## UNIVERSITY OF CALIFORNIA, SAN DIEGO PRICE CENTER-WEST

**ASSET NUMBER: 6701** 

**FACILITY CONDITION ANALYSIS** 

**SEPTEMBER 15, 2010** 





#### **TABLE OF CONTENTS**

Section 1:	GENERAL ASSET INFORMATION	
A.	Asset Executive Summary	1.1.1
	Asset Summary	
	Inspection Team Data	
D.	Facility Condition Analysis - Definitions	
	Material and Labor Cost Factors and Additional Markups	
	Facility Condition Needs Index	
	3. Project Number	
	4. Project Classification	
	5. Priority Class	
	6. Category Code	
	7. Priority Sequence by Priority Class	
	8. Project Subclass Type	
	9. Drawings / Project Locations	1.4.4
	10. Life Cycle Cost Model Description and Definitions	
_	11. Photo Number	
E.	Category Code Report	1.5.1
A. B. C.	Detailed Project Totals – Matrix with FCNI Data and Associated Charts  Detailed Projects by Priority Class / Priority Sequence  Detailed Projects by Project Classification	2.2.1 2.3.1
D.	Detailed Projects by Project Subclass - Energy Conservation	2.4.1
E.	Detailed Projects by Category / System Code	2.5.1
Section 3:	SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST	3.1.1
Section 4:	DRAWINGS / PROJECT LOCATIONS	
Section 5:	LIFE CYCLE MODEL SUMMARY AND PROJECTIONS	
	Building Component Summary  Expenditure Projections	
Section 6:	PHOTO LOC	611

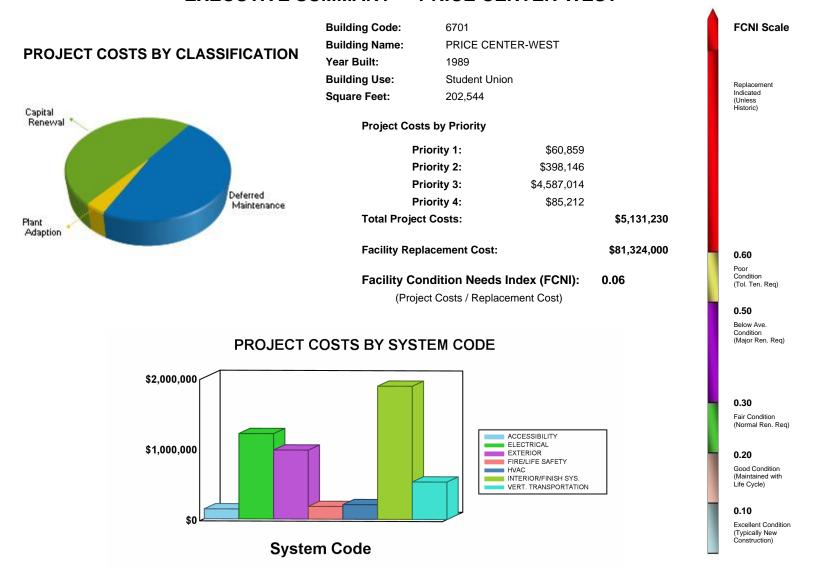
### **FACILITY CONDITION ANALYSIS**



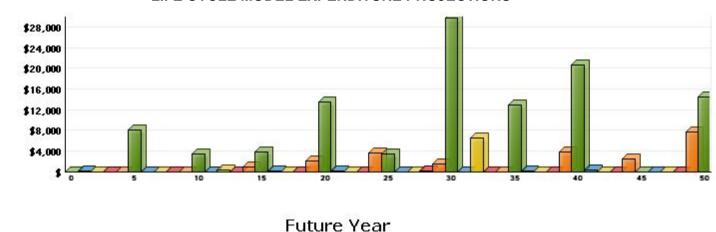
## **GENERAL ASSET INFORMATION**

Renewal Cost (Thousands of Dollars)

#### **EXECUTIVE SUMMARY - PRICE CENTER-WEST**



#### LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt \$5.87



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

Built in 1989, Price Center-West is a steel and concrete-framed retail / office / student union building. The majority of the retail space is devoted to the bookstore and to numerous food court dining businesses. The dining areas belong to the business owners, who are also responsible for their area's finishes and maintenance. This building is composed of three wings. The two-story north wing is separate from the three-story combined east and south wings. The three wings together enclose three sides of a paved plaza, which has a semi-circular, tiered seating area as its central focus. The fourth or west side of the plaza is a V-shaped sloped lawn pointing into the plaza area and lined with cascading fountain pools along its south side and cascading retaining walls and pedestrian steps along the north leg of the V. All three wings face this plaza, with open-frame wood trellises atop the open-air walkways that line the plaza facade of the three wings. Originally a freestanding complex, the east facade of the east wing now abuts the west facade of the 2008 Price Center-East addition, creating a much larger complex. Located near the middle of the University of California, San Diego campus in San Diego, California, the Price Center-West portion of this complex has a listed area of 202,544 gross square feet.

Information for this report was gathered during a site inspection that concluded on July 13, 2010.

#### SITE

The slightly sloping site is well landscaped and has many areas of pedestrian paving, in addition to the central plaza. The landscaping and paving are generally in good condition. However, a section of concrete sidewalk at the west end of the north wing is subsiding. This area is above the theater projection room, so the recommended remediation work is included in the Exterior section of this report. No other site upgrades are proposed.

#### EXTERIOR STRUCTURE

The exterior of the multi-faceted Price Center-West structure consists mostly of travertine, in overall good condition. Except for one slightly rounded area of glazed roofing at the tower element at the juncture of the east and south wings, the roofing is flat. There are relatively small areas of artificial stucco covered rooftop pop-up elements and some artificial stucco accent panels mixed in with the travertine. Exterior glazing is generally glass and aluminum storefront, including the majority of the exterior doors, and all are in overall good condition, except for reported leaks in the tower glazing system at the east-south wing intersection.

There is evidence of water infiltration through the basement foundation wall at the west end of the theater. Excavation and waterproofing system upgrades are recommended. Improve the slope of grade away from the foundation prior to restoring the landscaping and sidewalk. Also, the concrete sidewalk at the west end of the northwest wing is subsiding. This concrete should be removed, the cause of the subsidence determined, and new concrete installed.

It is anticipated that the applied finishes on the pitched metal roof applications will reach the end of their expected service life cycle within the ten-year window of this assessment, and much of this roofing



currently has mold on it. There are numerous locations where the base flashing or the expansion joint flashing has been torn or punctured, primarily on the south wing. Future budget modeling should include a provision for the replacement of the finish on the metal roofing and repairs to the damaged flashing.

The glazing in the curved section of exterior wall at the junction of the east and south wings (the "elbow") reportedly leaks. Repairs or replacements should be made to this glazing to restore the integrity of the weathertight building envelope.

The applied finish on the wood trellis work over the exterior walkways of most of this building is deteriorating, as are some of the wood trellis pieces themselves. Deteriorated wood members should be removed and replaced, and all of the applied finishes on these wood members should be renewed. The University should consider replacing the wood trellis members with a synthetic material.

It is recommended that the built-up roofing system be replaced within the next five years. The existing stress conditions around the seams and at the perimeter flashing will lead to failure if left unattended. Replace the stressed roof and flashing with a similar application. Replacement of the skylight systems or their flashing may also be necessary.

#### INTERIOR FINISHES / SYSTEMS

The building interior is mostly large open spaces, the bookstore, a ballroom, a theater, and dining arcades. There are also numerous offices and student study and meeting spaces. The floor plan tends to flow from one major space to another with small office and meeting areas attached to the sides of the major uses. Offices are generally carpeted and have painted walls and lay-in tile ceilings. Dining areas tend to have concrete floors and exposed interior structures.

Most walls are painted and in overall fair condition. The acoustical wall panels on the rear wall of the theater are coming loose. Repainting of the interior walls should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts, as well as repairing or replacing damaged theater acoustical wall panels.

Most of the floor areas are carpeted and in overall fair condition. However, carpeting in facilities with similar traffic patterns tends to need replacement every five to seven years. Carpeting upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts in this facility. Also, the ballroom wood flooring, which is currently in good condition, will need to be refinished within the next five years.

Ceiling finish applications vary between aging ceiling tile, paint, and exposed structure. Most of the ceiling tile is in overall poor condition. The ceilings should be repainted and the ceiling tiles replaced within the next ten years.

Interior doors are generally in overall good condition, except for the deteriorating ballroom entry doors. These doors are aged and damaged and should be replaced. Install modern rated units that are architecturally appropriate.



#### **ACCESSIBILITY**

Numerous provisions for handicapped accessibility into and through this building have been made, including at-grade entrances, ramped entrances, wheelchair accessible restrooms, ADA compliant elevators, and lever door hardware. However, several accessibility upgrades are still proposed.

The semicircular tired seating area in the central plaza has numerous locations where there is a drop-off, and the western end of the steps blends into the sloped paving of the plaza. These conditions create potential tripping hazards, especially to those with limited or no eyesight. It is proposed that a guardrail system be created to mitigate these hazards.

Accessibility legislation requires that building amenities be generally accessible to all persons. The configuration of many of the break room base cabinets is a barrier to wheelchair accessibility. A wheelchair accessible section should be incorporated into each non-compliant base cabinet. Also, the single level configuration of the drinking fountains is a barrier to accessibility. All single level drinking fountains should be replaced with dual level, refrigerated units.

ADA legislation also requires that places of assembly be accessible to the handicapped. The theater lacks an assistive listening system for the hearing impaired. Install transmitter and headphone receiver sets to accommodate those who require audible assistance.

The theater stage is inaccessible from the house seating to anyone in a wheelchair. In order to provide adequate access, it is recommended that a wheelchair ramp be installed at the stage. Also, the stage steps lack a second handrail. It is recommended that a second ADA compliant painted metal handrail be installed at both sets of steps.

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

#### **HEALTH**

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

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



#### FIRE / LIFE SAFETY

The eastern edge of the solar panels on the north end of the east wing roof is very close to the roof edge, creating a dangerously narrow walkway. It is recommended that a painted metal guardrail be installed along the east edge of this roof area.

It is not apparent that all of the glazing in the glass and aluminum doors of this building has safety labels. The installation of safety glazing is recommend at all of the glass and aluminum doors where it cannot be determined that the existing glazing is safety rated.

This facility appears to have been constructed in substantial compliance with building codes. There are numerous exits, and these are appropriately located. Therefore, no exiting projects are proposed at this time.

This facility is equipped with a digitally addressable fire alarm and detection system that is interfaced with the HVAC systems. Both local smoke / fire detectors and manual pull stations serve this system. Manual pull stations are installed at appropriate intervals along designated egress routes. Both audible horns and visible strobes provide local alarms for the system. This PIV / Notifier brand fire alarm and detection system is suitable for more than ten future years of service.

The interior space is fully equipped with automated fire suppression with original metallic-triggered sprinkler heads. Infrastructure firewater pressure is presumed adequate for the system, since there is no fire pumping equipment. While the majority of the piping, tamper detection, flow detection, and infrastructure interface components are suitable for extended future use beyond the purview of this assessment, the sprinkler heads are recommended for replacement based upon obsolescence and typical life cycle depletion.

Although exit signage varies from area to area, the lighted (or self-luminous) exit signage is liberally applied and relatively energy efficient. The exit signage is battery type in some locations and self-luminous in others. In addition, the partial emergency power grid system supplies power to unit devices. Egress lighting is provided by a combination of select normal fixtures alternately powered by the partial emergency power distribution grid, and also by unitary egress lighting units with self-contained battery power. Generally, the exit signage and egress lighting system components are satisfactory for ten additional years of service, so no wholesale system redesign is recommended at this time.

A partial emergency power grid is present in the facility. This system is supplied by a district generator located near Lisa Laboratory and is fed through automatic transfer switches located in the basement electrical vault in Price Center-East. No modification of this arrangement is recommended at this time.

#### **HVAC**

Thermal media is supplied to the facility via campus infrastructure thermal media distribution systems. Media consists of chilled water for space cooling and high temperature / high pressure hot water for space heating, reheat, and domestic water production. Therefore, this structure has no boilers or chillers. Local heating media is generated by shell-and-tube heat exchangers using the high temperature / high pressure infrastructure media as the source of thermal energy. Both heating hot water and chilled water are circulated by electrically driven high efficiency pumps. Insulated steel pipe distributes thermal media throughout the facility. Generally, media distribution piping, pumping equipment, and heat exchange



elements are satisfactory for ten additional years of service given normal routine maintenance. Some of this equipment was recently updated as part of the Bookstore Expansion project and general Bookstore renovation efforts in recent years.

The HVAC system is a variable volume low pressure forced-air design with variable volume air terminals (some with hot water reheat). Central station handling units on the rooftops and within enclosed interior mechanical rooms are electrically driven by high efficiency drive units ranging in size between 10 hp and 25 hp. Air handlers contain hot and chilled water coils to temper the delivery air and supply medium and low pressure air to local terminal units which act to control local space temperatures. The systems serving the Bookstore and Bookstore Expansion areas were upgraded and restored during recent years. The original air handlers located within indoor machine rooms are generally serviceable and have at least ten additional years of service life. Duct is generally metallic design with internal insulation, with the exception of new duct installed in the Bookstore Expansion space. The duct and terminal distribution elements of the system are generally satisfactory for ten additional years of service. The HVAC control system consists of a combination of both Johnson Controls Metasys elements and Siemens Apogee elements (in the newer segment of construction). Food service exhaust hood make-up air tempering units also use hot water to pre-heat the make-up air. General space exhaust fans and dedicated food service exhaust fans ventilate the facility. In addition, some relief air fans enforce proper air exchange within administrative segments of the facility.

Generally, this largely original HVAC system is relatively efficient and has sustainable remaining life. The recently renovated segment of the system has substantial remaining sustainable life. However, there is some noted deterioration in select original elements of the system which should be corrected by Capital Projects due to their magnitude. Rooftop air handlers on the roof of Buildings 2, 3, and 4 are original and showing signs of age related deterioration. Restoration and repair of the rooftop air handlers is necessary. Work should include re-insulation of rooftop piping where it is damaged, repair of door gaskets and locks, repair of cooling coil condensation collection pans, and restoration of any deteriorated internal insulation. In addition, the repair of any leaks or deteriorated isolation on control valves is recommended. This work will adequately restore the units and sustain their life until their practical lifespans have been depleted.

Exhaust fans are partially maintained by local maintenance staff and partially maintained by tenants. The roof-mounted exhaust fans range widely in age and condition. Some of the original exhaust fans maintained by facility staff are corroded and showing signs of metal fatigue. The statistical life cycle for an exhaust fan is approximately twenty years. At or beyond this time, exhaust fans can incur high maintenance costs that justify replacement. While many of the original fans should remain serviceable, a small component of the high use and rough-service fans should be replaced to avert the potential for failure and potential negative impact on other aspects of the HVAC design.

#### **ELECTRICAL**

Power is supplied to this facility from a recently installed 480 volt substation located in Price Center-East. The building service capacity is estimated to be about 2,000 kVA, with 4,000 amps, 480 volts. Locally, a primary 4,000 amp, 480 volt primary distribution switchboard feeds power to numerous dry-type step transformers and secondary distribution switchboards. Some of these are located in the central switchroom, but others are located within the various electrical rooms of the four segments of the building. There are at least eleven dedicated tenant power distribution systems that are separately



metered. The distribution equipment was manufactured by General Electric and has sustainable life. No major primary power equipment upgrades are recommended within ten future years, given normal routine maintenance efforts.

