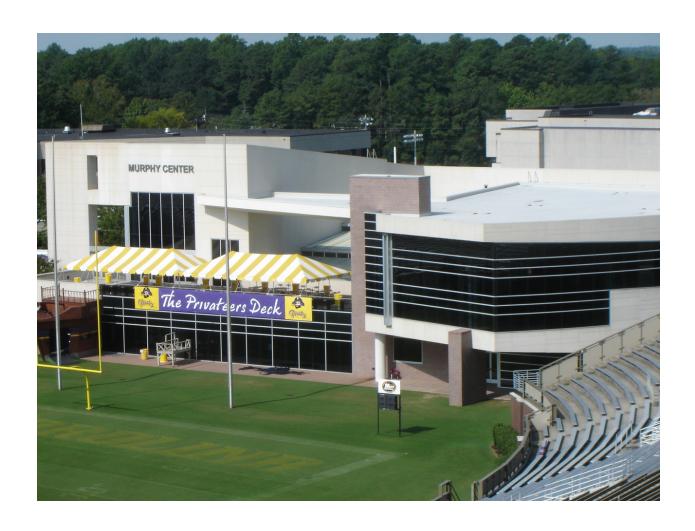
# **EAST CAROLINA UNIVERSITY**

#### **MURPHY STRENGTH CENTER**

ASSET CODE: MURP

**FACILITY CONDITION ANALYSIS** 

**DECEMBER 11, 2009** 





# EAST CAROLINA UNIVERSITY Facility Condition Analysis

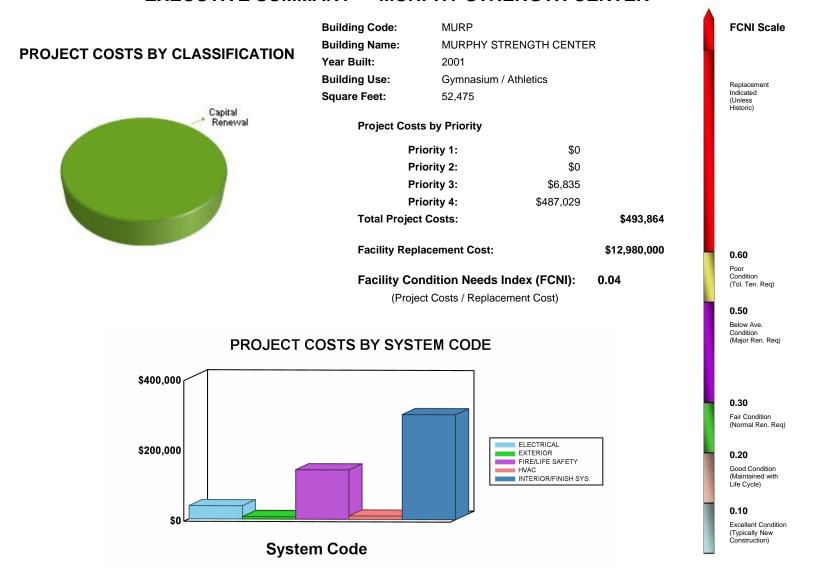
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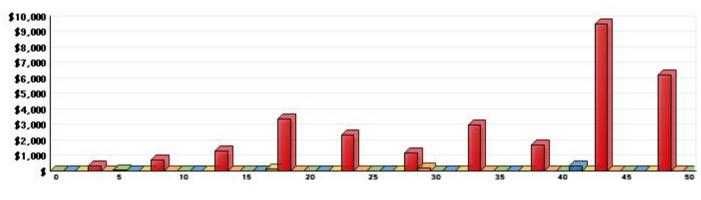


# **GENERAL ASSET INFORMATION**

#### **EXECUTIVE SUMMARY - MURPHY STRENGTH CENTER**



#### LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



**Future Year** 

Average Annual Renewal Cost Per SqFt \$4.38



#### **B. ASSET SUMMARY**

The Murphy Strength and Conditioning Center was constructed in 2001 and is located on the southern athletic campus of East Carolina University in Greenville, North Carolina. The facility's footprint covers a partial circle, with an eastern flat exterior wall facing the football field within Dowdy-Ficklen Stadium. This wall contains the wooden bow of a pirate ship encroaching on the back of the west end zone. This building contains 52,475 square feet of area on two levels. It has a slab-on-grade foundation, and the structural steel superstructure supports corrugated metal deck and cast-in-place lightweight concrete floor systems.

The first floor consists of the strength and conditioning areas and office, accessible restrooms, and support facilities. There are rubberized weightlifting areas, carpeted running areas, and artificial turf workout and practice areas in the large open floor space. The second floor consists of a large banquet hall, a smaller private dining area, additional accessible restrooms, and the centralized kitchen preparation area. The exterior facade consists of areas of brick masonry and concrete panel, with almost half of the exterior covered in a dark tinted dual-pane glazing. The roof is a sloping membrane application with a large translucent skylight area. All entrances are handicapped accessible, with nearby accessible parking located in the parking lot to the north.

The information for this report was gathered during a site visit that concluded on September 17, 2009.

#### SITE

The building sits on a flat parcel of land in a suburban campus setting. Minimal landscaping exists and consists of several specimen trees, small areas of shrubbery, and minimal turf. There are concrete sidewalks on three sides of the facility. Vehicular access is from both the south via Blackbeard's Alley or Charles Boulevard and from the north via Ficklen Drive. The orange parking lot to the north of the structure leads to a sidewalk system that serves all entrances and the campus.

#### **EXTERIOR STRUCTURE**

The concrete exterior has become visibly soiled. Cleaning, surface preparation, and selective construction joint replacement are recommended to restore the aesthetics and integrity of the building envelope. The brick masonry facade appears to be in good condition.

The single ply membrane roofing system is expected to provide satisfactory service through the ten-year scope of this analysis. The dual pane, thermal glazing system utilized on this facility and the glass entrance doors are all in good condition and require no upgrades.

#### INTERIOR FINISHES / SYSTEMS

The offices and interior floor finishes within the facility are all in good condition. There are entrance areas of ceramic tile, with carpet primarily used in the public use areas of the banquet hall and large dining room on the second floor along with a few areas on the first floor such as the offices, conference room,

# EAST CAROLINA UNIVERSITY Facility Condition Analysis

Section One -



and the running print track. The main floor finish on the first floor strength and conditioning area is a rubber mat application with artificial turf in two separate indoor activity areas. Interior floor finish applications are all fairly new and in good condition. Due to present use patterns, it is anticipated that carpet upgrades should be considered as part of any long-term cosmetic improvements or major comprehensive renovation efforts over the next ten years.

The majority of the interior wall finish is paint over sheetrock partitions. Walls are generally in good condition. However, painted finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

The ceilings are generally finished in suspended grid acoustical tile applications. These are all in good condition and require no upgrades. The interior doors are all properly rated and have lever actuated door hardware and accessible signage.

