomat Code	Component Description	Qty	Units	Unit Cost	Complex Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	35,840	SF	\$1.30	.31	\$14,483	1966	10
B2020	STANDARD GLAZING AND CURTAIN WALL	8,960	SF	\$104.04		\$932,168	1966	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	3	LEAF	\$4,311.24		\$12,934	1966	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	77	LEAF	\$2,863.29		\$220,473	1966	40
B3010	BUILT-UP ROOF	16,190	SF	\$6.70		\$108,516	2000	20
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	339	LEAF	\$1,489.06		\$504,791	1966	35
C1020	INTERIOR DOOR HARDWARE	339	EA	\$423.04		\$143,411	1966	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	223,010	SF	\$0.80		\$178,640	1966	10
C3020	CARPET	55,050	SF	\$8.75		\$481,493	2000	10
C3020	VINYL FLOOR TILE	3,240	SF	\$6.59		\$21,345	2000	15
C3020	CERAMIC FLOOR TILE	6,480	SF	\$17.36		\$112,508	1966	20
C3030	PAINTED CEILING FINISH APPLICATION	64,760	SF	\$0.80		\$51,875	1966	15
D2010	PLUMBING FIXTURES - DORMITORY / APARTMENTS	80,950	SF	\$4.99		\$403,723	1966	35
D2020	WATER PIPING - DORMITORY / APARTMENTS	80,950	SF	\$3.55		\$287,477	1966	35
D2020	WATER HEATER, SHELL AND TUBE HEAT EXCHANGER	48	GPM	\$355.69		\$17,073	1966	24
D2030	DRAIN PIPING - DORMITORY / APARTMENTS	80,950	SF	\$5.40		\$437,221	1966	40
D2030	SUMP PUMP SYS (2 PUMPS, CONTROLS)	1	SYS	\$8,276.49		\$8,276	2000	20
D3020	HEATING SYSTEM, STEAM OR HYDRONIC	80,950	SF	\$7.30		\$591,088	1966	25
D3040	CONDENSATE RECEIVER	1	SYS	\$9,504.01		\$9,504	1966	15
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	18	EA	\$2,768.62		\$49,835	1966	20
D3040	EXHAUST FAN - PROPELLER TYPE OR SIMILAR	1	EA	\$1,357.34		\$1,357	1966	20
D3050	SPLIT DX SYSTEM	5	TON	\$2,143.89		\$10,719	2004	15
D3050	SPLIT DX SYSTEM	5	TON	\$2,143.89		\$10,719	2003	15
D3050	SPLIT DX SYSTEM	1	TON	\$2,143.89		\$2,144	2004	15
D3050	SPLIT DX SYSTEM	1	TON	\$2,143.89		\$2,144	1997	15
D3050	THRU-WALL AC UNIT	175	TON	\$1,528.27		\$267,448	2008	10
D5010	ELECTRICAL SYSTEM - DORMITORY / APARTMENTS	80,950	SF	\$7.21		\$583,444	1966	50
D5010	ELECTRICAL SWITCHGEAR 120/208V	2,000	AMP	\$32.96		\$65,927	2002	20
D5020	EMERGENCY LIGHT (BATTERY)	17	EA	\$283.62		\$4,822	1966	20

**Life Cycle Model
Building Component Summary
BELK : BELK RESIDENCE HALL**

Unifomat Code	Component Description	Qty	Units	Unit Cost	Complex Adj	Total Cost	Install Date	Life Exp
D5020	EXIT SIGNS (BATTERY)	30	EA	\$280.76		\$8,423	1966	20
D5020	EXTERIOR LIGHT (HID)	10	EA	\$689.58		\$6,896	1995	20
D5020	LIGHTING - DORMITORY / APARTMENTS	80,950	SF	\$4.30		\$348,107	2003	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	80,950	SF	\$2.61		\$211,651	1990	15
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	1	LOT	\$5,940.22		<u>\$5,940</u>	1966	20
						\$6,116,577		

Life Cycle Model Expenditure Projections

BELK : BELK RESIDENCE HALL



Average Annual Renewal Cost Per SqFt \$3.06

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

**Photo Log - Facility Condition
Analysis
BELK : BELK RESIDENCE HALL**

Photo ID No	Description	Location	Date
BELK001a	Dorm suite interior finishes	Fourth floor	9/10/2009
BELK001e	Lavatories and radiator	Fourth floor, room 413A	9/10/2009
BELK002a	Dorm room door condition	Fourth floor	9/10/2009
BELK002e	Shower components	Fourth floor, room 413A	9/10/2009
BELK003a	Exterior corridor	Fourth floor	9/10/2009
BELK003e	Interior lighting	Fourth floor, room 413A	9/10/2009
BELK004a	Brick damage	Fourth floor	9/10/2009
BELK004e	Secondary electrical panel	Fourth floor, room 413	9/10/2009
BELK005a	Roof detail	Roof	9/10/2009
BELK005e	Radiator	Fourth floor, room 413	9/10/2009
BELK006a	Roof detail	Roof	9/10/2009
BELK006e	Fire alarm devices	Fourth floor, room 413	9/10/2009
BELK007a	Roof detail	Roof	9/10/2009
BELK007e	Light fixture	Stairway	9/10/2009
BELK008a	Exterior corridor	Fourth floor	9/10/2009
BELK008e	Radiator	Fourth floor, room 409S	9/10/2009
BELK009a	Exterior suite door	Fourth floor	9/10/2009
BELK009e	Service sink	Fourth floor, room 409D	9/10/2009
BELK010a	Stairwell design	Fourth floor	9/10/2009
BELK010e	Exhaust fan	Roof	9/10/2009
BELK011a	Stairwell design	Third floor	9/10/2009
BELK011e	Exhaust fans	Roof	9/10/2009
BELK012a	Lobby finishes	First floor	9/10/2009
BELK012e	Exhaust fans	Roof	9/10/2009
BELK013a	Single level drinking fountain	First floor	9/10/2009
BELK013e	Water closet	Fourth floor, room 409D	9/10/2009
BELK014a	Vending room finishes	Basement	9/10/2009
BELK014e	Drain piping	Third floor, room 309D	9/10/2009
BELK015a	Laundry room finishes	Basement	9/10/2009
BELK015e	Exit signage	Third floor, corridor	9/10/2009
BELK016a	Kitchen finishes	Basement	9/10/2009
BELK016e	Exterior lighting	Second floor, corridor	9/10/2009
BELK017a	Recreation room finishes	Basement	9/10/2009