The electrical distribution network consists of both 480/277 volt and 208Y120 volt circuitry. Equipment and lighting loads are carried by 480/277 volt systems, while local user loads are served by the 208Y120 volt power distribution networks. The basic elements of the electrical distribution system (conductors, distribution panels, breaker panels, connects, etc.) are satisfactory for extended future use. However, the terminal devices are due for replacement based upon typical maintenance practices and schedules. Aging devices, including wall switches and receptacles, are potential shock and fire hazards. The replacement of all worn or damaged switches, receptacles, and cover plates is needed, as is the testing of power panels for proper operation followed by replacement of any faulty breakers. To enhance operational safety, power panel directories should be checked and updated as appropriate to reflect accurate load designations.

While the vast majority of the building has received upgraded lighting over the years, some areas have been overlooked for lighting replacement. Some of these areas have received elemental component replacements, but retain old and outdated fixtures that are far less efficient than modern design fixtures. Completion of the interior lighting restoration is recommended to unify the interior appearance and to eliminate any remaining use of incandescent fixtures. Replace aged and / or inefficient light fixtures with modern fixtures of the latest energy-efficient design. Select lamps with the same color temperature and rendering index for lighting uniformity. Install occupancy sensors in select areas for additional energy conservation. Brace all new lighting systems for seismic activity.

Generally, exterior lighting fixtures are in satisfactory condition. Recent Bookstore area improvements included replacement and architectural upgrade of the exterior fixtures. At this time, it is apparent that the lighting was not connected to the Honeywell DCS central lighting control system. It is typical that these exterior lights operate 24/7 due to lack of practical control. Troubleshooting and reconnection of the Bookstore exterior lighting system to the Honeywell DCS central computerized relay control system is recommended to rectify the problem, save energy, and enhance fixture / lamp life.

Outdoor power is supplied to the central plaza amphitheater stage area from Building 4. To control this power, a relay system has been installed. Operation of the power relay to this outdoor power source requires that users enter secured space. To simplify control of the outdoor power at the stage area, the installation of a wireless remote control system is recommended. The control should have programmable user security passkey protection and should be industrial-grade to assure reliable operation.

#### **PLUMBING**

The facility is provided domestic water from the public utility through a traditional turbine-type water meter and backflow prevention system. The building's distribution system has central pressure control and does not require a pressure booster system. Water supply piping is hard-drawn copper construction with jacketed fiberglass pipe insulation. The piping network is generally original. A copper water supply system of this design should last decades before needing any major repair, so no water supply network restoration needs are foreseen within the ten years considered by this assessment.



The sanitary and storm drain piping network is hubless iron construction. These systems are gravity flow, and no significant pumping systems are installed. Food preparation and cleanup areas have local grease interceptors serviced by the tenants. Since this design of piping network should last for many decades with no trouble, no drain piping recommendations are offered at this time.

Natural gas is distributed by black steel piping through multiple food service tenant gas meters. Both the piping and metering arrays are generally original, but these design systems should last for decades. No gas service work is recommended at this time.

Plumbing base fixtures are high quality and original. Water control elements have been updated in recent years and feature pre-mix faucets and automated flush valves. Outside of any architecturally oriented space / finish modifications, the restroom fixtures, food service plumbing fixtures, and fixture water control elements are suitable for extended future use. No obsolescence, efficiency, or deterioration based plumbing fixture upgrade recommendations are suggested for the next ten years.

Price Center-East provides the majority of centrally distributed domestic hot water for this facility. Some food service operations have booster heaters and similar equipment associated with their operations, but this equipment is the property and maintenance responsibility of these tenants. Therefore, this equipment is not included in future cost planning considerations of this assessment. One small electric water heater serving semi-private restrooms was installed in 2005. This low use element should last at least ten additional years.

#### **VERTICAL TRANSPORTATION**

Three three-stop hydraulic passenger elevators (each with single-door geometry) are installed in this facility, but only two are used. The elevator located in the western extremity of Building 2 is not considered by this report, since Price Center-East elevators are nearby, and this unit is reportedly no longer needed. The centrally located Bookstore elevator and the outdoor access elevator located off of Building 3 are presently used (along with elevators in the connected Price Center-East). Comprehensive modernization of the currently used hydraulic elevators is recommended, based upon the probable age of the primary mechanical components of these systems (there were no reports of comprehensive mechanical renovations to these elevators). Modernization should include the installation of a new hydraulic machine, pump, valve, doors and hardware, car finishes, roller guides, and solid state controllers. The elevators have already received accessibility upgrades within the cars, including updated operating panels, audible notification, emergency lights, and hands-free phones. Renovation work should also include any currently required pits or machine room 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:** July 13, 2010

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

 NAME
 POSITION
 SPECIALTY

 Doug Fredendall
 Facility Analyst
 Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Life Safety / Health

 Norm Teahan, RA, AIA, NCARB
 Project Architect
 Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

**FACILITY CONTACTS:** 

NAME POSITION

Jeff Turner Senior Vice President, Brailsford & Dunlavey
Matt Bohannon Project Manager, Brailsford & Dunlavey

Paul Terzino Director, UC San Diego

**REPORT DEVELOPMENT:** 

Report Development by: ISES Corporation

2165 West Park Court

Suite N

Stone Mountain, GA 30087

Contact: Norman Teahan, Project Manager

770-879-7376, ext. 153



#### D. FACILITY CONDITION ANALYSIS - DEFINITIONS

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

#### 1. MATERIAL AND LABOR COST FACTORS AND ADDITIONAL MARKUPS

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

GLOBAL MARKUP PERCENTAGES		R.S. MEANS
Local Labor Index:	107.5 %	of National Average
Local Materials Index:	102.4 %	of National Average
General Contractor Markup:	25.0 %	Contractor profit and overhead, bonds and insurance

Arch / Fra

Professional Fees:

16.0 % Arch. / Eng. Firm design fees and in-house design cost

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

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

FCNI = Deferred Maintenance +

Capital Renewal + Plant Adaption
Plant / Facility Replacement Cost

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

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

0001 - Asset Identification Number

EL - System Code, EL represents Electrical

Seguential Assignment Project Number by Category / System

### UNIVERSITY OF CALIFORNIA, SAN DIEGO

**Facility Condition Analysis** 

Section One



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

- 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).

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

PRIORITY 1 - Currently Critical (Immediate)

Projects in this category require immediate action to:

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

PRIORITY 2 - Potentially Critical (Year One)

Projects in this category, if not corrected expeditiously, will become critical within a year. Situations in this category include:

- a. intermittent interruptions
- b. rapid deterioration
- c. potential safety hazards

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

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

PRIORITY 4 - Recommended (Years Six to Ten)

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



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

5 = Component DescriptionA = Element Description

CATEGORY CODE*		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

<sup>\*</sup>Refer to the Category Code Report starting on page 1.5.1.

#### 7. PRIORITY SEQUENCE BY PRIORITY CLASS

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

Example:	PRIORITY CLASS 1				
	Code	Project No.	Priority Sequence		
	HV2C	0001HV04	01		
	PL1D	PL1D 0001PL02 0			
		PRIORITY C	LASS 2		
	Code	Project No.	Priority Sequence		
·	IS1E	0001IS06	03		
	EL4C	0001EL03	04		

#### 8. PROJECT SUBCLASS TYPE

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



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

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

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

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

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

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

#### 11. PHOTO NUMBER (Shown in Section 6)

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

Example: 0001006e

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



	CATEGORY CODE REPORT				
CODE	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 THE ADA.		
AC3E	INTERIOR PATH OF TRAVEL	RESTROOMS/ BATHROOMS	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms that are an integral part of residential suites are catalogued under HC4A.		
AC3F	INTERIOR PATH OF TRAVEL	DRINKING FOUNTAINS	Upgrading/replacing drinking fountains for reasons of accessibility.		
AC3G	INTERIOR PATH OF TRAVEL	PHONES	Replacement/modification of public access telephones.		
AC4A	GENERAL	FUNCTIONAL SPACE MODIFICATIONS	This category covers all necessary interior modifications necessary to make the services and functions of a building accessible. It includes installation of assistive listening systems, modification of living quarters, modifications to laboratory workstations, etc. Bathrooms that are integral to efficiency suites are catalogued here.		
AC4B	GENERAL	OTHER	All accessibility issues not catalogued elsewhere.		
SYSTEM 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 step-down and isolation transformers.		
EL3B	SECONDARY DISTRIBUTION	DISTRIBUTION NETWORK	Includes conduit, conductors, sub-distribution panels, switches, outlets, etc. Complete interior rewiring of a facility is catalogued here.		
EL3C	SECONDARY DISTRIBUTION	MOTOR CONTROLLERS	Mechanical equipment motor starters and control centers.		
EL4A	DEVICES AND FIXTURES	EXTERIOR LIGHTING	Exterior building lighting fixtures, including supply conductors and conduit.		
EL4B	DEVICES AND FIXTURES	INTERIOR LIGHTING	Interior lighting fixtures (also system wide emergency lighting), including supply conductors and conduits.		
EL4C	DEVICES AND FIXTURES	LIGHTING CONTROLLERS	Motion sensors, photocell controllers, lighting contactors, etc.		



	CATEGORY CODE REPORT					
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION			
EL4D	DEVICES AND FIXTURES	GFCI PROTECTION	Ground fault protection, including GFCI receptacles and breakers.			
EL4E	DEVICES AND FIXTURES	LIGHTNING PROTECTION	Lightning arrestation systems including air terminals and grounding conductors.			
EL5A	EMERGENCY POWER SYSTEM	GENERATION/ DISTRIBUTION	Includes generators, central battery banks, transfer switches, emergency power grid, etc.			
EL6A	SYSTEMS	UPS/DC POWER SUPPLY	Uninterruptible power supply systems and DC motor-generator sets and distribution systems.			
EL7A	INFRASTRUCTURE	ABOVE GROUND TRANSMISSION	Includes poles, towers, conductors, insulators, fuses, disconnects, etc.			
EL7B	INFRASTRUCTURE	UNDERGROUND TRANSMISSION	Includes direct buried feeders, ductbanks, conduit, manholes, feeders, switches, disconnects, etc.			
EL7C	INFRASTRUCTURE	SUBSTATIONS	Includes incoming feeders, breakers, buses, switchgear, meters, CTs, PTs, battery systems, capacitor banks, and all associated auxiliary equipment.			
EL7D	INFRASTRUCTURE	DISTRIBUTION SWITCHGEAR	Stand-alone sectionalizing switches, distribution switchboards, etc.			
EL7F	INFRASTRUCTURE	AREA AND STREET LIGHTING	Area and street lighting systems, including stanchions, fixtures, feeders, etc.			
EL8A	GENERAL	OTHER	Electrical system components not catalogued elsewhere.			
SYSTEM DE	ESCRIPTION: EXTERIOR					
ES1A	FOUNDATION/FOOTING	STRUCTURE	Structural foundation improvements involving structural work on foundation wall/footing, piers, caissons, and piles, including crack repairs, shoring, and pointing			
ES1B	FOUNDATION/FOOTING	DAMPPROOFING/ DEWATERING	Foundation/footing waterproofing work, including, damp-proofing, dewatering, insulation, etc.			
ES2A	COLUMNS/BEAMS/ WALLS	STRUCTURE	Structural work to primary load-bearing structural components aside from floors, including columns, beams, bearing walls, lintels, arches, etc.			
ES2B	COLUMNS/BEAMS/ WALLS	FINISH	Work involving restoration of the appearance and weatherproof integrity of exterior wall/structural envelope components, including masonry/pointing, expansion joints, efflorescence and stain removal, grouting, surfacing, chimney repairs, etc.			
ES3A	FLOOR	STRUCTURE	Work concerning the structural integrity of the load supporting floors, both exposed and unexposed, including deformation, delamination, spalling, shoring, crack repair, etc.			
ES4A	ROOF	REPAIR	Work on waterproof horizontal finish (roof) involving repair and/or limited replacement (<40% total), including membrane patching, flashing repair, coping caulk/resetting, PPT wall parging/coating, walkpad installation, skylight and roof hatch R&R, etc.			
ES4B	ROOF	REPLACEMENT	Work involving total refurbishment of roofing system, including related component rehab.			
ES5A	FENESTRATIONS	DOORS	Work on exterior exit/access door, including storefronts, airlocks, air curtains, vinyl slat doors, all power/manual operating hardware (except handicapped), etc.			
ES5B	FENESTRATIONS	WINDOWS	Work on exterior fenestration closure and related components, including glass/metal/wood curtain walls, fixed or operable window sashes, glazing, frames, sills, casings, stools, seats, coatings, treatments, screens, storm windows, etc.			
ES6A	GENERAL	ATTACHED STRUCTURE	Work on attached exterior structure components not normally considered in above categories, including porches, stoops, decks, monumental entrance stairs, cupolas, tower, etc.			
ES6B	GENERAL	AREAWAYS	Work on attached grade level or below structural features, including subterranean lightwells, areaways, basement access stairs, etc.			
ES6C	GENERAL	TRIM	Work on ornamental exterior (generally non-structural) elements, including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.			
ES6D	GENERAL	SUPERSTRUCTURE	Finish and structural work on non-standard structures with exposed load-bearing elements, such as stadiums, bag houses, bleachers, freestanding towers, etc.			



	CATEGORY CODE REPORT				
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION		
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere, including finish and structural work on freestanding boiler stacks.		
SYSTEM DE	SCRIPTION: FIRE / LIFE SAFE	тү			
FS1A	LIGHTING	EGRESS LIGHTING/EXIT SIGNAGE	R&R work on exit signage and packaged AC/DC emergency lighting.		
FS2A	DETECTION/ALARM	GENERAL	Repair or replacement of fire alarm/detection system/components, including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.		
FS3A	SUPPRESSION	SPRINKLERS	Repair or installation of water sprinkler type automatic fire suppressions, including wet-pipe and dry-pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.		
FS3B	SUPPRESSION	STANDPIPE/HOSE	Repair or installation of standpipe system or components, including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.		
FS3C	SUPPRESSION	EXTINGUISHERS	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.		
FS3D	SUPPRESSION	OTHER	Other fire suppression items not specifically categorized elsewhere, including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.		
FS4A	HAZARDOUS MATERIALS	STORAGE ENVIRONMENT	Installation or repair of special storage environment for the safe holding of flammable or otherwise dangerous materials/supplies, including vented flammables storage cabinets, holding pens/rooms, cages, fire safe chemical storage rooms, etc.		
FS4B	HAZARDOUS MATERIALS	USER SAFETY	Improvements, repairs, installation, or testing of user safety equipment, including emergency eyewashes, safety showers, emergency panic/shut-down system, etc.		
FS5A	EGRESS PATH	DESIGNATION	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.		
FS5B	EGRESS PATH	DISTANCE/ GEOMETRY	Work involving remediation of egress routing problems, including elimination of dead end corridors, excessive egress distance modifications, and egress routing inadequacies.		
FS5C	EGRESS PATH	SEPARATION RATING	Restoration of required fire protective barriers, including wall rating compromises, fire-rated construction, structural fire proofing, wind/safety glazing, transom retrofitting, etc.		
FS5D	EGRESS PATH	OBSTRUCTION	Clearance of items restricting the required egress routes.		
FS5E	EGRESS PATH	STAIRS RAILING	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.		
FS5F	EGRESS PATH	FIRE DOORS/ HARDWARE	Installation/replacement/repair of fire doors and hardware, including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.		
FS5G	EGRESS PATH	FINISH/FURNITURE RATINGS	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.		
FS6A	GENERAL	OTHER	Life/fire safety items not specifically categorized elsewhere.		
SYSTEM DE	SCRIPTION: 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.		
НЕЗА	REFUSE	GENERAL	Issues related to the collection, handling, and disposal of refuse.		
HE4A	SANITATION EQUIPMENT	LABORATORY AND PROCESS	Includes autoclaves, cage washers, steam cleaners, etc.		
HE5A	FOOD SERVICE	KITCHEN EQUIPMENT	Includes ranges, grilles, cookers, sculleries, etc.		
HE5B	FOOD SERVICE	COLD STORAGE	Includes the cold storage room and all associated refrigeration equipment.		
HE6A	HAZARDOUS MATERIAL	STRUCTURAL ASBESTOS	Testing, abatement, and disposal of structural and building finish materials containing asbestos.		