#### **ACCESSIBILITY**

As a result of the building being originally constructed in 2001, all required accessibility improvements have been incorporated into the original design of the facility. Restrooms, door hardware, room signage, accessible handrails within stairwells, and accessible elevators have all been incorporated into the existing design.

#### **HEALTH**

Based on the date of original construction and latest renovations, it is highly unlikely that lead paint or asbestos containing material was used in the construction of this facility. No lead paint or suspected asbestos was observed during the inspection of this building. The lead paint and asbestos health risks are extremely minimal, but workers present during any and all remodeling should be made aware of the potential hazards of working with such materials.

#### FIRE / LIFE SAFETY

The paths of egress in this building are adequate in regard to fire rating. There are no compromises involving doors, partitions, elevators lobbies, or stairs. No fire or life safety issues related to architectural features were observed during the inspection of this facility.

The facility is served by a modern addressable fire alarm system that was manufactured by Notifier Corporation and installed in 2001. The system utilizes pull stations, heat detectors, smoke detectors, and duct smoke detectors for activation, and audible / visible strobes are present for notification. The fire alarm system appears to be in good condition and provide adequate coverage. However, the fire alarm system will approach the end of intended life cycle within the scope of this report. Install a system of the latest technology.

The facility is served by a wet-pipe sprinkler system that incorporates fast action sprinkler heads for fire suppression. Additional coverage is provided by manual chemical type fire extinguishers. The system appears to provide adequate coverage, and no recommendations are warranted for the extent of this report.

# EAST CAROLINA UNIVERSITY Facility Condition Analysis Section One



The path of egress is marked with LED exit signs that provide adequate coverage. The units contain backup batteries in the event of a power failure. The exit signs appear to be in good condition and should not require replacement within the next ten years.

Emergency lighting consists of select overhead light fixtures that are directly tied to the emergency power circuit. The units that could be observed appeared to be in good condition and provide adequate coverage. No emergency lighting recommendations are warranted at this time.

#### **HVAC**

The facility is connected to the campus steam and chilled water loops. Steam is supplied to a heat exchanger in the main mechanical room that produces heating hot water. The hot water and chilled water are then circulated throughout the building by pumps to the associated HVAC equipment to heat or cool the facility. The heat exchangers and pumps appear to be in good condition and should continue to provide adequate service over the course of the next ten years.

This facility is served by a forced air HVAC system with multizone air handling units. The system provides tempered air throughout the facility. Fan coil units and variable air volume (VAV) boxes support the system. The air handling units have hot water heating coils and chilled water cooling coils. The air distribution network furnishes VAV to the occupied spaces. The equipment is monitored by a direct digital control (DDC) system that was manufactured by Invensys. The HVAC system is an adequate application for this facility. However, it should be expected that the condensate receiver will require replacement within the purview of this analysis.

#### **ELECTRICAL**

Power is supplied to this facility at 12,470 volts. An oil-filled transformer rated at 1,500 kVA service steps the incoming power down to 277/480 volts. The 277/480 volt power is distributed by a switchgear that is rated for 1,200 amp service and was manufactured by General Electric. All of the main electrical distribution system components are serviceable and will likely remain so throughout the scope of this report.

The secondary electrical system consists of panelboards and dry type transformers located in electrical closets within the facility. Power is either distributed at 480/277 volts from the panelboards or stepped down to 120/208 volts in the form of mechanical, lighting, and general purpose loads. Overall, the system appears to be in good condition. Panelboards are properly labeled and enclosed, and wiring that could be observed seemed to be connected correctly, with no wear. It should be anticipated that the electrical distribution network will require minor repairs within the scope of this report. Such remedies include, but are not limited to, installing additional circuits, replacing worn switches and receptacles, replacing circuit breakers, and updating panel directories.

The interior lighting scheme consists of lay-in fluorescent light fixtures that contain T8 bulbs. Additional lighting is incorporated into the scheme in the form of can light fixtures that contain compact fluorescent bulbs. The fixtures appear to be in good condition, and lighting levels seem to be sufficient. The interior lighting scheme should continue to provide adequate service over the next ten years.

# EAST CAROLINA UNIVERSITY Facility Condition Analysis Section One



The exterior lighting scheme consists of wall-mounted light fixtures and eave-mounted light fixtures with compact fluorescent and HID bulbs. Additional lighting is provided by pole-mounted light fixtures located on site or light fixtures located on adjacent facilities. The exterior lighting scheme appears to be in good condition and provides adequate coverage. No projects are recommended for the exterior lighting system at this time.

Emergency power for this facility is produced by a diesel-fired emergency generator located on site. The unit was manufactured by Cummins in 2001. The generator provides 480/277 volt power and has a capacity of 75 kW. Overall, the unit appears to be in good condition and properly enclosed. This generator should remain a reliable source of standby power throughout scope of this report.

#### **PLUMBING**

The domestic water supply is fed to the facility from a main shutoff valve located on site. A backflow preventer is present to protect the supply from cross contamination. Copper piping is then utilized to distribute water throughout the facility. The domestic water supply system appears to be in good condition at this time.

Sanitary waste and stormwater piping consists mainly of cast-iron, no-hub piping, with some plastic piping applications. The system appears to be in good condition, and no deterioration or leaks were observed or reported during the inspection. No projects are recommended for the sanitary waste and stormwater piping network within the scope of this report.

The plumbing fixtures consist of ceramic and stainless steel construction and utilize hand operated devices on restroom flush valves and faucets. The units appear to be in good condition, with no observed deterioration. The plumbing fixtures should continue to provide sufficient service within this report. No projects are recommended.

Domestic water for this facility is heated by a steam to hot water unit that was manufactured by Aerco. The unit was installed in 2001 and appears to be in good condition. With proper maintenance, it will outlast the purview of this analysis.

#### **VERTICAL TRANSPORTATION**

The University commissioned an outside contractor to perform an elevator condition study in 2009. The aforementioned study did not identify any deficiencies requiring capital funding.

# EAST CAROLINA UNIVERSITY Facility Condition Analysis Section One



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 17, 2009

#### **INSPECTION TEAM PERSONNEL:**

<u>NAME</u>	<u>POSITION</u>	SPECIALTY
Thomas Ferguson, AIA, LEED <sup>®</sup> 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:**

NAME POSITION

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.

FCNI = Deferred Maintenance / Modernization +

<u>Capital Renewal + Plant Adaption</u>

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. <u>Plant / Program Adaption</u>: 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. <u>Deferred Maintenance</u>: 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. <u>Capital Renewal:</u> 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. <u>Energy Conservation:</u> Projects with energy conservation opportunities, based on simple payback analysis.