**Photo Log - Facility Condition
Analysis
BELK : BELK RESIDENCE HALL**

Photo ID No	Description	Location	Date
BELK017e	Radiator	Second floor, room 204D	9/10/2009
BELK018a	Fire penetrations in telecom closet	Basement	9/10/2009
BELK018e	Water closet and urinal	First floor, restroom	9/10/2009
BELK019a	North facade	Exterior elevation	9/10/2009
BELK019e	Fire alarm panels	First floor, lobby	9/10/2009
BELK020a	North facade	Exterior elevation	9/10/2009
BELK020e	Kitchen hood	Basement, room 4	9/10/2009
BELK021a	North facade	Exterior elevation	9/10/2009
BELK021e	Piping	Basement, crawlspace	9/10/2009
BELK022a	East facade	Exterior elevation	9/10/2009
BELK022e	Furnace	Basement, room 3	9/10/2009
BELK023a	South facade	Exterior elevation	9/10/2009
BELK023e	Main incoming electrical equipment	Basement, room 6	9/10/2009
BELK024a	South facade	Exterior elevation	9/10/2009
BELK024e	Secondary electrical panel	Basement, room 6	9/10/2009
BELK025a	South facade	Exterior elevation	9/10/2009
BELK025e	Drain piping	Basement, room 11	9/10/2009
BELK026a	South facade	Exterior elevation	9/10/2009
BELK026e	Condensate return system	Basement, room 7	9/10/2009
BELK027a	South facade	Exterior elevation	9/10/2009
BELK027e	Heat exchanger	Basement, room 7	9/10/2009
BELK028a	West facade	Exterior elevation	9/10/2009
BELK028e	Heat exchanger	Basement, room 7	9/10/2009
BELK029e	Pump equipment	Basement, room 7	9/10/2009
BELK030e	Air handling equipment	Basement, room 7	9/10/2009
BELK031e	HVAC controls	Basement, room 7	9/10/2009
BELK032e	Exterior lighting	Exterior	9/10/2009
BELK033e	Transformer	Site	9/10/2009
BELK034e	Window air conditioning units	Exterior	9/10/2009
BELK035e	Exterior lighting and window air conditioning units	Exterior	9/10/2009
BELK036e	Exterior lighting	Exterior	9/10/2009

Facility Condition Analysis - Photo Log



BELK001A.jpg



BELK001E.jpg



BELK002A.jpg



BELK002E.jpg



BELK003A.jpg



BELK003E.jpg



BELK004A.jpg



BELK004E.jpg



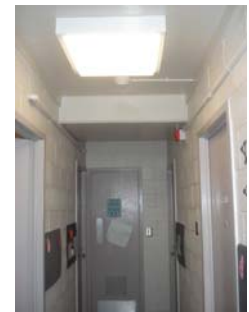
BELK005A.jpg



BELK005E.jpg



BELK006A.jpg



BELK006E.jpg



BELK007A.jpg



BELK007E.jpg



BELK008A.jpg



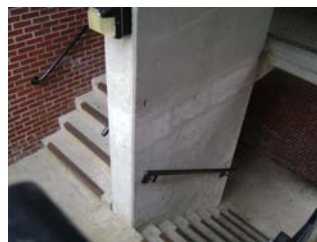
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BELK009A.jpg



BELK009E.jpg

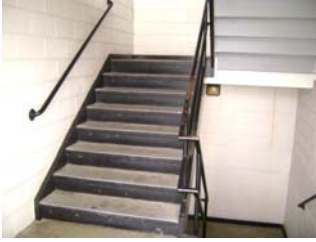


BELK010A.jpg



BELK010E.jpg

Facility Condition Analysis - Photo Log



BELK011A.jpg



BELK011E.jpg



BELK012A.jpg



BELK012E.jpg



BELK013A.jpg



BELK013E.jpg



BELK014A.jpg



BELK014E.jpg



BELK015A.jpg



BELK015E.jpg



BELK016A.jpg



BELK016E.jpg



BELK017A.jpg



BELK017E.jpg



BELK018A.jpg



BELK018E.jpg



BELK019A.jpg



BELK019E.jpg



BELK020A.jpg



BELK020E.jpg

Facility Condition Analysis - Photo Log



BELK021A.jpg



BELK021E.jpg



BELK022A.jpg



BELK022E.jpg



BELK023A.jpg



BELK023E.jpg



BELK024A.jpg



BELK024E.jpg



BELK025A.jpg



BELK025E.jpg



BELK026A.jpg



BELK026E.jpg



BELK027A.jpg



BELK027E.jpg



BELK028A.jpg



BELK028E.jpg



BELK029E.jpg



BELK030E.jpg



BELK031E.jpg



BELK032E.jpg

Facility Condition Analysis - Photo Log



BELK033E.jpg



BELK034E.jpg



BELK035E.jpg



BELK036E.jpg