CODE CODE DESCRIPTION TEsting, shatement, and deposed of mechanical insulation materials containing advancate. DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION: HVAC DES			CATEG	ORY CODE REPORT	
HERO HAZARDOUS MATERIAL PCBs Includes testing, denotion, deposal, and cleanup of PCB contaminated substances.  HERO HAZARDOUS MATERIAL FUEL STORAGE Includes annothing, tremposit, and replacement of above and believe ground fuel storage and distribution systems. Also recibile testing and disposal of contaminated substances.  HERE HAZARDOUS MATERIAL LEAD PAINT Testing, removal, and disposal of substances are contaminated solution.  HERE HAZARDOUS MATERIAL OTHER Handling, storage, and disposal of other hazardous materials.  HERE HAZARDOUS MATERIAL OTHER Handling, storage, and disposal of other hazardous materials.  HYTIA REATING CONTROLS  SYSTEM DESCRIPTION: HVAC  HYTIA NEATING ROBERSTACKS CONTROLS CONTROLS CONTROLS CONTROLS CONTROLS CONTROLS CONTROLS CONTROLS.  HYTIA NEATING RADIATORS CONTROLS C	CODE			DEFINITION	
HEGD HAZARDOUS MATERIAL LEAD PAINT Testing, removal, and replacement of above and below ground such stronge and distribution systems. Also includes testing and disposal of contaminated dolls.  HERE HAZARDOUS MATERIAL OTHER Handling, sonoge, and disposal of lead-based paint systems.  HERA GENERAL OTHER Handling, sonoge, and disposal of lead-based paint systems.  HERA GENERAL OTHER Handling, sonoge, and disposal of lead-based paint systems.  HERATING OCHTROLS SYSTEM DESCRIPTION: HVAC  HYVIA HEATING CONTROLS CONTECTORS CONTECTORS Including cast-ion radiators, fin substraints, fin substraints, and controls.  HYVIA HEATING CONTROLS CONTROLS CONTECTORS Including cast-ion radiators, fin substraints, substraints, and controls.  HYVID HEATING FUEL SUPPLYSTORAGE Storage and their related controls, flues, etc.  HYVIA COOLING CHILLER' COOLING CHILLER' COOLING CHILLER' COOLING CHILLER' COOLING HEAT REJECTION Replacement of calling teams, day coolers, are cooling, and heat rejection. Including models for one contents groups, including stanks and heat rejection. Includes connection of concentrating by system to cooling texeer.  HYVIA HEATING.COOLING WATER TEELETION Replacement of major retroll of HVAC systems.  HYVIA HEATING.COOLING WATER TEELETION Treatment of hat water, day coolers, are cooling, and heat rejection. Including contents groups are considerable system to cooling texeer.  HYVIA HEATING.COOLING WATER TEELETION Treatment of hat water, delived water for cooling purposes, related controls groups are considerable system to cooling texeer.  HYVIA HEATING.COOLING WATER TEELETION Treatment of hat water, delived water for cooling purposes, related controls groups are considerable systems to cooling texeer.  HYVIA HEATING.COOLING PACKAGE/SELF-CONTAINED UNITS REPLACE HYVIA AR ROYNEY HYVIA AR ROYNEY HYVIA AR ROYNEY AR HANDLERS FOR H	HE6B	HAZARDOUS MATERIAL	MECHANICAL ASBESTOS	Testing, abatement, and disposal of mechanical insulation materials containing asbestos.	
HESE HAZARDOUS MATERIAL LEAD PAINT Teeting, removal, and disposal of lead-based paint systems. HEFA CRAPOLUS MATERIAL COTHER Handle, strongs, and disposal of lead-based paint systems. HEFA CENERAL OTHER Health rolated issues not catalogued elsewhere.  SYSTEM DESCRIPTION: HVAC  HV1A HEATING CONTROLS  RADIATORS' CONVECTIORS Including stand-on or adiators, including sheer related stands, fluers, and controls.  HV1B HEATING CONTROLS CONVECTIORS Including cast-iron radiators, fin tube radiators, baseboard radiators, etc.  HV1D HEATING PLEASY CONVECTIORS Storage and or distribution of but for heating purposes, including lanks and piping networks and resided sea, delector/involution; HV1D HEATING PLEASY CONTROLS	HE6C	HAZARDOUS MATERIAL	PCBs	Includes testing, demolition, disposal, and cleanup of PCB contaminated substances.	
HESF HAZARDOUS MATERIAL OTHER Harding, storage, and disposal of other hazardous materials.  HE7A GENERAL OTHER Health related issues not catalogued blowhere.  SYSTEM DESCRIPTION: HVAC  HV1A HEATING BOLERGSTACKS/ CONTROLS Boilers for heating purposes, including their related stacks, flues, and controls.  HV1B HEATING RADIATORS/ CONVECTORS Including cast-tran radiators, fin tube radiators, baseboard radiators, etc.  HV1D HEATING FURNACE Furnaces and their related outrols, flues, etc.  HV1D HEATING FUEL SUPPL/YSTORAGE Storage and/or distribution of fuel for heating purposes, including tanks and pixing networks and related leak detection/monitoring.  HV2A COOLING CHILLERS/ CONTROLS CHILLERS/ COVENG HEATING.  HOVE COOLING HEATING COOLING REPORT TO A REpuls of conceptions of concentration of concentration of concentration of concentration grows.  HV3A HEATING/COOLING SYSTEM RETROTIT/ REPLACE REPORT TO REPLACE REPORT TO REplacement of major retrofit of HVAC systems.  HV3B HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS  HV3B HEATING/COOLING CONVERTIONAL SPLIT  HV3B HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS  HV3B HEATING/COOLING CONVERTIONAL SPLIT  HV3B ARROUNING/  HV3B STEMBUTION ARROUND CONVERT AND Exhaust that purpose and cooling systems, both and conditions, including place and cooling systems, including place and cond	HE6D	HAZARDOUS MATERIAL	FUEL STORAGE		
HEFA GENERAL OTHER Health related issues not catalogued elsewhere.  BYSTEM DESCRIPTION: HVAC  HV1A HEATING BOILERS/STACKS/ CONTROL3 RADATORS/ CONTROL3 RADATORS/ CONVECTORS Including case-fror radiators, fin tube radiators, baseboard radiators, etc.  HV1B HEATING FURNACE FURNACE FURNACE FURNACE HU1D HEATING FUEL SUPPLYSTORAGE Strapps and/or distribution of fise for heating purposes, including tranks and piping networks and related eartests, flues, etc.  HV1D HEATING COLING CONTROL3 CONTROLS CONTROLS CONTROLS CONTROLS COLING HEAT REJECTION Reparament of conting towers, dry coolers, air-cooling, and heat rejection. Including mode for done continued towers, dry coolers, air-cooling, and heat rejection. Including mode for continued towers, dry coolers, air-cooling, and heat rejection. Including mode for continued towers, dry coolers, air-cooling, and heat rejection. Includes connection of concentroling towers.  HV3A HEATING/COOLING RYSTEM RETROFIT7 REPLACE HV3AC HEATING/COOLING RYSTEM RETROFIT7 REPLACE HV3AC HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS Repain/replacement of major retrofil of HVAC systems.  HV3AC HEATING/COOLING CONTENTIONAL SPLIT SYSTEMS Repain/replacement of confidence and heat purpose.  HV3AC AIR MOVING/ VENTILATION AIR MOVING/ VENTILATION CONTENTIONAL SPLIT SYSTEMS Esthaust fan systems, lond-under gain and-under long-present and confidence and cost, fan coul units, unit ventilators, diffraction apparents, etc.  HV3AC AIR MOVING/ VENTILATION AIR MOVING/ VE	HE6E	HAZARDOUS MATERIAL	LEAD PAINT	Testing, removal, and disposal of lead-based paint systems.	
SYSTEM DESCRIPTION: HVAC  HV1A HEATING BOILERS/STACKS/ CONTROLS Boilers for heating purposes, including their related stacks, flues, and controls.  HV1B HEATING RADITORS/ CONNECTORS Including cast-iner radiators, fin tube radiators, baseboard radiators, etc.  HV1C HEATING FURNACE Furnaces and their related controls, flues, etc.  HV1D HEATING FURNACE Furnaces and their related controls, flues, etc.  Storage and controls, flues, etc.  Storage and controls, flues, etc.  HV1D HEATING FURNACE Furnaces and their related controls, flues, etc.  HV2D COOLING CHILLERS/ CONTROLS Group of the cast detection monitoring.  HV2B COOLING CHILLERS/ CONTROLS GROUP of the cast	HE6F	HAZARDOUS MATERIAL	OTHER	Handling, storage, and disposal of other hazardous materials.	
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  Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related detection/monitoring detection/monitoring detection/monitoring to detection/monitoring to detection/monitoring to detection/monitoring to detection/monitoring to detection/monitoring to configuration of chilled water for cooling purposes, related controls (not including mods for CFC complaints).  HV2B  COOLING  HEAT REJECTION  Replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of concentrough system to cooling towers.  HV3A  HEATING/COOLING  WATER TREATMENT  Treatment of hot water, chilled water, steam, condenser water, etc.  Repair/replacement of individual water, steam, condenser water, etc.  Repair/replacement of ell-contained/purkage type units, including stand-up units, rooftop units, window units.  HV3D  HEATING/COOLING  CONVENTIONAL SPLIT  SYSTEMS  Repair, installation, or replacement of conventional split systems, both air conditioners and healt pumps.  HV4D  VENTILATION  AIR MOVING/ VENTILATION  AIR DISTRIBUTION  AIR DISTRIBUTION  AIR DISTRIBUTION  AIR DISTRIBUTION  AIR DISTRIBUTION  AIR MOVING/ VENTILATION  AIR MOVING/ VENTILATION  AIR DISTRIBUTION  AIR DISTRIBUTION	HE7A	GENERAL	OTHER	Health related issues not catalogued elsewhere.	
HY1B HEATING CONTROLS Boolers for neadlators, fine up and controls.  HY1B HEATING RADIATORS' Including cast-iron radiators, fin tube radiators, baseboard radiators, etc.  HY1C HEATING FURNACE Furnaces and their related controls, flues, etc.  HY1D HEATING FUEL SUPPLY/STORAGE Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related leak detection/monitoring.  HY2A COOLING CHILLERS' CONTROLS Chiller units for production of chilled water for cooling purposes, related controls (not including mode for CFC compliance).  HY2B COOLING HEAT REJECTION Repair/replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of cince-through system to cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of cince-through system to cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of cince-through system to cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of cince-through system to cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of cince-through system to cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of cince-through systems to cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of cince-through systems.  HY3B HEATING/COOLING SYSTEM BETTORITI/ Replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes a heat purpose.  HY3B HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS  HY3B HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS  HY3B HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS  HY3B HEATING/COOLING SYSTEMS  HEATING/COOLIN	SYSTEM DE	SCRIPTION: HVAC			
HY1C HEATING FURNACE F	HV1A	HEATING		Boilers for heating purposes, including their related stacks, flues, and controls.	
HY1D HEATING  FUEL SUPPLY/STORAGE  Slorage and/or distribution of fuel for healing purposes, including tanks and piping networks and related leak detection/monitoring.  HY2A  COOLING  CHILLERS/ COOTROLS  CPC compliance  CPC compliance  CPC compliance  CPC compliance  Repair/replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of once-through system to cooling towers.  HY3B  HEATING/COOLING  SYSTEM RETROFIT/ REPLACE  Replacement or major retrofit of HYAC systems.  HY3C  HEATING/COOLING  WATER TREATMENT  Treatment of hot water, chilled water, steam, condenser water, etc.  HY3C  HEATING/COOLING  PACKAGE/SELF-CONTAINED  UNTS  Repair/replacement of self-contained/package type units, including stand-up units, rooftop units, window units, etc; both air conditioners and heat pumps.  INV3D  HEATING/COOLING  CONVENTIONAL SPLIT  Repair installation, or replacement of compressors and condensers.  HY4A  AIR MOVING/ VENTILATION  AIR HANDLERS/ FAR UNITS  EXHAUST FANS  Exhaust fan systems, including fans, range and furme hoods, controls, and related ductwork.  HY4B  AIR MOVING/ VENTILATION  OTHER FANS  Supply, return, or any other fans not incorporated into a component categorized elsewhere.  HY4B  STEAMHYDORONIC  HY4B  AIR MOVING/ VENTILATION  AIR DISTRIBUTION NETWORK  Repair, replacement of prings networks for heating and cooling systems, including pipe, fittings, insulation, clasted component categorized elsewhere.  Repair, replacement of prings networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.  HY4B  AIR MOVING/ VENTILATION  AIR DISTRIBUTION  PIPING NETWORK  Repair replacement of pumps used in heating and cooling systems, including pipe, fittings, insulation, related components, etc.  HY5B  STEAMHYDRONIC  DISTRIBUTION  PIPING NETWORK  Repair replacement of pumps used in heating and cooling systems, related control components, etc.  HY6B  COMTROLS  COMPLETE SYSTEM  UPGRADE  Replacement of HYAC control systems.	HV1B	HEATING		Including cast-iron radiators, fin tube radiators, baseboard radiators, etc.	
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 towers.  HV3B HEATING/COOLING SYSTEM RETROFIT/ REPLACE HV3C HEATING/COOLING WATER TREATMENT Treatment of hot water, chilled water, steam, condenser water, etc.  HV3C HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS HV3D HEATING/COOLING CONVENTIONAL SPLIT Repair/replacement of self-contained/package type units, including stand-up units, rooftop units, window units, etc. both air conditioners and heat pumps. Including independent component replacements of compressors and condensers.  HV4A AIR MOVING/ VENTILATION FAN UNITS  EXHAUST FANS EXHAUST FANS EXHAUST fans or other specifically categorized systems.  HV4A 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 dustwork, terminal reheat/cool, VENTILATION  AIR MOVING/ VENTILATION AIR DISTRIBUTION PIPPING NETWORK Repair, replacement, or cleaning of air distribution network, including dustwork, terminal reheat/cool, VENTILATION  AIR MOVING/ VENTILATION PIPPING NETWORK Repair, replacement, or cleaning of air distribution network, including dustwork, terminal reheat/cool, VENTILATION  HV5A STEAMHYDRONIC PIPPING NETWORK Repair, replacement of pipping networks for heating and cooling systems, related control components, etc.  HV5A CONTROLS  COMPLETE SYSTEM UPGRADE  Replacement of HVAC control systems.	HV1C	HEATING	FURNACE	Furnaces and their related controls, flues, etc.	
HV2B COOLING HEAT REJECTION Repair/replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of once-through system to cooling towers.  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 PACKAGE/SELF-CONT	HV1D	HEATING	FUEL SUPPLY/STORAGE		
HV3A HEATING/COOLING SYSTEM RETROFIT/ REPLACE HV3B HEATING/COOLING SYSTEM RETROFIT/ REPLACE HV3B HEATING/COOLING WATER TREATMENT Treatment of hot water, chilled water, steam, condenser water, etc.  HV3C HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS CONVENTIONAL SPLIT SYSTEMS REplacement of self-contained/package type units, including stand-up units, rooftop units, window units, etc. both air conditioners and heat pumps.  HV3D HEATING/COOLING CONVENTIONAL SPLIT SYSTEMS Repair, installation, or replacement of conventional split systems, both air conditioners and heat pumps, including independent component replacements of compressors and condensers.  HV4A AIR MOVING/ VENTILATION AIR HANDLERS/ FAN UNITS Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.  HV4B AIR MOVING/ VENTILATION EXHAUST FANS Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.  HV4C AIR MOVING/ VENTILATION OTHER FANS Supply, return, or any other fans not incorporated into a component categorized elsewhere.  HV4D AIR MOVING/ VENTILATION AIR MOVING/ VENTILATION 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 STEAMHYDRONIC DISTRIBUTION PIPING NETWORK Repair/replacement of piping networks for heating and cooling systems, related control components, etc.  HV5A CONTROLS COMPLETE SYSTEM UPGRADE Replacement of HVAC control systems.	HV2A	COOLING			
HY3B HEATING/COOLING WATER TREATMENT Treatment of hot water, chilled water, steam, condenser water, etc.  HY3C HEATING/COOLING PACKAGE/SELF-CONTAINED UNITS  HY3D HEATING/COOLING CONVENTIONAL SPLIT Repair/replacement of self-contained/package type units, including stand-up units, window units, etc. both air conditioners and heat pumps, including independent component replacements of conventional split systems, both air conditioners and heat pumps, including independent component replacements of conventional split systems, both air conditioners and heat pumps, including independent component replacements of compressors and condensers.  HV4A AIR MOVING/ VENTILATION AIR HANDLERS/ FAN UNITS  Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.  HV4B AIR MOVING/ VENTILATION  EXHAUST FANS  Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.  HV4C AIR MOVING/ VENTILATION  OTHER FANS  Supply, return, or any other fans not incorporated into a component categorized elsewhere.  HV4D AIR MOVING/ VENTILATION  AIR 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 STEAMHYDRONIC DISTRIBUTION  PIPING NETWORK  Repair/replacement of piping networks for heating and cooling systems, related control components, etc.  HV5C STEAMHYDRONIC DISTRIBUTION  HEAT EXCHANGERS  Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.	HV2B	COOLING	HEAT REJECTION		
HV3D HEATING/COOLING PACKAGE/SELF-CONTAINED Units, etc. both air conditioners and heat pumps.  HV3D HEATING/COOLING CONVENTIONAL SPLIT SYSTEMS Repair, installation, or replacement of conventional split systems, both air conditioners and heat pumps, including independent component replacements of compressors and condensers.  HV4A AIR MOVING/ VENTILATION AIR HANDLERS/ FAN UNITS Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.  HV4B AIR MOVING/ VENTILATION EXHAUST FANS Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.  HV4C AIR MOVING/ VENTILATION OTHER FANS Supply, return, or any other fans not incorporated into a component categorized elsewhere.  HV4D AIR MOVING/ VENTILATION AIR DISTRIBUTION NETWORK Repair, replacement, or cleaning of air distribution network, including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.  HV5A STEAMHYDRONIC DISTRIBUTION PUMPS Repair or replacement of piping networks for heating and cooling systems, related control components, etc.  HV5C STEAMHYDRONIC 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.	HV3A	HEATING/COOLING		Replacement or major retrofit of HVAC systems.	
HV4D HEATING/COOLING CONVENTIONAL SPLIT Repair, installation, or replacement of conventional split systems, both air conditioners and heat pumps, including independent component replacements of compressors and condensers.  HV4A AIR MOVING/ VENTILATION AIR HANDLERS/ FAN UNITS Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.  HV4B AIR MOVING/ VENTILATION EXHAUST FANS Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.  HV4C AIR MOVING/ VENTILATION OTHER FANS Supply, return, or any other fans not incorporated into a component categorized elsewhere.  HV4D AIR MOVING/ VENTILATION AIR DISTRIBUTION NETWORK Repair, replacement, or cleaning of air distribution network, including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.  HV5A STEAM/HYDRONIC DISTRIBUTION PIPING NETWORK Repair replacement of piping networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.  HV5B STEAM/HYDRONIC DISTRIBUTION PIPING NETWORK Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.  HV5C STEAM/HYDRONIC DISTRIBUTION HEAT EXCHANGERS Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.  Replacement of HVAC control systems.	HV3B	HEATING/COOLING	WATER TREATMENT	Treatment of hot water, chilled water, steam, condenser water, etc.	
HV4A AIR MOVING/ VENTILATION AIR HANDLERS/ FAN UNITS  Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.  HV4B AIR MOVING/ VENTILATION  EXHAUST FANS  Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.  HV4C AIR MOVING/ VENTILATION  OTHER FANS  Supply, return, or any other fans not incorporated into a component categorized elsewhere.  HV4D AIR MOVING/ VENTILATION  AIR DISTRIBUTION NETWORK  HV5A  STEAM/HYDRONIC DISTRIBUTION  PIPING NETWORK  HV5B  STEAM/HYDRONIC DISTRIBUTION  PUMPS  Repair or replacement of piping networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.  HV5C  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.  Replacement of HVAC control systems.	HV3C	HEATING/COOLING		Repair/replacement of self-contained/package type units, including stand-up units, rooftop units, window units, etc; both air conditioners and heat pumps.	
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 POPULATION  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 STEAMHYDRONIC DISTRIBUTION  PIPING NETWORK Repair/replacement of piping networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.  HV5B STEAMHYDRONIC DISTRIBUTION  PUMPS Repair or replacement of pumps used in heating and cooling systems, related control components, etc.  HV5C STEAMHYDRONIC DISTRIBUTION  HEAT EXCHANGERS Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.  Replacement of HVAC control systems.	HV3D	HEATING/COOLING			
HV4B VENTILATION EXHAUST FANS Exhaust fan systems, including fans, range and tume 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 Papair, replacement, or cleaning of air distribution network, including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.  HV5A STEAM/HYDRONIC DISTRIBUTION PIPING NETWORK Repair/replacement of piping networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.  HV5B STEAM/HYDRONIC DISTRIBUTION PUMPS Repair or replacement of pumps used in heating and cooling systems, related control components, etc.  HV5C STEAM/HYDRONIC DISTRIBUTION HEAT EXCHANGERS Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.  HV6A CONTROLS COMPLETE SYSTEM UPGRADE Replacement of HVAC control systems.	HV4A				
HV4D VENTILATION  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.  Replacement of HVAC control systems.	HV4B		EXHAUST FANS	Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.	
HV5A STEAM/HYDRONIC DISTRIBUTION PUMPS Repair or replacement of pumps used in heating and cooling systems, related control components, etc.  HV5C STEAM/HYDRONIC DISTRIBUTION PUMPS Repair or replacement of pumps used in heating and cooling systems, related control components, etc.  HV5C STEAM/HYDRONIC DISTRIBUTION HEAT EXCHANGERS Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.  HV6A CONTROLS COMPLETE SYSTEM UPGRADE Replacement of HVAC control systems.	HV4C		OTHER FANS	Supply, return, or any other fans not incorporated into a component categorized elsewhere.	
HV5A DISTRIBUTION PIPING NETWORK insulation, related components, etc.  HV5B STEAM/HYDRONIC DISTRIBUTION PUMPS Repair or replacement of pumps used in heating and cooling systems, related control components, etc.  HV5C STEAM/HYDRONIC DISTRIBUTION HEAT EXCHANGERS Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.  HV6A CONTROLS COMPLETE SYSTEM UPGRADE Replacement of HVAC control systems.	HV4D		AIR DISTRIBUTION NETWORK		
HV5C STEAM/HYDRONIC DISTRIBUTION HEAT EXCHANGERS Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.  HV6A CONTROLS COMPLETE SYSTEM UPGRADE Replacement of Pumps used in neating and cooling systems, related control components, etc.  Replacement of pumps used in neating and cooling systems, related control components, etc.	HV5A		PIPING NETWORK		
HV6A CONTROLS COMPLETE SYSTEM UPGRADE Replacement of HVAC control systems.	HV5B		PUMPS	Repair or replacement of pumps used in heating and cooling systems, related control components, etc.	
UPGRADE Replacement of HVAC control systems.	HV5C		HEAT EXCHANGERS	Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.	
HV6B CONTROLS MODIFICATIONS/ REPAIRS Repair or modification of HVAC control system.	HV6A	CONTROLS		Replacement of HVAC control systems.	
	HV6B	CONTROLS	MODIFICATIONS/ REPAIRS	Repair or modification of HVAC control system.	