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

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

#### Example:

	PRIORITY CLA	SS 1
CODE	PROJECT NO.	PRIORITY SEQUENCE
HV2C	0001HV04	01
PL1D	0001PL02	02
	DDIODITY OL A	00.0
	PRIORITY CLA	<u>55 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: Local Materials Index:	51.3 % 100.7 %	of National Average of National average
General Contractor Markup: Professional Fees:	20.0 % 16.0 %	Contractor profit & overhead, bonds & insurance 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

- 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

Building Number Photo Sequence Arch / Eng / VT 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.

# EAST CAROLINA UNIVERSITY

Facility Condition Analysis

Section One -



#### 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

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



	CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION	
SYSTEM DE	SCRIPTION: 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 DE	SCRIPTION: 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 DI	ESCRIPTION: 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		
LSGL	GLINEIVAL	OTTLER	freestanding boiler stacks.		
SYSTEM D	ESCRIPTION: FIRE / LIFE SAFE	TY			
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 D	ESCRIPTION: 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 DE	ESCRIPTION: 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 D	ESCRIPTION: INTERIOR FINI	SHES / SYSTEMS			
IS1A	FLOOR	FINISHES-DRY	R & R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum & tile, marble, terrazzo, rubber flooring, underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)		
IS1B	FLOOR	FINISHES-WET	Flooring finish/underlayment work in predominantly "wet" areas including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.		
IS2A	PARTITIONS	STRUCTURE	Structural work on full height permanent interior partitions including wood/metal stud & drywall systems, CMU systems, structural brick, tile, glass block, etc.		
IS2B	PARTITIONS	FINISHES	Work on full height permanent interior partitions including R & R to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.		
IS3A	CEILINGS	REPAIR	Repair of interior ceilings (<40% of total) including tiles, gypsum board, plaster, paint, etc.		
IS3B	CEILINGS	REPLACEMENT	Major refurbishments (>40% of total) to interior ceiling systems including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.		
IS4A	DOORS	GENERAL	Any work on interior non-fire rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).		
IS5A	STAIRS	FINISH	Any finish restorative work to stair tower walking surfaces including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).		
IS6A	GENERAL	MOLDING	R & R to interior trim/molding systems including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.		
IS6B	GENERAL	CABINETRY	R & R work to interior casework systems including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).		
IS6C	GENERAL	SCREENING	Work on temporary or partial height partitioning systems including toilet partitions, urinal/vanity screens, etc.		
IS6D	GENERAL	OTHER	Any work on interior elements not logically or specifically categorized elsewhere including light coves, phone booths, interior light wells, etc.		
SYSTEM D	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 DE	ESCRIPTION: 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 DE	ESCRIPTION: SECURITY SYSTE	EMS			
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		SPORTATION			
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.		



# DETAILED PROJECT SUMMARIES AND TOTALS

#### **Detailed Project Totals**

#### **Facility Condition Analysis**

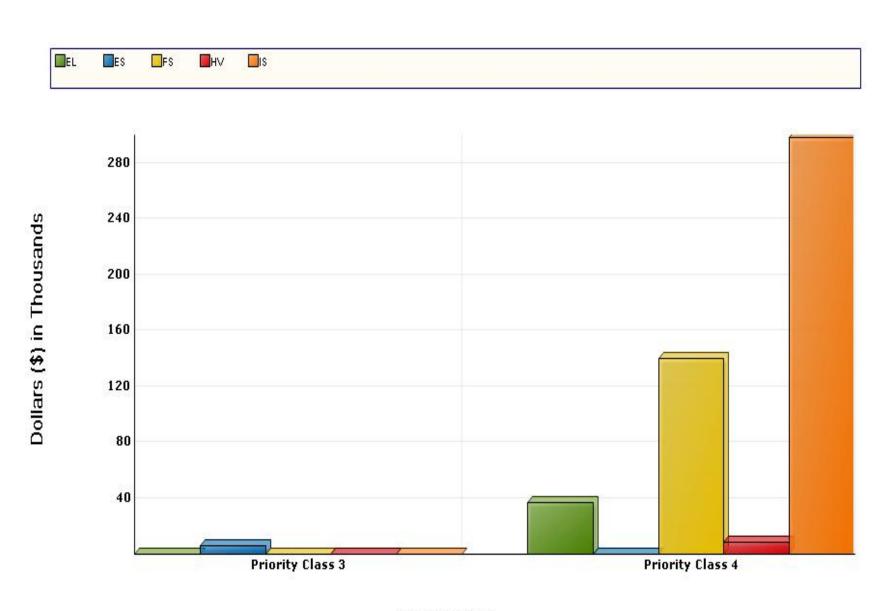
#### **System Code by Priority Class**

System	Priority Classes						
Code	System Description	1	2	3	4	Subtotal	
EL	ELECTRICAL	0	0	0	37,819	37,819	
ES	EXTERIOR	0	0	6,835	0	6,835	
FS	FIRE/LIFE SAFETY	0	0	0	140,743	140,743	
HV	HVAC	0	0	0	9,705	9,705	
IS	INTERIOR/FINISH SYS.	0	0	0	298,762	298,762	
	TOTALS	0	0	6,835	487,029	493,864	

Facility Replacement Cost	\$12,980,000
Facility Condition Needs Index	0.04

Gross Square Feet 52,475	Total Cost Per Square Foot \$9.41
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# **System Code by Priority Class**



Priority Class

# Detailed Project Totals Facility Condition Analysis

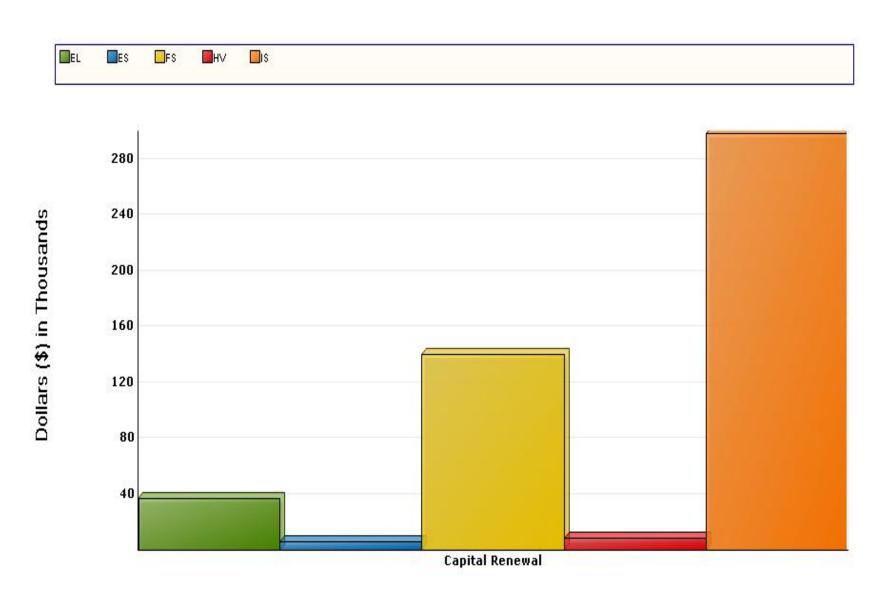
## System Code by Project Class

		Project Classes				
System Code	System Description	Captial Renewal	Deferred Maintenance	Plant Adaption	Subtotal	
EL	ELECTRICAL	37,819	0	0	37,819	
ES	EXTERIOR	6,835	0	0	6,835	
FS	FIRE/LIFE SAFETY	140,743	0	0	140,743	
ΗV	HVAC	9,705	0	0	9,705	
IS	INTERIOR/FINISH SYS.	298,762	0	0	298,762	
	TOTALS	493,864	0	0	493,864	