CATEGORY CODE REPORT					
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION		
HV6C	CONTROLS	AIR COMPRESSORS/ DRYERS	Repair or modification of control air compressors and dryers.		
HV7A	INFRASTRUCTURE	STEAM/HOT WATER GENERATION	Generation of central steam and/or hot water, including boilers and related components.		
HV7B	INFRASTRUCTURE	STEAM/HOT WATER DISTRIBUTION	Distribution system for central hot water and/or steam.		
HV7C	INFRASTRUCTURE	CHILLED WATER GENERATION	Generation of central chilled water, including chillers and related components.		
HV7D	INFRASTRUCTURE	CHILLED WATER DISTRIBUTION	Distribution system for central chilled water.		
HV7E	INFRASTRUCTURE	TUNNELS/ MANHOLES/ TRENCHES	Repairs, installation, or replacement of utility system access chambers.		
HV7F	INFRASTRUCTURE	OTHER	HVAC infrastructure issues not specifically categorized elsewhere.		
HV8A	GENERAL	CFC COMPLIANCE	Chiller conversions/replacements for CFC regulatory compliance, monitoring, etc.		
HV8B	GENERAL	OTHER	HVAC issues not catalogued elsewhere.		
SYSTEM DE	SCRIPTION: INTERIOR FINISH	ES/SYSTEMS			
IS1A	FLOOR	FINISHES-DRY	R&R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum and tile, marble, terrazzo, rubber flooring, and underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)		
IS1B	FLOOR	FINISHES-WET	Flooring finish/underlayment work in predominantly "wet" areas, including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.		
IS2A	PARTITIONS	STRUCTURE	Structural work on full height permanent interior partitions, including wood/metal stud and drywall systems, CMU systems, structural brick, tile, glass block, etc.		
IS2B	PARTITIONS	FINISHES	Work on full height permanent interior partitions, including R&R, to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.		
IS3A	CEILINGS	REPAIR	Repair of interior ceilings (<40% of total), including tiles, gypsum board, plaster, paint, etc.		
IS3B	CEILINGS	REPLACEMENT	Major refurbishments (>40% of total) to interior ceiling systems, including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.		
IS4A	DOORS	GENERAL	Any work on interior non-fire-rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).		
IS5A	STAIRS	FINISH	Any finish restorative work to stair tower walking surfaces, including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).		
IS6A	GENERAL	MOLDING	R&R to interior trim/molding systems, including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.		
IS6B	GENERAL	CABINETRY	R&R work to interior casework systems, including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).		
IS6C	GENERAL	SCREENING	Work on temporary or partial height partitioning systems, including toilet partitions, urinal/vanity screens, etc.		
IS6D	GENERAL	OTHER	Any work on interior elements not logically or specifically categorized elsewhere, including light coves, phone booths, interior lightwells, etc.		
SYSTEM DE	SCRIPTION: PLUMBING				
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.		
PL1B	DOMESTIC WATER	PUMPS	Domestic water booster pumps, circulating pumps, related controls, etc.		



	CATEGORY CODE REPORT					
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION			
PL1C	DOMESTIC WATER	STORAGE/ TREATMENT	Equipment or vessels for storage or treatment of domestic water.			
PL1D	DOMESTIC WATER	METERING	Installation, repair, or replacement of water meters.			
PL1E	DOMESTIC WATER	HEATING	Domestic water heaters, including gas, oil, and electric water heaters, shell-and-tube heat exchangers, tank type, and instantaneous.			
PL1F	DOMESTIC WATER	COOLING	Central systems for cooling and distributing drinking water.			
PL1G	DOMESTIC WATER	FIXTURES	Plumbing fixtures, including sinks, drinking fountains, water closets, urinals, etc.			
PL1H	DOMESTIC WATER	CONSERVATION	Alternations made to the water distribution system to conserve water.			
PL1I	DOMESTIC WATER	BACKFLOW PROTECTION	Backflow protection devices, including backflow preventers, vacuum breakers, etc.			
PL2A	WASTEWATER	PIPING NETWORK	Repair or replacement of building wastewater piping network.			
PL2B	WASTEWATER	PUMPS	Pump systems used to lift wastewater, including sewage ejectors and other sump systems.			
PL3A	SPECIAL SYSTEMS	PROCESS GAS/FLUIDS	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.			
PL4A	INFRASTRUCTURE	POTABLE WATER STORAGE/ TREATMENT	Storage and treatment of potable water for distribution.			
PL4B	INFRASTRUCTURE	INDUSTRIAL WATER DISTRIBUTION/ TREATMENT	Storage and treatment of industrial water for distribution.			
PL4C	INFRASTRUCTURE	SANITARY WATER COLLECTION	Sanitary water collection systems and sanitary sewer systems, including combined systems.			
PL4D	INFRASTRUCTURE	STORMWATER COLLECTION	Stormwater collection systems and storm sewer systems; storm water only.			
PL4E	INFRASTRUCTURE	POTABLE WATER DISTRIBUTION	Potable water distribution network.			
PL4F	INFRASTRUCTURE	WASTEWATER TREATMENT	Wastewater treatment plants, associated equipment, etc.			
PL5A	GENERAL	OTHER	Plumbing issues not categorized elsewhere.			
SYSTEM DE	SCRIPTION: 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	SYSTEM DESCRIPTION: SECURITY SYSTEMS						
SS1A	LIGHTING	EXTERIOR	Fixtures, stanchions, foliage interference, cleanliness, locations, etc.				
SS2A	SITE	FENCING	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.				



	CATEGORY CODE REPORT					
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION			
SS2B	SITE	GENERAL	Hidden areas due to foliage, fencing, parking, walls, etc.			
SS3A	COMMUNICATIONS	EMERGENCY PHONES	Access, locations, visibility, function, reliability, etc.			
SS4A	ACCESS CONTROL	DOORS	Access, locks, keys, two-way speakers, reliability, redundancy, etc.			
SS4B	ACCESS CONTROL	WINDOWS	Locks, screens, access, reliability, etc.			
SS4C	ACCESS CONTROL	SYSTEMS	Card key, proximity devices, data control, data use, reliability, system design, etc.			
SS5A	MONITORING	SYSTEMS	Cameras, audio communication, monitoring stations, locations, system design, etc.			
SS6A	CIRCULATION	PEDESTRIAN	On campus as well as to and from off-campus housing and class locations, etc.			
SS6B	CIRCULATION	VEHICULAR	Guard gates, access, systems, data control and use, identification, etc.			
SS7A	GENERAL	OTHER	General information/projects pertaining to security issues.			
SYSTEM DE	ESCRIPTION: VERTICAL TRANS	SPORTATION				
VT1A	MACHINE ROOM	GENERAL	Machine, worm gear, thrust bearing, brake, motors, sheaves, generator, controller, selector, governor, pump(s), valves, oil, access, lighting, ventilation, and floor.			
VT2A	CAR	GENERAL	Position indicator, lighting, floor, gate-doors, operation devices, safeties, safety shoe, light ray/detection, emergency light, fire fighter service, car top, door operator, stop switch, car frame, car guides, sheaves, phone, and ventilation.			
VT3A	HOISTWAY	GENERAL	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, and compensation.			
VT4A	HALL FIXTURES	GENERAL	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, and card/key access.			
VT5A	PIT	GENERAL	Buffer(s), guards, sheaves, hydro packing, floor, lighting, and safety controls.			
VT6A	OPERATING CONDITIONS	GENERAL	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, and nudging.			
VT7A	GENERAL	OTHER	General information/projects relating to vertical transportation system components.			