Facility Replacement Cost	\$12,980,000
Facility Condition Needs Index	0.04

Gross Square Feet 52,475	Total Cost Per Square Foot \$9.41
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# **System Code by Project Class**



Project Classification

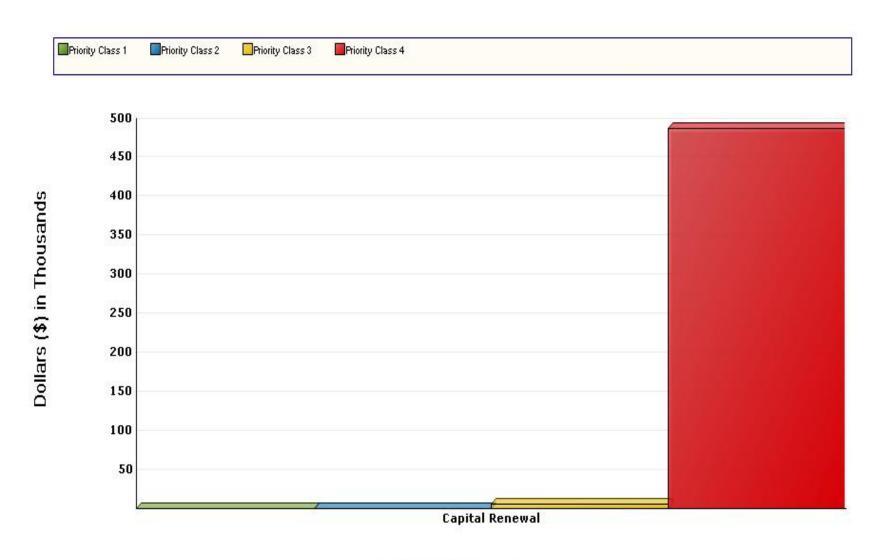
#### Detailed Project Summary Facility Condition Analysis Project Class by Priority Class

	Priority Classes				
Project Class	1	2	3	4	Subtotal
Capital Renewal	0	0	6,835	487,029	493,864
TOTALS	0	0	6,835	487,029	493,864

Facility Replacement Cost	\$12,980,000
Facility Condition Needs Index	0.04

Gross Square Feet 52,475	Total Cost Per Square Foot	\$9.41
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# **Project Class by Priority Class**



**Project Classification** 

#### Detailed Project Summary Facility Condition Analysis

#### **Priority Class - Priority Sequence**

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
ES2B	MURPES01	3	1	RESTORE CONCRETE FINISH	5,892	943	6,835
				Totals for Priority Class 3	5,892	943	6,835
FS2A	MURPFS01	4	2	FIRE ALARM SYSTEM REPLACEMENT	121,330	19,413	140,743
HV5B	MURPHV01	4	3	CONDENSATE RECEIVER REPLACEMENT	8,366	1,339	9,705
EL3B	MURPEL01	4	4	ELECTRICAL SYSTEM REPAIRS	32,603	5,216	37,819
IS1A	MURPIS01	4	5	REFINISH FLOORING	184,458	29,513	213,971
IS2B	MURPIS02	4	6	REFINISH WALLS	73,096	11,695	84,791
				Totals for Priority Class 4	419,852	67,176	487,029
				Grand Total:	425,744	68,119	493,864

#### Detailed Project Summary Facility Condition Analysis

#### **Project Cost Range**

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
ES2B	MURPES01	3	1	RESTORE CONCRETE FINISH	5,892	943	6,835
				Totals for Priority Class 3	5,892	943	6,835
HV5B	MURPHV01	4	3	CONDENSATE RECEIVER REPLACEMENT	8,366	1,339	9,705
EL3B	MURPEL01	4	4	ELECTRICAL SYSTEM REPAIRS	32,603	5,216	37,819
IS2B	MURPIS02	4	6	REFINISH WALLS	73,096	11,695	84,791
				Totals for Priority Class 4	114,065	18,250	132,315
				Grand Totals for Projects < 100,000	119,957	19,193	139,150

#### Detailed Project Summary Facility Condition Analysis

#### **Project Cost Range**

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	MURPFS01	4	2	FIRE ALARM SYSTEM REPLACEMENT	121,330	19,413	140,743
IS1A	MURPIS01	4	5	REFINISH FLOORING	184,458	29,513	213,971
				Totals for Priority Class 4	305,788	48,926	354,714
				Grand Totals for Projects >= 100,000 and < 500,000	305,788	48,926	354,714
				Grand Totals For All Projects:	425,744	68,119	493,864

### Detailed Project Summary Facility Condition Analysis

### **Project Classification**

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
ES2B	MURPES01	1	Capital Renewal	3	RESTORE CONCRETE FINISH	6,835
FS2A	MURPFS01	2	Capital Renewal	4	FIRE ALARM SYSTEM REPLACEMENT	140,743
HV5B	MURPHV01	3	Capital Renewal	4	CONDENSATE RECEIVER REPLACEMENT	9,705
EL3B	MURPEL01	4	Capital Renewal	4	ELECTRICAL SYSTEM REPAIRS	37,819
IS1A	MURPIS01	5	Capital Renewal	4	REFINISH FLOORING	213,971
IS2B	MURPIS02	6	Capital Renewal	4	REFINISH WALLS	84,791
					Totals for Capital Renewal	493,864
					Grand Total:	493.864

### Detailed Project Summary Facility Condition Analysis Energy Conservation

### MURP : MURPHY STRENGTH CENTER

Cat	Project	Pri	Pri	Project	Total	Annual	Simple
Code	Number	Cls	Seq	Title	Cost	Savings	Payback

No Projects Meeting This Criteria Found

**Totals for Priority Class** 

**Grand Total:** 

### Detailed Project Summary Facility Condition Analysis

### Category/System Code

Cat. Code	Project Number		Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
EL3B	MURPEL01	4	4	ELECTRICAL SYSTEM REPAIRS	32,603	5,216	37,819
				Totals for System Code: ELECTRICAL	32,603	5,216	37,819
ES2B	MURPES01	3	1	RESTORE CONCRETE FINISH	5,892	943	6,835
				Totals for System Code: EXTERIOR	5,892	943	6,835
FS2A	MURPFS01	4	2	FIRE ALARM SYSTEM REPLACEMENT	121,330	19,413	140,743
				Totals for System Code: FIRE/LIFE SAFETY	121,330	19,413	140,743
HV5B	MURPHV01	4	3	CONDENSATE RECEIVER REPLACEMENT	8,366	1,339	9,705
				Totals for System Code: HVAC	8,366	1,339	9,705
IS1A	MURPIS01	4	5	REFINISH FLOORING	184,458	29,513	213,971
IS2B	MURPIS02	4	6	REFINISH WALLS	73,096	11,695	84,791
				Totals for System Code: INTERIOR/FINISH SYS.	257,554	41,209	298,762
				Grand Total:	425,744	68,119	493,864

### **FACILITY CONDITION ANALYSIS**



# SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

### Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Description**

Project Number: MURPES01 Title: RESTORE CONCRETE FINISH

Priority Sequence: 1

Priority Class: 3

Category Code: ES2B System: EXTERIOR

Component: COLUMNS/BEAMS/WALLS

Element: FINISH

Building Code: MURP

Building Name: MURPHY STRENGTH CENTER

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

Project Date: 10/23/2009

**Project** 

**Location:** Building-wide: Floor(s) 1

### **Project Description**

The concrete exterior has become visibly soiled. Cleaning, surface preparation, and selective construction joint replacement are recommended to restore the aesthetics and integrity of the building envelope.

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Cost**

Project Number: MURPES01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cleaning and surface preparation	SF	6,760	\$0.11	\$744	\$0.22	\$1,487	\$2,231
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	676	\$2.45	\$1,656	\$4.99	\$3,373	\$5,029
Project Totals	:			\$2,400		\$4,860	\$7,260

Material/Labor Cost		\$7,260
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$4,910
General Contractor Mark Up at 20.0%	+	\$982
Construction Cost		\$5,892
Professional Fees at 16.0%	+	\$943
Total Project Cost		\$6,835

### Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Description**

Project Number: MURPFS01 Title: FIRE ALARM SYSTEM REPLACEMENT

Priority Sequence: 2

Priority Class: 4

Category Code: FS2A System: FIRE/LIFE SAFETY

Component: DETECTION ALARM

Element: GENERAL

Building Code: MURP

Building Name: MURPHY STRENGTH CENTER

Subclass/Savings: Not Applicable

Code Application: ADAAG 702.1

NFPA 1, 101

Project Class: Capital Renewal

**Project Date:** 10/14/2009

Project

**Location:** Floor-wide: Floor(s) 1, 2, 3

### **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.

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Cost**

Project Number: MURPFS01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, and cut and patching materials	SF	52,475	\$1.46	\$76,614	\$0.89	\$46,703	\$123,316
Project Totals	:			\$76,614		\$46,703	\$123,316

Material/Labor Cost		\$123,316
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$101,108
General Contractor Mark Up at 20.0%	+	\$20,222
Construction Cost		\$121,330
Professional Fees at 16.0%	+	\$19,413
Total Project Cost		\$140,743

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Description**

Project Number: MURPHV01 Title: CONDENSATE RECEIVER REPLACEMENT

Priority Sequence: 3

Priority Class: 4

Category Code: HV5B System: HVAC

Component: STEAM/HYDRONIC DISTRIB.

Element: PUMPS

Building Code: MURP

Building Name: MURPHY STRENGTH CENTER

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/14/2009

**Project** 

Location: Item Only: Floor(s) 1

### **Project Description**

The condensate receiver serving the heating system is at or approaching the end of its intended life cycle. It is recommended that the unit be replaced in order to preclude failure. The project cost includes the replacement of the pumps, receiver, and all connections.

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Cost**

Project Number: MURPHV01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace duplex condensate return application	SYS	1	\$6,480	\$6,480	\$870	\$870	\$7,350
Project To	tals:			\$6.480	-	\$870	\$7.350

Material/Labor Cost		\$7,350
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$6,972
General Contractor Mark Up at 20.0%	+	\$1,394
<b>Construction Cost</b>		\$8,366
Professional Fees at 16.0%	+	\$1,339
Total Project Cost		\$9,705

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Description**

Project Number: MURPEL01 Title: ELECTRICAL SYSTEM REPAIRS

Priority Sequence: 4

Priority Class: 4

Category Code: EL3B System: ELECTRICAL

Component: SECONDARY DISTRIBUTION

Element: DISTRIBUTION NETWORK

Building Code: MURP

Building Name: MURPHY STRENGTH CENTER

Subclass/Savings: Not Applicable

Code Application: NEC Articles 100, 210, 410

Project Class: Capital Renewal

**Project Date:** 10/14/2009

**Project** 

**Location:** Floor-wide: Floor(s) 1, 2, 3

### **Project Description**

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

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Cost**

Project Number: MURPEL01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Switches, receptacles, cover plates, breakers, and miscellaneous materials	SF	52,475	\$0.29	\$15,218	\$0.44	\$23,089	\$38,307
Project Total	als:			\$15.218	-	\$23.089	\$38.307

Material/Labor Cost		\$38,307
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$27,169
General Contractor Mark Up at 20.0%	+	\$5,434
Construction Cost		\$32,603
Professional Fees at 16.0%	+	\$5,216
Total Project Cost		\$37,819

### Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

#### **Project Description**

Project Number: MURPIS01 Title: REFINISH FLOORING

Priority Sequence: 5

Priority Class: 4

Category Code: IS1A System: INTERIOR/FINISH SYS.

Component: FLOOR

Element: FINISHES-DRY

Building Code: MURP

Building Name: MURPHY STRENGTH CENTER

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/23/2009

Project

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

### **Project Description**

The offices and interior floor finishes within the facility are all in good condition. There are entrance areas of ceramic tile, with carpet primarily used in the public use areas of the banquet hall and large dining room on the second floor along with a few areas on the first floor such as the offices, conference room, and the running print track. The main floor finish on the first floor strength and conditioning area is a rubber mat application with artificial turf in two separate indoor activity areas. Interior floor finish applications are all fairly new and in good condition. Due to present use patterns, it is anticipated that carpet upgrades should be considered as part of any long-term cosmetic improvements or major comprehensive renovation efforts over the next ten years.