### **FACILITY CONDITION ANALYSIS**



# DETAILED PROJECT SUMMARIES AND TOTALS

#### Detailed Project Totals Facility Condition Analysis System Code by Priority Class

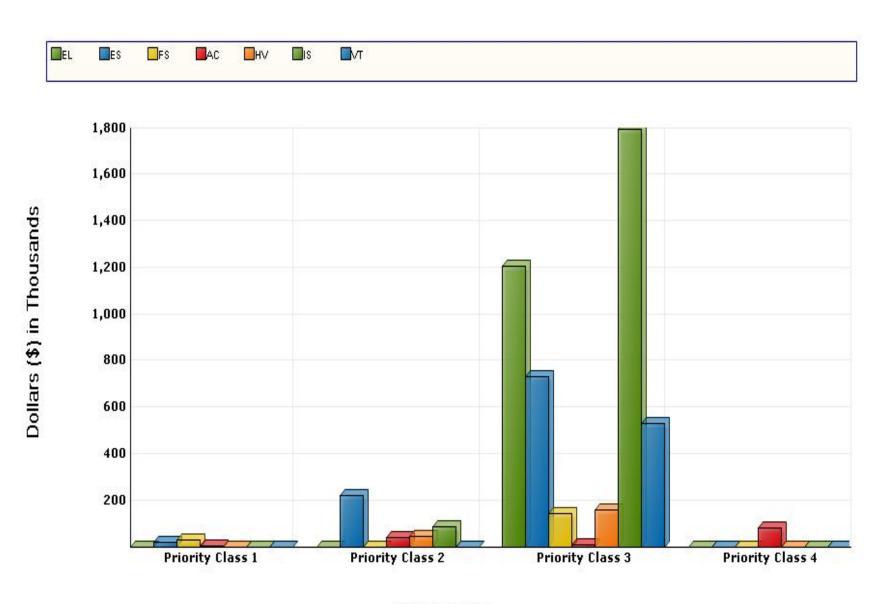
System		Priority Classes					
Code	System Description	1	2	3	4	Subtotal	
AC	ACCESSIBILITY	6,102	39,723	9,944	85,212	140,981	
EL	ELECTRICAL	0	0	1,209,006	0	1,209,006	
ES	EXTERIOR	21,548	223,818	731,541	0	976,907	
FS	FIRE/LIFE SAFETY	33,209	0	146,888	0	180,097	
HV	HVAC	0	46,348	160,821	0	207,169	
IS	INTERIOR/FINISH SYS.	0	88,256	1,797,681	0	1,885,937	
VT	VERT. TRANSPORTATION	0	0	531,133	0	531,133	
	TOTALS	60,859	398,146	4,587,014	85,212	5,131,230	

Facility Replacement Cost	\$81,324,000
Facility Condition Needs Index	0.06

Gross Square Feet	202,544	Total Cost Per Square Foot	\$25.33
	- /-		,

### **FACILITY CONDITION ANALYSIS**

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



**Priority Class** 

#### Detailed Project Totals Facility Condition Analysis System Code by Project Class

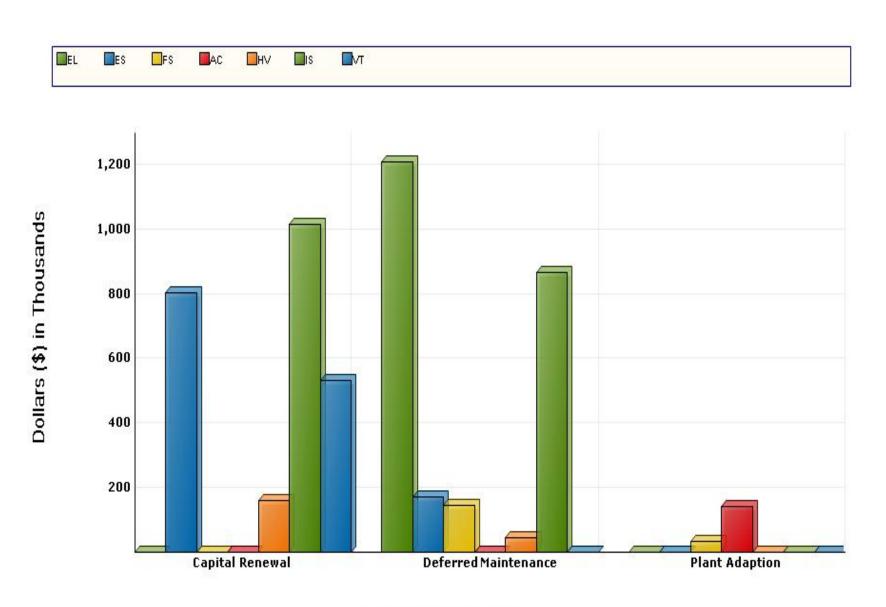
		Project Classes				
System Code	System Description	Captial Renewal	Deferred Maintenance	Plant Adaption	Subtotal	
AC	ACCESSIBILITY	0	0	140,981	140,981	
EL	ELECTRICAL	0	1,209,006	0	1,209,006	
ES	EXTERIOR	806,183	170,724	0	976,907	
FS	FIRE/LIFE SAFETY	0	146,888	33,209	180,097	
н٧	HVAC	160,821	46,348	0	207,169	
ıs	INTERIOR/FINISH SYS.	1,016,654	869,282	0	1,885,937	
VT	VERT. TRANSPORTATION	531,133	0	0	531,133	
	TOTALS	2,514,792	2,442,249	174,190	5,131,230	

Facility Replacement Cost	\$81,324,000
Facility Condition Needs Index	0.06

Gross Square Feet	202,544	Total Cost Per Square Foot	\$25.33

### **FACILITY CONDITION ANALYSIS**

### **System Code by Project Class**



**Project Classification** 

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

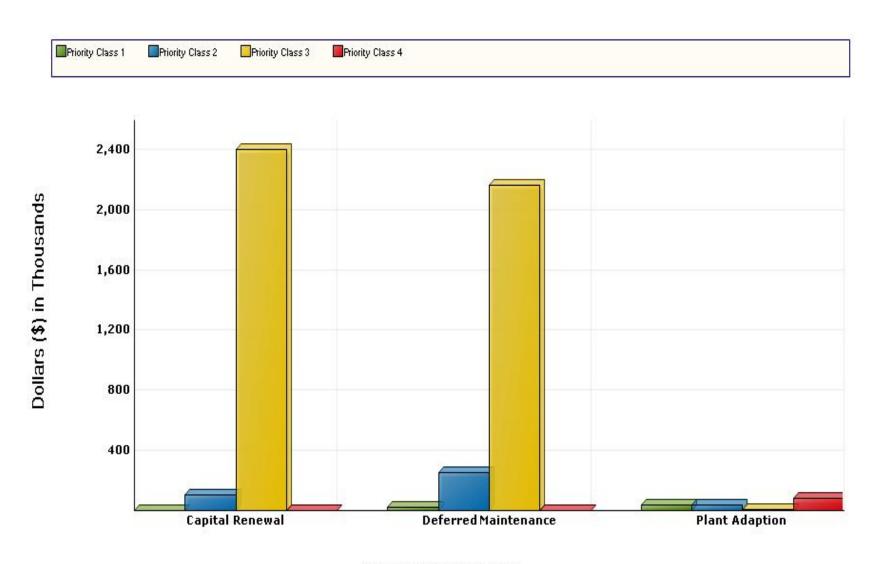
	Priority Classes						
Project Class	1	2	3	4	Subtotal		
Capital Renewal	0	105,730	2,409,061	0	2,514,792		
Deferred Maintenance	21,548	252,692	2,168,008	0	2,442,249		
Plant Adaption	39,311	39,723	9,944	85,212	174,190		
TOTALS	60,859	398,146	4,587,014	85,212	5,131,230		

Facility Replacement Cost	\$81,324,000
Facility Condition Needs Index	0.06

Gross Square Feet 202,544	Total Cost Per Square Foot	\$25.33
---------------------------	----------------------------	---------

### **FACILITY CONDITION ANALYSIS**

### **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
FS5E	6701FS02	1	1	INSTALL ROOF EDGE SAFETY RAILING	15,548	2,488	18,036
FS5C	6701FS03	1	2	INSTALL SAFETY GLAZING	13,080	2,093	15,173
AC1A	6701AC01	1	3	PLAZA STEP GUARDRAIL INSTALLATION	5,260	842	6,102
ES1B	6701ES01	1	4	WATERPROOFING OF EXTERIOR FOUNDATION WALL	18,576	2,972	21,548
				Totals for Priority Class 1	52,464	8,394	60,859
AC4A	6701AC02	2	5	MODIFY MILLWORK FOR WHEELCHAIR ACCESSIBILITY	6,220	995	7,215
AC4B	6701AC03	2	6	ASSISTIVE LISTENING SYSTEM INSTALLATION	3,891	623	4,514
AC4B	6701AC04	2	7	THEATER ACCESSIBILITY UPGRADES	24,133	3,861	27,994
ES4B	6701ES02	2	8	CLEAN AND PAINT METAL ROOFING AND REPAIR FLASHING	91,147	14,583	105,730
ES5B	6701ES03	2	9	REPAIR WINDOW LEAKS	26,800	4,288	31,088
ES2B	6701ES04	2	10	REPAIR SUBSIDING NORTHWEST SIDEWALK	75,000	12,000	87,000
HV4B	6701HV02	2	11	EXHAUST FAN REPLACEMENT	39,955	6,393	46,348
IS4A	6701IS04	2	12	BALLROOM ENTRY DOOR REPLACEMENTS	76,083	12,173	88,256
				Totals for Priority Class 2	343,229	54,917	398,146
FS3A	6701FS01	3	13	REPLACE SPRINKLER HEADS	126,628	20,260	146,888
AC3F	6701AC05	3	14	INSTALL DUAL LEVEL DRINKING FOUNTAINS	8,573	1,372	9,944
ES2B	6701ES05	3	15	REPAIR AND REPAINT WOOD TRELLIS TRIM	26,800	4,288	31,088
ES4B	6701ES06	3	16	BUILT-UP ROOF REPLACEMENT	603,839	96,614	700,453
HV3A	6701HV01	3	17	HVAC SYSTEM RESTORATION	138,639	22,182	160,821
EL4A	6701EL04	3	18	PLAZA POWER CONTROL UPGRADE	6,496	1,039	7,535
EL3B	6701EL02	3	19	ELECTRICAL SYSTEM REPAIRS	283,075	45,292	328,368
EL4B	6701EL01	3	20	INTERIOR LIGHTING UPGRADE	739,429	118,309	857,738
EL4A	6701EL03	3	21	EXTERIOR LIGHTING CONTROL IMPROVEMENT	13,246	2,119	15,366
IS2B	6701IS01	3	22	REFINISH WALLS	178,188	28,510	206,698
IS1A	6701IS02	3	23	REFINISH FLOORING	698,238	111,718	809,956
IS3B	6701IS03	3	24	REFINISH CEILINGS	673,298	107,728	781,026
VT7A	6701VT01	3	25	COMPREHENSIVE HYDRAULIC ELEVATOR MODERNIZATION	457,873	73,260	531,133
				Totals for Priority Class 3	3,954,323	632,692	4,587,014

### 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
AC3D	6701AC06	4	26	BUILDING SIGNAGE PACKAGE INSTALLATION	73,458	11,753	85,212
				Totals for Priority Class 4	73,458	11,753	85,212
				Grand Total:	4,423,474	707,756	5,131,230

## Detailed Project Summary Facility Condition Analysis Project Classification

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
ES4B	6701ES02	8	Capital Renewal	2	CLEAN AND PAINT METAL ROOFING AND REPAIR FLASHING	105,730
ES4B	6701ES06	16	Capital Renewal	3	BUILT-UP ROOF REPLACEMENT	700,453
HV3A	6701HV01	17	Capital Renewal	3	HVAC SYSTEM RESTORATION	160,821
IS2B	6701IS01	22	Capital Renewal	3	REFINISH WALLS	206,698
IS1A	6701IS02	23	Capital Renewal	3	REFINISH FLOORING	809,956
VT7A	6701VT01	25	Capital Renewal	3	COMPREHENSIVE HYDRAULIC ELEVATOR MODERNIZATION	531,133
					Totals for Capital Renewal	2,514,792
ES1B	6701ES01	4	Deferred Maintenance	1	WATERPROOFING OF EXTERIOR FOUNDATION WALL	21,548
ES5B	6701ES03	9	Deferred Maintenance	2	REPAIR WINDOW LEAKS	31,088
ES2B	6701ES04	10	Deferred Maintenance	2	REPAIR SUBSIDING NORTHWEST SIDEWALK	87,000
HV4B	6701HV02	11	Deferred Maintenance	2	EXHAUST FAN REPLACEMENT	46,348
IS4A	6701IS04	12	Deferred Maintenance	2	BALLROOM ENTRY DOOR REPLACEMENTS	88,256
FS3A	6701FS01	13	Deferred Maintenance	3	REPLACE SPRINKLER HEADS	146,888
ES2B	6701ES05	15	Deferred Maintenance	3	REPAIR AND REPAINT WOOD TRELLIS TRIM	31,088
EL4A	6701EL04	18	Deferred Maintenance	3	PLAZA POWER CONTROL UPGRADE	7,535
EL3B	6701EL02	19	Deferred Maintenance	3	ELECTRICAL SYSTEM REPAIRS	328,368
EL4B	6701EL01	20	Deferred Maintenance	3	INTERIOR LIGHTING UPGRADE	857,738
EL4A	6701EL03	21	Deferred Maintenance	3	EXTERIOR LIGHTING CONTROL IMPROVEMENT	15,366
IS3B	6701IS03	24	Deferred Maintenance	3	REFINISH CEILINGS	781,026
					Totals for Deferred Maintenance	2,442,249
FS5E	6701FS02	1	Plant Adaption	1	INSTALL ROOF EDGE SAFETY RAILING	18,036
FS5C	6701FS03	2	Plant Adaption	1	INSTALL SAFETY GLAZING	15,173
AC1A	6701AC01	3	Plant Adaption	1	PLAZA STEP GUARDRAIL INSTALLATION	6,102
AC4A	6701AC02	5	Plant Adaption	2	MODIFY MILLWORK FOR WHEELCHAIR ACCESSIBILITY	7,215
AC4B	6701AC03	6	Plant Adaption	2	ASSISTIVE LISTENING SYSTEM INSTALLATION	4,514
AC4B	6701AC04	7	Plant Adaption	2	THEATER ACCESSIBILITY UPGRADES	27,994
AC3F	6701AC05	14	Plant Adaption	3	INSTALL DUAL LEVEL DRINKING FOUNTAINS	9,944
FS5C AC1A AC4A AC4B AC4B	6701FS03 6701AC01 6701AC02 6701AC03 6701AC04	2 3 5 6 7	Plant Adaption Plant Adaption Plant Adaption Plant Adaption Plant Adaption	1 1 2 2 2	INSTALL ROOF EDGE SAFETY RAILING INSTALL SAFETY GLAZING PLAZA STEP GUARDRAIL INSTALLATION MODIFY MILLWORK FOR WHEELCHAIR ACCESSIBILITY ASSISTIVE LISTENING SYSTEM INSTALLATION THEATER ACCESSIBILITY UPGRADES	18,03 15,17 6,10 7,21 4,51 27,99

### Detailed Project Summary Facility Condition Analysis

# **Project Classification**

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
AC3D	6701AC06	26	Plant Adaption	4	BUILDING SIGNAGE PACKAGE INSTALLATION	85,212
					Totals for Plant Adaption	174,190
					Grand Total:	5,131,230

# Detailed Project Summary Facility Condition Analysis Energy Conservation

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
ES4B	6701ES02	2	8	CLEAN AND PAINT METAL ROOFING AND REPAIR FLASHING	105,730	300	352.43
ES5B	6701ES03	2	9	REPAIR WINDOW LEAKS	31,088	2,400	12.95
				Totals for Priority Class 2	136,818	2,700	50.67
ES4B	6701ES06	3	16	BUILT-UP ROOF REPLACEMENT	700,453	2,600	269.4
EL4B	6701EL01	3	20	INTERIOR LIGHTING UPGRADE	857,738	3,940	217.7
EL4A	6701EL03	3	21	EXTERIOR LIGHTING CONTROL IMPROVEMENT	15,366	712	21.58
				Totals for Priority Class 3	1,573,556	7,252	216.98
				Grand Total:	1,710,375	9,952	171.86