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Cost**

Project Number: MURPIS01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	23,930	\$5.36	\$128,265	\$2.00	\$47,860	\$176,125
	Project Totals:			\$128,265		\$47,860	\$176,125

Total Project Cost		\$213,971
Professional Fees at 16.0%	+	\$29,513
Construction Cost		\$184,458
General Contractor Mark Up at 20.0%	+	\$30,743
Material/Labor Indexed Cost		\$153,715
Labor Index		51.3%
Material Index		100.7%
Material/Labor Cost		\$176,125

### Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Description**

Project Number: MURPIS02 Title: REFINISH WALLS

Priority Sequence: 6

Priority Class: 4

Category Code: IS2B System: INTERIOR/FINISH SYS.

Component: PARTITIONS

Element: FINISHES

Building Code: MURP

Building Name: MURPHY STRENGTH CENTER

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/23/2009

**Project** 

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

### **Project Description**

The majority of the interior wall finish is paint over sheetrock partitions. Walls are generally in good condition. However, painted finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

# Facility Condition Analysis Section Three

MURP: MURPHY STRENGTH CENTER

### **Project Cost**

Project Number: MURPIS02

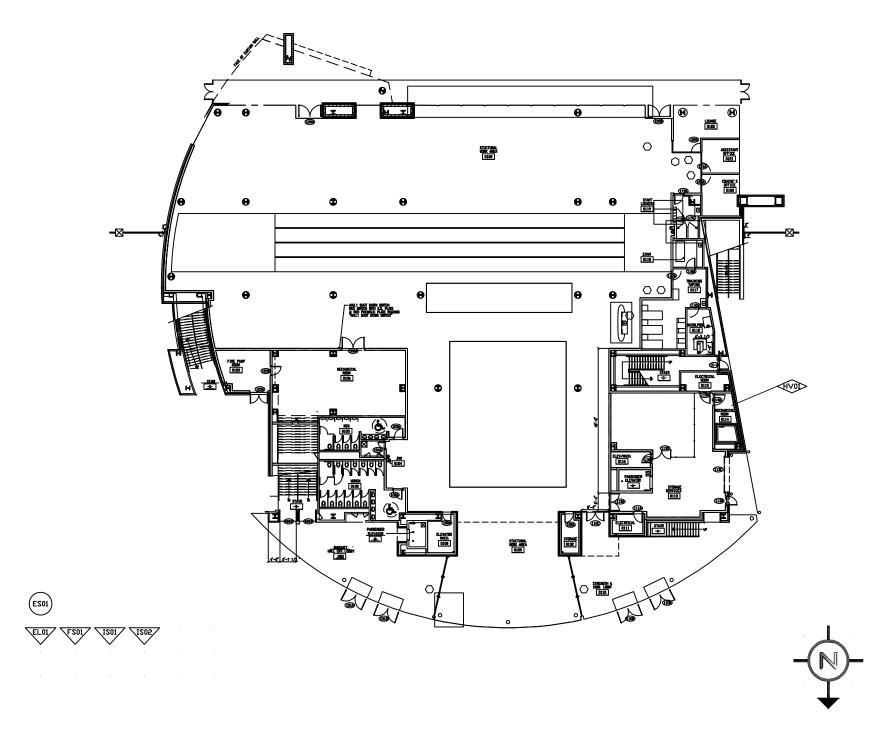
Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Standard wall finish (paint, wall covering, etc.)	SF	103,820	\$0.17	\$17,649	\$0.81	\$84,094	\$101,744
Project Totals				\$17,649		\$84,094	\$101,744

Material/Labor Cost		\$101,744
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$60,913
General Contractor Mark Up at 20.0%	+	\$12,183
Construction Cost		\$73,096
Professional Fees at 16.0%	+	\$11,695
Total Project Cost		\$84,791

### **FACILITY CONDITION ANALYSIS**

SECTION 4

DRAWINGS AND PROJECT LOCATIONS



MURPHY STRENGTH CENTER

BLDG NO. MURP



CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N Stone Mountain GA 30087 770.879.7376

PROJECT NUMBER APPLIES TO

ONE ROOM ONLY

PROJECT NUMBER ONE ITEM ONLY

PROJECT NUMBER ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS



PROJECT NUMBER APPLIES TO AREA AS NOTED

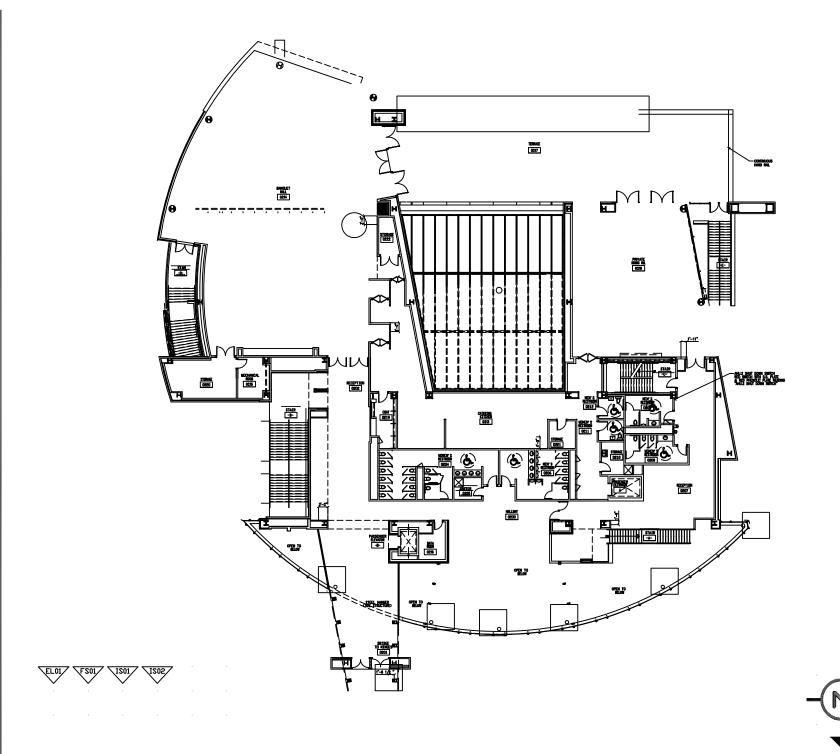
Date: 12/11/09 Drawn by: J.T.V.

Project No. 09-041

FIRST FLOOR PLAN

Sheet No.