## Detailed Project Summary Facility Condition Analysis Category/System Code

Cat. Code	Project Number		i Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC1A	6701AC01	1	3	PLAZA STEP GUARDRAIL INSTALLATION	5,260	842	6,102
AC4A	6701AC02	2	5	MODIFY MILLWORK FOR WHEELCHAIR ACCESSIBILITY	6,220	995	7,215
AC4B	6701AC03	2	6	ASSISTIVE LISTENING SYSTEM INSTALLATION	3,891	623	4,514
AC4B	6701AC04	2	7	THEATER ACCESSIBILITY UPGRADES	24,133	3,861	27,994
AC3F	6701AC05	3	14	INSTALL DUAL LEVEL DRINKING FOUNTAINS	8,573	1,372	9,944
AC3D	6701AC06	4	26	BUILDING SIGNAGE PACKAGE INSTALLATION	73,458	11,753	85,212
				Totals for System Code: ACCESSIBILITY	121,535	19,446	140,981
EL4A	6701EL04	3	18	PLAZA POWER CONTROL UPGRADE	6,496	1,039	7,535
EL3B	6701EL02	3	19	ELECTRICAL SYSTEM REPAIRS	283,075	45,292	328,368
EL4B	6701EL01	3	20	INTERIOR LIGHTING UPGRADE	739,429	118,309	857,738
EL4A	6701EL03	3	21	EXTERIOR LIGHTING CONTROL IMPROVEMENT	13,246	2,119	15,366
				Totals for System Code: ELECTRICAL	1,042,246	166,759	1,209,006
ES1B	6701ES01	1	4	WATERPROOFING OF EXTERIOR FOUNDATION WALL	18,576	2,972	21,548
ES4B	6701ES02	2	8	CLEAN AND PAINT METAL ROOFING AND REPAIR FLASHING	91,147	14,583	105,730
ES5B	6701ES03	2	9	REPAIR WINDOW LEAKS	26,800	4,288	31,088
ES2B	6701ES04	2	10	REPAIR SUBSIDING NORTHWEST SIDEWALK	75,000	12,000	87,000
ES2B	6701ES05	3	15	REPAIR AND REPAINT WOOD TRELLIS TRIM	26,800	4,288	31,088
ES4B	6701ES06	3	16	BUILT-UP ROOF REPLACEMENT	603,839	96,614	700,453
				Totals for System Code: EXTERIOR	842,162	134,746	976,907
FS5E	6701FS02	1	1	INSTALL ROOF EDGE SAFETY RAILING	15,548	2,488	18,036
FS5C	6701FS03	1	2	INSTALL SAFETY GLAZING	13,080	2,093	15,173
FS3A	6701FS01	3	13	REPLACE SPRINKLER HEADS	126,628	20,260	146,888
				Totals for System Code: FIRE/LIFE SAFETY	155,256	24,841	180,097
HV4B	6701HV02	2	11	EXHAUST FAN REPLACEMENT	39,955	6,393	46,348
HV3A	6701HV01	3	17	HVAC SYSTEM RESTORATION	138,639	22,182	160,821
				Totals for System Code: HVAC	178,594	28,575	207,169
IS4A	6701IS04	2	12	BALLROOM ENTRY DOOR REPLACEMENTS	76,083	12,173	88,256
IS2B	6701IS01	3	22	REFINISH WALLS	178,188	28,510	206,698
IS1A	6701IS02	3	23	REFINISH FLOORING	698,238	111,718	809,956
IS3B	6701IS03	3	24	REFINISH CEILINGS	673,298	107,728	781,026
				Totals for System Code: INTERIOR/FINISH SYS.	1,625,807	260,129	1,885,937

## Detailed Project Summary Facility Condition Analysis Category/System Code

Cat. Code	Project Number	Pri Cls	Pri Seq Project Title	Construction Cost	Professional Fee	Total Cost
VT7A	6701VT01	3	25 COMPREHENSIVE HYDRAULIC ELEVATOR MODERNIZATION	457,873	73,260	531,133
			Totals for System Code: VERT. TRANSPORTATION	457,873	73,260	531,133
			Grand Total:	4,423,474	707,756	5,131,230

# **FACILITY CONDITION ANALYSIS**



# SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701FS02 Title: INSTALL ROOF EDGE SAFETY RAILING

Priority Sequence: 1

Priority Class: 1

Category Code: FS5E System: FIRE/LIFE SAFETY

Component: EGRESS PATH

Element: STAIRS AND RAILING

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: IBC 1003.3

ADAAG 505

Project Class: Plant Adaption

**Project Date:** 9/9/2010

Project

Location: Area Wide: Floor(s) R

### **Project Description**

The eastern edge of the solar panels on the north end of the east wing roof is very close to the roof edge, creating a dangerously narrow walkway. It is recommended that a painted metal guardrail be installed along the east edge of this roof area.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701FS02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Railing system up to 42 inches high with pickets at 4 1/2 inches on center	LF	80	\$112	\$8,960	\$37.95	\$3,036	\$11,996
Project Totals	:			\$8.960	-	\$3.036	\$11.996

Material/Labor Cost		\$11,996
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$12,439
General Contractor Mark Up at 25.0%	+	\$3,110
Construction Cost		\$15,548
Professional Fees at 16.0%	+	\$2,488
Total Project Cost		\$18,036

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701FS03 Title: INSTALL SAFETY GLAZING

Priority Sequence: 2
Priority Class: 1

Category Code: FS5C System: FIRE/LIFE SAFETY

Component: EGRESS PATH

Element: SEPARATION RATING

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: NFPA 2400

Project Class: Plant Adaption

**Project Date:** 9/9/2010

**Project** 

Location: Undefined: Floor(s) 1

#### **Project Description**

It is not apparent that all of the glazing in the glass and aluminum doors of this building has safety labels. The installation of safety glazing is recommend at all of the glass and aluminum doors where it cannot be determined that the existing glazing is safety rated.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701FS03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Safety rated glazing installation allowance	LOT	1	\$3,500	\$3,500	\$6,400	\$6,400	\$9,900
Project T	otals:			\$3,500		\$6,400	\$9,900

Material/Labor Cost		\$9,900
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$10,464
General Contractor Mark Up at 25.0%	+	\$2,616
<b>Construction Cost</b>		\$13,080
Professional Fees at 16.0%	+	\$2,093
Total Project Cost		\$15,173

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701AC01 Title: PLAZA STEP GUARDRAIL INSTALLATION

Priority Sequence: 3

Priority Class: 1

Category Code: AC1A System: ACCESSIBILITY

Component: SITE

Element: STAIR AND RAILINGS

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ADAAG 303

Project Class: Plant Adaption

**Project Date:** 9/9/2010

**Project** 

Location: Area Wide: Floor(s) 1

### **Project Description**

The semicircular tired seating area in the central plaza has numerous locations where there is a drop-off, and the western end of the steps blends into the sloped paving of the plaza. These conditions create potential tripping hazards, especially to those with limited or no eyesight. It is proposed that a guardrail system be created to mitigate these hazards.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701AC01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Plaza guardrail allowance	LOT	1	\$750	\$750	\$3,200	\$3,200	\$3,950
Project	Totals:			\$750		\$3,200	\$3,950

Total Project Cost		\$6,102
Professional Fees at 16.0%	+	\$842
Construction Cost		\$5,260
General Contractor Mark Up at 25.0%	+	\$1,052
Material/Labor Indexed Cost		\$4,208
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$3,950

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701ES01 Title: WATERPROOFING OF EXTERIOR

FOUNDATION WALL

Priority Sequence: 4

Priority Class: 1

Category Code: ES1B System: EXTERIOR

Component: FOUNDATION/FOOTING

Element: DAMPPROOFING/DEWATERING

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

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

#### **Project Description**

There is evidence of water infiltration through the basement foundation wall at the west end of the theater. Excavation and waterproofing system upgrades are recommended. Improve the slope of grade away from the foundation prior to restoring the landscaping and sidewalk. This work should be coordinated with the separately proposed Exterior category project to repair the subsiding northwest sidewalk.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701ES01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Excavation and backfill to a depth of 10 feet	LF	30	\$126	\$3,780	\$268	\$8,040	\$11,820
Landscape restoration 20 feet from building	LF	30	\$11.96	\$359	\$8.98	\$269	\$628
Dampproofing application to a height of 10 feet	LF	30	\$22.23	\$667	\$31.23	\$937	\$1,604
Project Totals	s:			\$4,806		\$9,246	\$14,052

Material/Labor Cost		\$14,052
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$14,861
General Contractor Mark Up at 25.0%	+	\$3,715
Construction Cost		\$18,576
Professional Fees at 16.0%	+	\$2,972
Total Project Cost		\$21,548

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701AC02 Title: MODIFY MILLWORK FOR WHEELCHAIR

**ACCESSIBILITY** 

Priority Sequence: 5

Priority Class: 2

Category Code: AC4A System: ACCESSIBILITY

Component: GENERAL

Element: FUNCTIONAL SPACE MOD.

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ADAAG 804

Project Class: Plant Adaption

**Project Date:** 9/9/2010

Project

Location: Undefined: Floor(s) 1

#### **Project Description**

Accessibility legislation requires that building amenities be generally accessible to all persons. The configuration of many of the break room base cabinets is a barrier to wheelchair accessibility. A wheelchair accessible section should be incorporated into each non-compliant base cabinet.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701AC02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Base cabinet modifications	LOT	1	\$1,500	\$1,500	\$3,200	\$3,200	\$4,700
Project	Totals:		·	\$1,500		\$3,200	\$4,700

Labor Index  Material/Labor Indexed Cost		107.5% \$4,976
General Contractor Mark Up at 25.0%	+	\$1,244
Construction Cost		\$6,220
Construction Cost  Professional Fees at 16.0%	+	\$6,220 \$995

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701AC03 Title: ASSISTIVE LISTENING SYSTEM

INSTALLATION

Priority Sequence: 6

Priority Class: 2

Category Code: AC4B System: ACCESSIBILITY

Component: GENERAL

Element: OTHER

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ADAAG 219.3, 706.1

Project Class: Plant Adaption

**Project Date:** 9/9/2010

Project

Location: Room Only: Floor(s) 1

#### **Project Description**

ADA legislation also requires that places of assembly be accessible to the handicapped. The theater lacks an assistive listening system for the hearing impaired. Install transmitter and headphone receiver sets to accommodate those who require audible assistance.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701AC03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Infrared transmitter and headphone receiver sets	SYS	1	\$1,583	\$1,583	\$1,388	\$1,388	\$2,971
Project Tot	als:			\$1,583		\$1.388	\$2.971

Material/Labor Cost		\$2,971
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$3,113
General Contractor Mark Up at 25.0%	+	\$778
Construction Cost		\$3,891
Professional Fees at 16.0%	+	\$623
Total Project Cost		\$4,514

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701AC04 Title: THEATER ACCESSIBILITY UPGRADES

Priority Sequence: 7
Priority Class: 2

Category Code: AC4B System: ACCESSIBILITY

Component: GENERAL

Element: OTHER

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ADAAG 405, 505

Project Class: Plant Adaption

**Project Date:** 9/9/2010

Project

Location: Item Only: Floor(s) 1

### **Project Description**

The theater stage is inaccessible from the house seating to anyone in a wheelchair. In order to provide adequate access, it is recommended that a wheelchair ramp be installed at the stage. Also, the stage steps lack a second handrail. It is recommended that a second ADA compliant painted metal handrail be installed at both sets of steps.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701AC04

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Wall-mounted handrail system	LF	30	\$52.59	\$1,578	\$36.87	\$1,106	\$2,684
Ramp construction, including handrails	VFT	4	\$1,843	\$7,372	\$2,082	\$8,328	\$15,700
Project Totals	<del></del>			\$8,950		\$9,434	\$18,384

Material/Labor Cost		\$18,384
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$19,306
General Contractor Mark Up at 25.0%	+	\$4,827
Construction Cost		\$24,133
Professional Fees at 16.0%	+	\$3,861
Total Project Cost		\$27,994

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701ES02 Title: CLEAN AND PAINT METAL ROOFING AND

REPAIR FLASHING

Priority Sequence: 8

Priority Class: 2

Category Code: ES4B System: EXTERIOR

Component: ROOF

Element: REPLACEMENT

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Energy Conservation \$300

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 9/9/2010

Project

Location: Undefined: Floor(s) R

#### **Project Description**

It is anticipated that the applied finishes on the pitched metal roof applications will reach the end of their expected service life cycle within the ten-year window of this assessment, and much of this roofing currently has mold on it. There are numerous locations where the base flashing or the expansion joint flashing has been torn or punctured, primarily on the south wing. Future budget modeling should include a provision for the replacement of the finish on the metal roofing and repairs to the damaged flashing.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701ES02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Painted metal roof	SF	8,270	\$3.37	\$27,870	\$3.93	\$32,501	\$60,371
Roof flashing repair allowance	LOT	1	\$2,500	\$2,500	\$6,400	\$6,400	\$8,900
Project 1	Γotals:			\$30,370		\$38,901	\$69,271

Material/Labor Cost		\$69,271
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$72,917
General Contractor Mark Up at 25.0%	+	\$18,229
Construction Cost		\$91,147
Professional Fees at 16.0%	+	\$14,583
Total Project Cost		\$105,730

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

### **Project Description**

Project Number: 6701ES03 Title: REPAIR WINDOW LEAKS

Priority Sequence: 9
Priority Class: 2

Category Code: ES5B System: EXTERIOR

Component: FENESTRATIONS

Element: WINDOWS

Building Code: 6701

Building Name: PRICE CENTER-WEST

**Subclass/Savings:** Energy Conservation \$2,400

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

Location: Area Wide: Floor(s) 3

#### **Project Description**

The glazing in the curved section of exterior wall at the junction of the east and south wings (the "elbow") reportedly leaks. Repairs or replacements should be made to this glazing to restore the integrity of the weathertight building envelope.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701ES03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Curtainwall glazing repair allowance	LOT	1	\$7,500	\$7,500	\$12,800	\$12,800	\$20,300
Project Total	als:			\$7,500		\$12,800	\$20,300

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

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701ES04 Title: REPAIR SUBSIDING NORTHWEST

**SIDEWALK** 

Priority Sequence: 10

Priority Class: 2

Category Code: ES2B System: EXTERIOR

Component: COLUMNS/BEAMS/WALLS

Element: FINISH

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

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

### **Project Description**

The concrete sidewalk at the west end of the northwest wing is subsiding. This concrete should be removed, the cause of the subsidence determined, and new concrete installed.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701ES04

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Equipment rental, concrete, reinforcing, supplies, tools, and landscape allowance	LOT	1	\$25,000	\$25,000	\$32,000	\$32,000	\$57,000
Project Totals	 }:			\$25,000		\$32,000	\$57.000

Material/Labor Cost		\$57,000
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$60,000
General Contractor Mark Up at 25.0%	+	\$15,000
Construction Cost		\$75,000
Professional Fees at 16.0%	+	\$12,000
Total Project Cost		\$87,000

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701HV02 Title: EXHAUST FAN REPLACEMENT

Priority Sequence: 11

Priority Class: 2

Category Code: HV4B System: HVAC

Component: AIR MOVING/VENTILATION

Element: EXHAUST FANS

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ASHRAE 62-2004

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

Location: Floor-wide: Floor(s) R

### **Project Description**

Exhaust fans are partially maintained by local maintenance staff and partially maintained by tenants. The roof-mounted exhaust fans range widely in age and condition. Some of the original exhaust fans maintained by facility staff are corroded and showing signs of metal fatigue. The statistical life cycle for an exhaust fan is approximately twenty years. At or beyond this time, exhaust fans can incur high maintenance costs that justify replacement. While many of the original fans should remain serviceable, a small component of the high use and rough-service fans should be replaced to avert the potential for failure and potential negative impact on other aspects of the HVAC design.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701HV02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace centrifugal roof exhauster	EA	11	\$1,410	\$15,510	\$1,360	\$14,960	\$30,470
Project Tot	als:			\$15,510		\$14,960	\$30,470

Material/Labor Cost		\$30,470
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$31,964
General Contractor Mark Up at 25.0%	+	\$7,991
Construction Cost		\$39,955
Professional Fees at 16.0%	+	\$6,393
Total Project Cost		\$46,348

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701IS04 Title: BALLROOM ENTRY DOOR REPLACEMENTS

Priority Sequence: 12

Priority Class: 2

Category Code: IS4A System: INTERIOR/FINISH SYS.