1 of 3



MURPHY STRENGTH CENTER

BLDG NO. MURP



CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N Stone Mountain GA 30087 770.879.7376

> PROJECT NUMBER APPLIES TO

ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS



PROJECT NUMBER APPLIES TO AREA AS NOTED

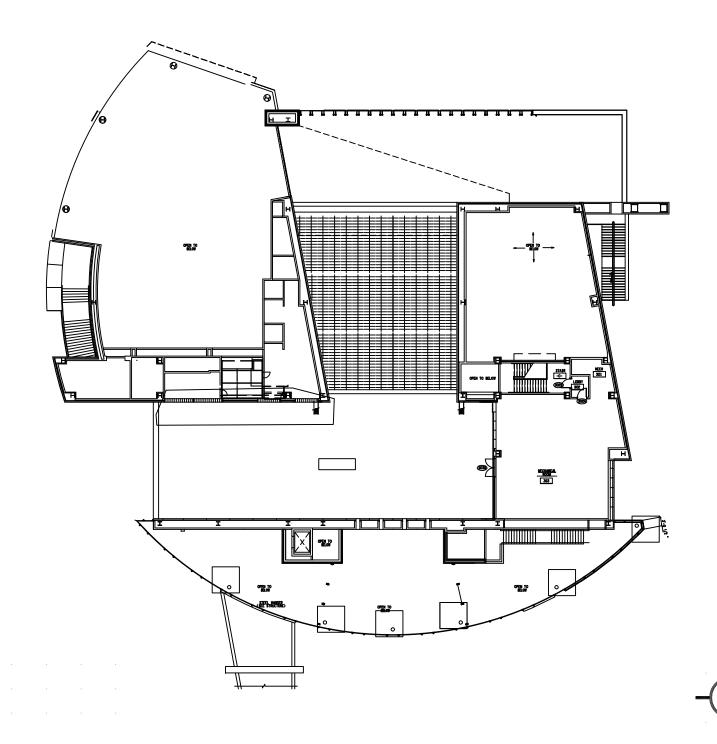
Date: 12/11/09 Drawn by: J.T.V.

Project No. 09-041

SECOND FLOOR PLAN

Sheet No.

2 of 3



MURPHY STRENGTH CENTER

BLDG NO. MURP



CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N Stone Mountain GA 30087 770.879.7376

OJECT NUMBER

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO

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: 12/11/09
Drawn by: J.T.V.

Project No. 09-041

THIRD

FLOOR PLAN

Sheet No.

3 of 3

**FACILITY CONDITION ANALYSIS** 

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

### Life Cycle Model

### **Building Component Summary**

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	6,760	SF	\$1.30		\$8,812	2001	10
B2010	EXTERIOR FINISH RENEWAL	3,640	SF	\$1.30	.31	\$1,471	2001	10
B2020	CUSTOM AND HISTORICAL GLAZING	10,400	SF	\$143.39		\$1,491,277	2001	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	10	LEAF	\$4,311.24		\$43,112	2001	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	14	LEAF	\$2,863.29		\$40,086	2001	40
B3010	MEMBRANE ROOF	23,500	SF	\$6.41		\$150,560	2001	15
B3020	SKYLIGHT	2,850	SF	\$104.04		\$296,504	2001	30
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	50	LEAF	\$783.68		\$39,184	2001	35
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	100	LEAF	\$1,489.06		\$148,906	2001	35
C1020	INTERIOR DOOR HARDWARE	100	EA	\$423.04		\$42,304	2001	15
C1020	INTERIOR DOOR HARDWARE	50	EA	\$423.04		\$21,152	2001	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	103,820	SF	\$0.80		\$83,164	2001	10
C3010	PREMIUM WALL FINISH (EPOXY, TILE, WOOD PANEL, ETC.)	11,540	SF	\$5.87		\$67,694	2001	20
C3020	CARPET	23,930	SF	\$8.75		\$209,303	2001	10
C3020	VINYL FLOOR TILE	9,970	SF	\$6.59		\$65,681	2001	15
C3020	CERAMIC FLOOR TILE	3,990	SF	\$17.36		\$69,276	2001	20
C3020	HARDWOOD REPLACEMENT	1,990	SF	\$23.94		\$47,634	2001	50
C3020	SAND AND FINISH HARDWOOD FLOORING	1,990	SF	\$3.24		\$6,443	2001	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	19,940	SF	\$4.99		\$99,561	2001	15
C3030	PAINTED CEILING FINISH APPLICATION	19,940	SF	\$0.80		\$15,973	2001	15
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	2	EA	\$158,628.64		\$317,257	2001	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	2	EA	\$26,616.80		\$53,234	2001	12
D2010	PLUMBING FIXTURES - GYMNASIUM / ATHLETICS	52,475	SF	\$3.53		\$185,377	2001	35
D2020	WATER PIPING - GYMNASIUM / ATHLETICS	52,475	SF	\$2.52		\$132,156	2001	35
D2020	WATER HEATER, SHELL AND TUBE HEAT EXCHANGER	48	GPM	\$355.69		\$17,073	2001	24
D2030	DRAIN PIPING - GYMNASIUM / ATHLETICS	52,475	SF	\$3.83		\$200,960	2001	40
D2050	AIR COMPRESSOR PACKAGE (AVERAGE SIZE)	1	SYS	\$6,456.49		\$6,456	2001	25
D3040	CONDENSATE RECEIVER	1	SYS	\$9,504.01		\$9,504	2001	15
D3040	EXHAUST FAN - PROPELLER TYPE OR SIMILAR	8 5.1.1	EA	\$1,357.34		\$10,859	2001	20

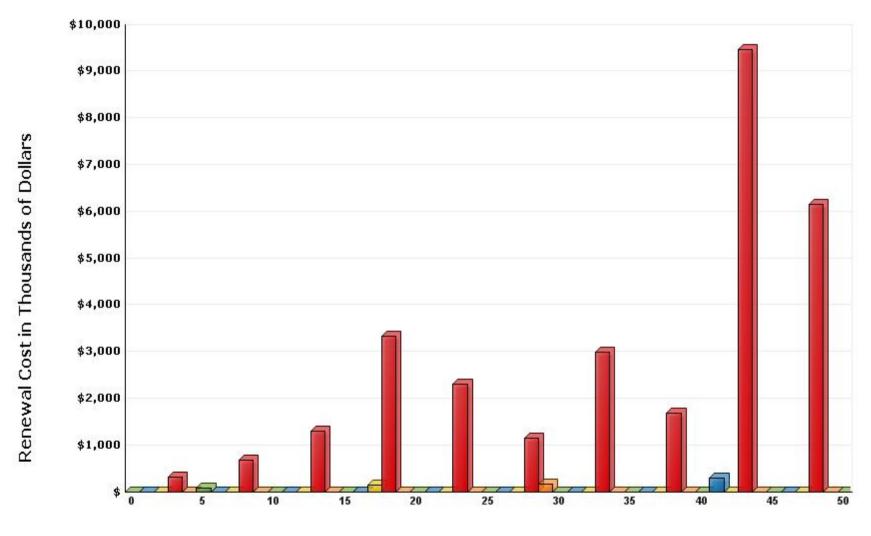
### Life Cycle Model

### **Building Component Summary**

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D3040	HVAC SYSTEM - GYMNASIUM / ATHLETICS	52,475	SF	\$29.18		\$1,531,420	2001	25
D3040	BASE MTD. PUMP - UP TO 15 HP	10	HP	\$3,175.77		\$31,758	2001	20
D3040	BASE MTD. PUMP - 15 HP TO 50 HP	20	HP	\$1,142.19		\$22,844	2001	20
D4010	FIRE SPRINKLER SYSTEM	52,475	SF	\$6.86		\$360,036	2001	80
D4010	FIRE SPRINKLER HEADS	52,475	SF	\$0.38		\$19,791	2001	20
D4020	FIRE PUMP - ELECTRIC (UP TO 750 GPM)	500	GPM	\$86.64		\$43,322	2001	25
D5010	ELECTRICAL SYSTEM - GYMNASIUM / ATHLETICS	52,475	SF	\$6.75		\$354,243	2001	50
D5010	ELECTRICAL SWITCHGEAR 277/480V	1,200	AMP	\$39.56		\$47,476	2001	20
D5010	TRANSFORMER, DRY, 480-208V (30-150 KVA)	262	KVA	\$96.00		\$25,151	2001	30
D5010	VARIABLE FREQUENCY DRIVE (UP TO 10 HP)	10	HP	\$1,020.08		\$10,201	2001	12
D5010	VARIABLE FREQUENCY DRIVE (10 - 50 HP)	20	HP	\$388.17		\$7,763	2001	12
D5020	EXIT SIGNS (CENTRAL POWER)	44	EA	\$163.78		\$7,206	2001	20
D5020	LIGHTING - GYMNASIUM / ATHLETICS	52,475	SF	\$4.85		\$254,660	2001	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	52,475	SF	\$2.61		\$137,201	2001	15
D5040	GENERATOR, DIESEL (50-100KW)	75	KW	\$717.93		\$53,845	2001	25
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	1	LOT	\$5,940.22		\$5,940	2001	20
						\$6,793,832		

# **Life Cycle Model Expenditure Projections**

**MURP: MURPHY STRENGTH CENTER** 



**Future Year** 

**Average Annual Renewal Cost Per SqFt \$4.38** 

### **FACILITY CONDITION ANALYSIS**

SECTION 6

# PHOTOGRAPHIC LOG

### Photo Log - Facility Condition Analysis

Photo ID No	Description	Location	Date
MURP001a	Combination of brick, concrete, and glass exterior	Eastern stadium side view	9/17/2009
MURP001e	Sprinkler head	Third floor, mechanical room	9/17/2009
MURP002a	Translucent skylight system	Central roof	9/17/2009
MURP002e	Air handling equipment	Third floor, mechanical room	9/17/2009
MURP003a	Translucent skylight system	Central roof	9/17/2009
MURP003e	Compressor	Third floor, mechanical room	9/17/2009
MURP004a	White JP Stevens membrane roof application	Roof	9/17/2009
MURP004e	Domestic water heater	Third floor, mechanical room	9/17/2009
MURP005a	Carpeted floors	Banquet hall 214	9/17/2009
MURP005e	Fire extinguisher and strobe	Third floor, mechanical room	9/17/2009
MURP006a	Artificial turf and rubber matted floor finish	First floor, workout area	9/17/2009
MURP006e	Domestic water heater	Third floor, mechanical room	9/17/2009
MURP007a	Exterior glazing	Western side	9/17/2009
MURP007e	Pump equipment	Third floor, mechanical room	9/17/2009
MURP008a	Combination of brick, concrete, and glass exterior	Southern side	9/17/2009
MURP008e	Heat exchanger	Third floor, mechanical room	9/17/2009
MURP009a	Combination of brick, concrete, and glass exterior	Eastern stadium field side	9/17/2009
MURP009e	Lavatory	Second floor, room 208	9/17/2009
MURP010a	Combination of brick, concrete, and glass exterior	Northeastern view	9/17/2009
MURP010e	Urinal	Second floor, room 208	9/17/2009
MURP011a	Concrete and glazing facade	Northern side	9/17/2009
MURP011e	Water closet	Second floor, room 208	9/17/2009
MURP012a	Outdoor observation deck and bow of pirate ship	Eastern side	9/17/2009
MURP012e	Strobe and interior lighting	Second floor, room 208	9/17/2009
MURP013a	Combination of brick, concrete, and glass exterior	Northern side	9/17/2009
MURP013e	Exit signage	Second floor, 218	9/17/2009
MURP014a	Glazed exterior with enclosed elevated walkway to Minges	Northwestern side	9/17/2009
MURP014e	Lavatory and water closet	Second floor, restroom	9/17/2009
MURP015a	Combination of brick, concrete, and glass exterior	Southern side	9/17/2009
MURP015e	Stainless steel sink	Second floor, kitchen	9/17/2009
MURP016e	Exhaust fans	Second floor, room 215	9/17/2009
MURP017e	Secondary electrical panel and transformer	Second floor, room 215	9/17/2009

### Photo Log - Facility Condition Analysis

Photo ID No	Description	Location	Date
MURP018e	Service sink	Second floor, janitor's closet	9/17/2009
MURP019e	Electrical distribution equipment	First floor, room 115	9/17/2009
MURP020e	Condensate return system	First floor, room 114	9/17/2009
MURP021e	Elevator machine and controller	First floor, room 116	9/17/2009
MURP022e	Fire alarm panels	First floor, room 111	9/17/2009
MURP023e	Interior lighting	First floor, room 109	9/17/2009
MURP024e	Thermostats	First floor, room 109	9/17/2009
MURP025e	Fire pump	First floor, room 123	9/17/2009
MURP026e	Fire pump controller	First floor, room 123	9/17/2009
MURP027e	Piping and automatic lavatory controller	First floor, room 103	9/17/2009
MURP028e	Exterior lighting	Exterior	9/17/2009
MURP029e	Exterior lighting	Site	9/17/2009
MURP030e	Exterior lighting	Exterior	9/17/2009
MURP031e	Transformer	Site	9/17/2009
MURP032e	Emergency generator	Site	9/17/2009









MURP001A.jpg

MURP001E.jpg

MURP002A.jpg

MURP002E.jpg









MURP003A.jpg

MURP003E.jpg

MURP004A.jpg

MURP004E.jpg









MURP005A.jpg

MURP005E.jpg

MURP006A.jpg

MURP006E.jpg









MURP007A.jpg

MURP007E.jpg

MURP008A.jpg

MURP008E.jpg









MURP009A.jpg

MURP009E.jpg

MURP010A.jpg

MURP010E.jpg

### Facility Condition Analysis - Photo Log









MURP011A.jpg

MURP011E.jpg

MURP012A.jpg

MURP012E.jpg









MURP013A.jpg

MURP013E.jpg

MURP014A.jpg

MURP014E.jpg









MURP015A.jpg

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### Facility Condition Analysis - Photo Log









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MURP030E.jpg

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