Component: DOORS

Element: GENERAL

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

Location: Room Only: Floor(s) 2

#### **Project Description**

Interior doors are generally in overall good condition, except for the deteriorating ballroom entry doors. These doors are aged and damaged and should be replaced. Install modern rated units that are architecturally appropriate.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701IS04

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High traffic door system	LEAF	14	\$2,060	\$28,840	\$2,082	\$29,148	\$57,988
Projec	t Totals:			\$28,840		\$29,148	\$57,988

Total Project Cost		\$88,256
Professional Fees at 16.0%	+	\$12,173
Construction Cost		\$76,083
General Contractor Mark Up at 25.0%	+	\$15,217
Material/Labor Indexed Cost		\$60,866
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$57,988

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701FS01 Title: REPLACE SPRINKLER HEADS

Priority Sequence: 13

Priority Class: 3

Category Code: FS3A System: FIRE/LIFE SAFETY

Component: SUPPRESSION

Element: SPRINKLERS

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

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

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

**Project** 

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

### **Project Description**

The sprinkler heads are recommended for replacement. The statistical life cycle for a sprinkler head is approximately twenty years. During this time, scale can accumulate inside the head and cause it to malfunction when needed. It is recommended that the aging sprinkler heads be replaced to ensure that proper protection is available.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701FS01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire sprinkler head replacement	SF	202,544	\$0.10	\$20,254	\$0.37	\$74,941	\$95,196
Project To	tals:			\$20,254		\$74,941	\$95,196

Total Project Cost		\$146,888
Professional Fees at 16.0%	+	\$20,260
Construction Cost		\$126,628
General Contractor Mark Up at 25.0%	+	\$25,326
Material/Labor Indexed Cost		\$101,302
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$95,196

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701AC05 Title: INSTALL DUAL LEVEL DRINKING

**FOUNTAINS** 

Priority Sequence: 14

Priority Class: 3

Category Code: AC3F System: ACCESSIBILITY

Component: INTERIOR PATH OF TRAVEL

Element: DRINKING FOUNTAINS

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ADAAG 211, 602

Project Class: Plant Adaption

**Project Date:** 9/9/2010

Project

Location: Item Only: Floor(s) 1, 3

### **Project Description**

The single level configuration of the drinking fountains is a barrier to accessibility. It is recommended that all single level drinking fountains be replaced with dual level, refrigerated units.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

# **Project Cost**

Project Number: 6701AC05

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dual level drinking fountain	EA	4	\$1,266	\$5,064	\$389	\$1,556	\$6,620
Project	Totals:			\$5,064		\$1,556	\$6,620

Total Project Cost		\$9,944
Professional Fees at 16.0%	+	\$1,372
Construction Cost		\$8,573
General Contractor Mark Up at 25.0%	+	\$1,715
Material/Labor Indexed Cost		\$6,858
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$6,620

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701ES05 Title: REPAIR AND REPAINT WOOD TRELLIS TRIM

Priority Sequence: 15

Priority Class: 3

Category Code: ES2B System: EXTERIOR

Component: COLUMNS/BEAMS/WALLS

Element: FINISH

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

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

### **Project Description**

The applied finish on the wood trellis work over the exterior walkways of most of this building is deteriorating, as are some of the wood trellis pieces themselves. Deteriorated wood members should be removed and replaced, and all of the applied finishes on these wood members should be renewed. The University should consider replacing the wood trellis members with a synthetic material.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701ES05

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Disposal fee, wood trim, applied exterior finish (2 coats), tools, and supplies	LOT	1	\$7,500	\$7,500	\$12,800	\$12,800	\$20,300
Project Totals	:			\$7,500		\$12,800	\$20,300

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

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701ES06 Title: BUILT-UP ROOF REPLACEMENT

Priority Sequence: 16

Priority Class: 3

Category Code: ES4B System: EXTERIOR

Component: ROOF

Element: REPLACEMENT

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Energy Conservation \$2,600

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 9/9/2010

**Project** 

Location: Floor-wide: Floor(s) R

### **Project Description**

It is recommended that the built-up roofing system be replaced within the next five years. The existing stress conditions around the seams and at the perimeter flashing will lead to failure if left unattended. Replace the stressed roof and flashing with a similar application. Replacement of the skylight systems or their flashing may also be necessary.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701ES06

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Built-up roof	SF	64,670	\$3.19	\$206,297	\$3.73	\$241,219	\$447,516
Skylight repair allowance	LOT	1	\$5,500	\$5,500	\$6,400	\$6,400	\$11,900
Project	t Totals:			\$211,797		\$247,619	\$459,416

Material/Labor Cost		\$459,416
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$483,071
General Contractor Mark Up at 25.0%	+	\$120,768
Construction Cost		\$603,839
Professional Fees at 16.0%	+	\$96,614
Total Project Cost		\$700,453

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701HV01 Title: HVAC SYSTEM RESTORATION

Priority Sequence: 17

Priority Class: 3

Category Code: HV3A System: HVAC

Component: HEATING/COOLING

Element: SYSTEM RETROFIT/REPLACE

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ASHRAE 62-2004

Project Class: Capital Renewal

**Project Date:** 9/9/2010

Project

Location: Floor-wide: Floor(s) R

### **Project Description**

Rooftop air handlers on the roof of Buildings 2, 3, and 4 are original and showing signs of age related deterioration. Restoration and repair of the rooftop air handlers is necessary. Work should include re-insulation of rooftop piping where it is damaged, repair of door gaskets and locks, repair of cooling coil condensation collection pans, and restoration of any deteriorated internal insulation. In addition, the repair of any leaks or deteriorated isolation on control valves is recommended. This work will adequately restore the units and sustain their life until their practical lifespans have been depleted.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701HV01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Pipe insulation, door gasket, door lock, condensate pan, internal insulation, and valve repair allocation	EA	8	\$4,434	\$35,472	\$8,673	\$69,384	\$104,856
Project Totals	);			\$35,472		\$69,384	\$104,856

Material/Labor Cost		\$104,856
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$110,911
General Contractor Mark Up at 25.0%	+	\$27,728
Construction Cost		\$138,639
Professional Fees at 16.0%	+	\$22,182
Total Project Cost		\$160,821

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

### **Project Description**

Project Number: 6701EL04 Title: PLAZA POWER CONTROL UPGRADE

Priority Sequence: 18

Priority Class: 3

Category Code: EL4A System: ELECTRICAL

Component: DEVICES AND FIXTURES

Element: EXTERIOR LIGHTING

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: NEC 410

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

Location: Item Only: Floor(s) 1

### **Project Description**

Outdoor power is supplied to the central plaza amphitheater stage area from Building 4. To control this power, a relay system has been installed. Operation of the power relay to this outdoor power source requires that users enter secured space. To simplify control of the outdoor power at the stage area, the installation of a wireless remote control system is recommended. The control should have programmable user security passkey protection and should be industrial-grade to assure reliable operation.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701EL04

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Remote relay actuation system allocation	SYS	1	\$3,500	\$3,500	\$1,500	\$1,500	\$5,000
Project Totals:				\$3,500		\$1,500	\$5,000

Total Project Cost		\$7,535
Professional Fees at 16.0%	+	\$1,039
Construction Cost		\$6,496
General Contractor Mark Up at 25.0%	+	\$1,299
Material/Labor Indexed Cost		\$5,197
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$5,000

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701EL02 Title: ELECTRICAL SYSTEM REPAIRS

Priority Sequence: 19

Priority Class: 3

Category Code: EL3B System: ELECTRICAL

Component: SECONDARY DISTRIBUTION

Element: DISTRIBUTION NETWORK

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: NEC Articles 100, 210, 410

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

**Project** 

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

### **Project Description**

The basic elements of the electrical distribution system (conductors, distribution panels, breaker panels, connects, etc.) are satisfactory for extended future use. However, the terminal devices are due for replacement based upon typical maintenance practices and schedules. Aging devices, including wall switches and receptacles, are potential shock and fire hazards. The replacement of all worn or damaged switches, receptacles, and cover plates is needed, as is the testing of power panels for proper operation followed by replacement of any faulty breakers. To enhance operational safety, power panel directories should be checked and updated as appropriate to reflect accurate load designations.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701EL02

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	202,544	\$0.42	\$85,068	\$0.64	\$129,628	\$214,697
Project Tota	ls:			\$85.068		\$129,628	\$214.697

Material/Labor Cost		\$214,697
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$226,460
General Contractor Mark Up at 25.0%	+	\$56,615
Construction Cost		\$283,075
Professional Fees at 16.0%	+	\$45,292
Total Project Cost		\$328,368

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

### **Project Description**

Project Number: 6701EL01 Title: INTERIOR LIGHTING UPGRADE

Priority Sequence: 20

Priority Class: 3

Category Code: EL4B System: ELECTRICAL

Component: DEVICES AND FIXTURES

Element: INTERIOR LIGHTING

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Energy Conservation \$3,940

Code Application: NEC Articles 210, 410

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

**Project** 

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

### **Project Description**

While the vast majority of the building has received upgraded lighting over the years, some areas have been overlooked for lighting replacement. Some of these areas have received elemental component replacements, but retain old and outdated fixtures that are far less efficient than modern design fixtures. Completion of the interior lighting restoration is recommended to unify the interior appearance and to eliminate any remaining use of incandescent fixtures. Replace aged and / or inefficient light fixtures with modern fixtures of the latest energy-efficient design. Select lamps with the same color temperature and rendering index for lighting uniformity. Install occupancy sensors in select areas for additional energy conservation. Brace all new lighting systems for seismic activity.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701EL01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High efficiency fluorescent fixtures, occupancy sensors, and demolition of existing lighting	SF	81,018	\$3.12	\$252,776	\$3.82	\$309,489	\$562,265
Project Total	ls:			\$252,776		\$309,489	\$562,265

Material/Labor Cost		\$562,265
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$591,543
General Contractor Mark Up at 25.0%	+	\$147,886
Construction Cost		\$739,429
Professional Fees at 16.0%	+	\$118,309
Total Project Cost		\$857,738

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701EL03 Title: EXTERIOR LIGHTING CONTROL

**IMPROVEMENT** 

Priority Sequence: 21

Priority Class: 3

Category Code: EL4A System: ELECTRICAL

Component: DEVICES AND FIXTURES

Element: EXTERIOR LIGHTING

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Energy Conservation \$712

Code Application: NEC 410

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

Location: Area Wide: Floor(s) 2

#### **Project Description**

Generally, exterior lighting fixtures are in satisfactory condition. Recent Bookstore area improvements included replacement and architectural upgrade of the exterior fixtures. At this time, it is apparent that the lighting was not connected to the Honeywell DCS central lighting control system. It is typical that these exterior lights operate 24/7 due to lack of practical control. Troubleshooting and reconnection of the Bookstore exterior lighting system to the Honeywell DCS central computerized relay control system is recommended to rectify the problem, save energy, and enhance fixture / lamp life.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701EL03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Rewiring and control connection allocation	SYS	1	\$3,000	\$3,000	\$7,000	\$7,000	\$10,000
Project To	otals:			\$3,000	-	\$7,000	\$10,000

Material/Labor Cost		\$10,000
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$10,597
General Contractor Mark Up at 25.0%	+	\$2,649
Construction Cost		\$13,246
Professional Fees at 16.0%	+	\$2,119
Total Project Cost		\$15,366

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701|S01 Title: REFINISH WALLS

Priority Sequence: 22

Priority Class: 3

Category Code: IS2B System: INTERIOR/FINISH SYS.

Component: PARTITIONS

Element: FINISHES

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 9/9/2010

**Project** 

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

### **Project Description**

Most walls are painted and in overall fair condition. The acoustical wall panels on the rear wall of the theater are coming loose. Repainting of the interior walls should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts, as well as repairing or replacing damaged theater acoustical wall panels.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701IS01

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	105,990	\$0.17	\$18,018	\$0.85	\$90,092	\$108,110
Theater acoustical wall panel repair allowance	SF	4,000	\$2.37	\$9,480	\$4.08	\$16,320	\$25,800
Project Totals	:			\$27,498		\$106,412	\$133,910

Material/Labor Cost		\$133,910
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$142,551
General Contractor Mark Up at 25.0%	+	\$35,638
Construction Cost		\$178,188
Professional Fees at 16.0%	+	\$28,510
Total Project Cost		\$206,698

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

### **Project Description**

Project Number: 6701IS02 Title: REFINISH FLOORING

Priority Sequence: 23

Priority Class: 3

Category Code: IS1A System: INTERIOR/FINISH SYS.

Component: FLOOR

Element: FINISHES-DRY

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 9/9/2010

**Project** 

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

### **Project Description**

Most of the floor areas are carpeted and in overall fair condition. However, carpeting in facilities with similar traffic patterns tends to need replacement every five to seven years. Carpeting upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts in this facility. Also, the ballroom wood flooring, which is currently in good condition, will need to be refinished within the next five years.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701|S02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	63,200	\$5.58	\$352,656	\$2.08	\$131,456	\$484,112
Sand and finish hardwood flooring	SF	11,760	\$0.38	\$4,469	\$4.08	\$47,981	\$52,450
Project To	tals:			\$357,125		\$179,437	\$536,562

Total Project Cost		\$809,956
Professional Fees at 16.0%	+	\$111,718
Construction Cost		\$698,238
General Contractor Mark Up at 25.0%	+	\$139,648
Material/Labor Indexed Cost		\$558,590
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$536,562

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

### **Project Description**

Project Number: 6701|S03 Title: REFINISH CEILINGS

Priority Sequence: 24

Priority Class: 3

Category Code: IS3B System: INTERIOR/FINISH SYS.

Component: CEILINGS

Element: REPLACEMENT

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 9/9/2010

Project

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

### **Project Description**

Ceiling finish applications vary between aging ceiling tile, paint, and exposed structure. Most of the ceiling tile is in overall poor condition. The ceilings should be repainted and the ceiling tiles replaced within the next ten years.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701IS03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Acoustical tile ceiling system	SF	91,120	\$2.21	\$201,375	\$3.10	\$282,472	\$483,847
Painted ceiling finish application	SF	26,450	\$0.17	\$4,497	\$0.85	\$22,483	\$26,979
Project To	otals:			\$205,872		\$304,955	\$510,826

Total Project Cost		\$781,026
Professional Fees at 16.0%	+	\$107,728
Construction Cost		\$673,298
General Contractor Mark Up at 25.0%	+	\$134,660
Material/Labor Indexed Cost		\$538,639
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$510,826

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

### **Project Description**

Project Number: 6701VT01 Title: COMPREHENSIVE HYDRAULIC ELEVATOR

MODERNIZATION

Priority Sequence: 25

Priority Class: 3

Category Code: VT7A System: VERT. TRANSPORTATION

Component: GENERAL

Element: OTHER

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ASME A17.1

Project Class: Capital Renewal

**Project Date:** 9/9/2010

Project

Location: Room Only: Floor(s) 1, R

#### **Project Description**

Three three-stop hydraulic passenger elevators (each with single-door geometry) are installed in this facility, but only two are used. The elevator located in the western extremity of Building 2 is not considered by this report, since Price Center-East elevators are nearby, and this unit is reportedly no longer needed. The centrally located Bookstore elevator and the outdoor access elevator located off of Building 3 are presently used (along with elevators in the connected Price Center-East). Comprehensive modernization of the currently used hydraulic elevators is recommended, based upon the probable age of the primary mechanical components of these systems (there were no reports of comprehensive mechanical renovations to these elevators). Modernization should include the installation of a new hydraulic machine, pump, valve, doors and hardware, car finishes, roller guides, and solid state controllers. The elevators have already received accessibility upgrades within the cars, including updated operating panels, audible notification, emergency lights, and hands-free phones. Renovation work should also include any currently required pits or machine room upgrades.

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701VT01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Comprehensive elevator modernization	LOT	2	\$80,700	\$161,400	\$93,500	\$187,000	\$348,400
Project Totals	s:			\$161,400		\$187,000	\$348,400

Material/Labor Cost		\$348,400
Material Index		102.4%
Labor Index		107.5%
Material/Labor Indexed Cost		\$366,299
General Contractor Mark Up at 25.0%	+	\$91,575
Construction Cost		\$457,873
Professional Fees at 16.0%	+	\$73,260
Total Project Cost		\$531,133

# Facility Condition Analysis Section Three

6701: PRICE CENTER-WEST

#### **Project Description**

Project Number: 6701AC06 Title: BUILDING SIGNAGE PACKAGE

INSTALLATION

Priority Sequence: 26

Priority Class: 4

Category Code: AC3D System: ACCESSIBILITY

Component: INTERIOR PATH OF TRAVEL

Element: SIGNAGE

Building Code: 6701

Building Name: PRICE CENTER-WEST

Subclass/Savings: Not Applicable

Code Application: ADAAG 703.1

Project Class: Plant Adaption

**Project Date:** 9/9/2010

Project

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

#### **Project Description**

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

# Facility Condition Analysis Section Three

6701 : PRICE CENTER-WEST

### **Project Cost**

Project Number: 6701AC06

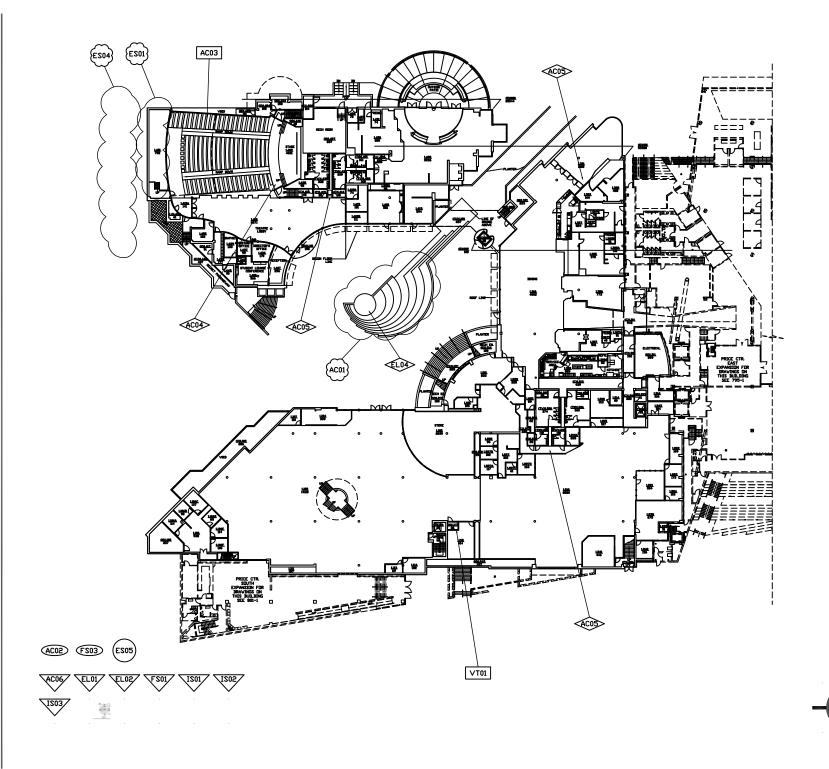
Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant signage	EA	793	\$55.30	\$43,853	\$16.26	\$12,894	\$56,747
Project	ct Totals:			\$43,853		\$12,894	\$56,747

Total Project Cost		\$85,212
Professional Fees at 16.0%	+	\$11,753
Construction Cost		\$73,458
General Contractor Mark Up at 25.0%	+	\$14,692
Material/Labor Indexed Cost		\$58,767
Labor Index		107.5%
Material Index		102.4%
Material/Labor Cost		\$56,747

# **FACILITY CONDITION ANALYSIS**

SECTION 4

DRAWINGS AND PROJECT LOCATIONS



PRICE CENTER -WEST

BLDG NO. 6701



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
ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER
APPLIES TO A SITUATION
OF UNDEFINED EXTENTS



PROJECT NUMBER APPLIES TO AREA AS NOTED

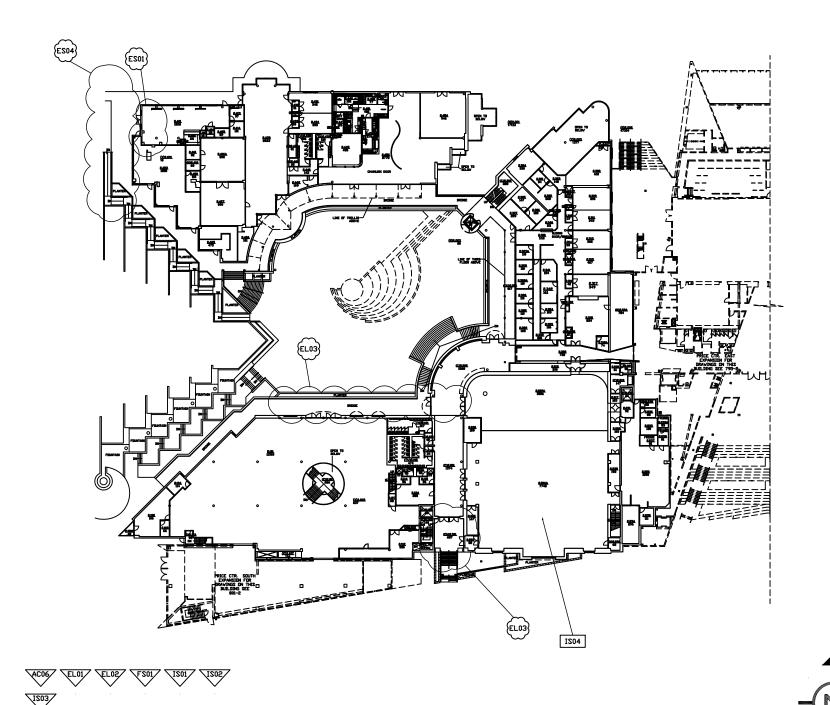
Date: 09/15/10
Drawn by: J.T.V.

Project No. 10-059

FIRST FLOOR PLAN

Sheet No.

1 of 3



PRICE CENTER -WEST

BLDG NO. 6701



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

 $\bigvee$ 

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS



PROJECT NUMBER APPLIES TO AREA AS NOTED

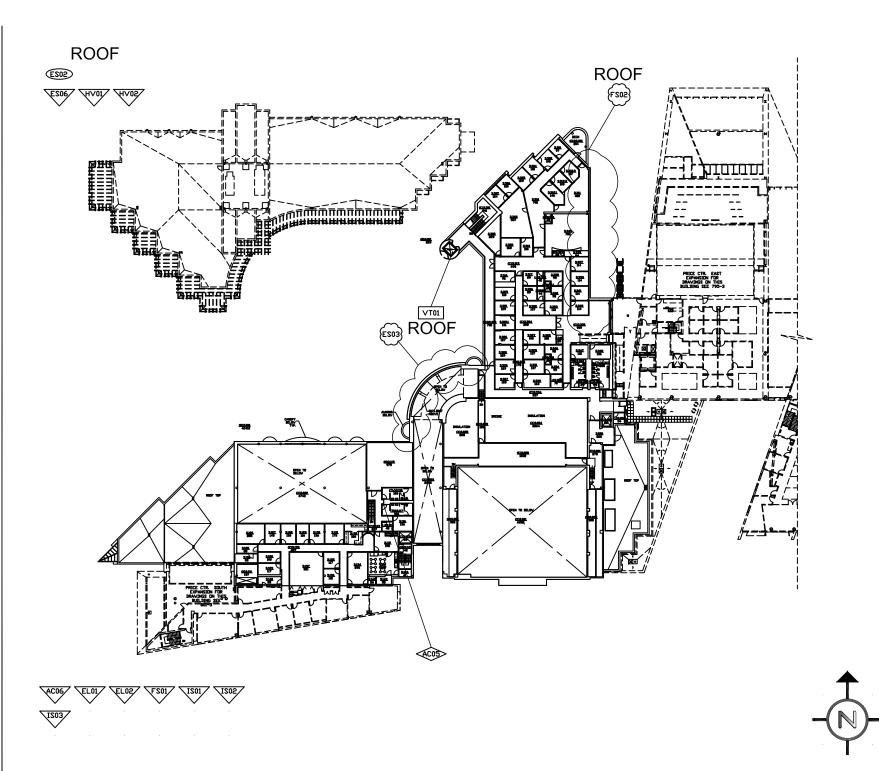
Date: 09/15/10
Drawn by: J.T.V.

Project No. 10-059

SECOND FLOOR PLAN

Sheet No.

2 of 3



PRICE CENTER -WEST

BLDG NO. 6701



CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N Stone Mountain GA 30087 770.879.7376



PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER
APPLIES TO A SITUATION
OF UNDEFINED EXTENTS



PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 09/15/10
Drawn by: J.T.V.

Project No. 10-059

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**

6701: PRICE CENTER-WEST

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	32,460	SF	\$2.18		\$70,689	1989	10
B2010	QUALITY LAP, SHINGLE OR T&G SIDING	5,250	SF	\$16.39		\$86,055	1989	50
B2010	EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)	10,020	SF	\$21.85		\$218,934	1989	45
B2020	STANDARD GLAZING AND CURTAIN WALL	24,880	SF	\$133.27		\$3,315,664	1989	55
B2020	STANDARD GLAZING AND CURTAIN WALL	9,680	SF	\$133.27		\$1,290,017	1989	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	41	LEAF	\$5,875.48		\$240,895	1989	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	51	LEAF	\$3,688.75		\$188,126	1989	40
B3010	BUILT-UP ROOF	60,910	SF	\$9.52		\$579,624	1989	20
B3010	BUILT-UP ROOF	3,760	SF	\$9.52		\$35,780	2005	20
B3010	MEMBRANE ROOF	2,260	SF	\$7.82		\$17,675	2001	15
B3010	PAINTED METAL ROOF	8,270	SF	\$10.03		\$82,953	1989	30
B3020	SKYLIGHT	50	SF	\$133.27		\$6,663	1989	30
B3020	SKYLIGHT	120	SF	\$133.27		\$15,992	1989	30
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	452	LEAF	\$1,095.20		\$495,029	1989	35
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	16	LEAF	\$2,126.48		\$34,024	1989	35
C1020	INTERIOR DOOR HARDWARE	16	EA	\$482.78		\$7,724	1989	15
C1020	INTERIOR DOOR HARDWARE	452	EA	\$482.78		\$218,216	1989	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	105,990	SF	\$1.43		\$151,435	1989	10
C3010	PREMIUM WALL FINISH (EPOXY, TILE, WOOD PANEL, ETC.)	15,840	SF	\$8.91		\$141,204	1989	20
C3020	CARPET	63,200	SF	\$10.40		\$657,229	1989	10
C3020	VINYL FLOOR TILE	47,030	SF	\$8.58		\$403,538	1989	15
C3020	CERAMIC FLOOR TILE	16,170	SF	\$25.67		\$415,139	1989	20
C3020	RESURFACE AND SEAL CONCRETE OR TERRAZZO	8,820	SF	\$11.87		\$104,708	1989	50
C3020	HARDWOOD REPLACEMENT	11,760	SF	\$36.68		\$431,361	1989	50
C3020	SAND AND FINISH HARDWOOD FLOORING	11,760	SF	\$6.24		\$73,403	1989	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	91,120	SF	\$7.32		\$667,350	1989	15
C3030	PAINTED CEILING FINISH APPLICATION	26,450	SF	\$1.43		\$37,791	1989	15
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	1	EA	\$224,835.51		\$224,836	1989	25
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	1	EA	\$224,835.51		\$224,836	1989	25

## Life Cycle Model

## **Building Component Summary**

6701: PRICE CENTER-WEST

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	\$42,018.07		\$42,018	1989	12
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	\$42,018.07		\$42,018	1989	12
D2010	PLUMBING FIXTURES - STUDENT UNION	202,544	SF	\$11.15		\$2,257,588	2006	35
D2020	WATER PIPING - STUDENT UNION	202,544	SF	\$9.18		\$1,860,069	1989	35
D2020	WATER HEATER (RES., ELEC.)	40	GAL	\$66.63		\$2,665	2005	10
D2030	DRAIN PIPING - STUDENT UNION	202,544	SF	\$13.74		\$2,783,424	1989	40
D2050	AIR COMPRESSOR PACKAGE (AVERAGE SIZE)	2	SYS	\$7,366.16		\$14,732	2010	25
D3030	COLD BOX REFRIGERATION SYSTEM	2	SYS	\$8,300.26		\$16,601	1989	15
D3030	COLD BOX REFRIGERATION SYSTEM	2	SYS	\$8,300.26		\$16,601	1989	15
D3030	COLD BOX REFRIGERATION SYSTEM	1	SYS	\$8,300.26		\$8,300	1989	15
D3030	COLD BOX REFRIGERATION SYSTEM	1	SYS	\$8,300.26		\$8,300	1989	15
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	23	EA	\$3,798.54		\$87,366	1989	20
D3040	EXHAUST FAN - UTILITY SET OR SIMILAR	6	EA	\$4,705.09		\$28,231	2008	20
D3040	EXHAUST FAN - PROPELLER TYPE OR SIMILAR	4	EA	\$1,642.43		\$6,570	1989	20
D3040	KITCHEN EXHAUST SYSTEM WITH MAKE-UP UNIT	14	SYS	\$72,100.38		\$1,009,405	1989	20
D3040	HVAC SYSTEM - STUDENT UNION	157,984	SF	\$41.19		\$6,506,987	1989	25
D3040	HVAC SYSTEM - STUDENT UNION	44,560	SF	\$41.19		\$1,835,321	2008	25
D3040	BASE MTD. PUMP - 15 HP TO 50 HP	30	HP	\$1,494.98		\$44,849	2010	20
D3040	BASE MTD. PUMP - 15 HP TO 50 HP	30	HP	\$1,494.98		\$44,849	2010	20
D4010	FIRE SPRINKLER SYSTEM	202,544	SF	\$9.82		\$1,988,081	1989	80
D4010	FIRE SPRINKLER HEADS	202,544	SF	\$0.65		\$131,475	1989	20
D5010	ELECTRICAL SYSTEM - STUDENT UNION	202,544	SF	\$18.96		\$3,840,601	1989	50
D5010	ELECTRICAL SWITCHGEAR 277/480V	4,000	AMP	\$52.17		\$208,668	1989	20
D5010	TRANSFORMER, DRY, 480-208V (30-150 KVA)	1,050	KVA	\$118.62		\$124,552	1989	30
D5020	EXIT SIGNS (BATTERY)	158	EA	\$392.65		\$62,038	1989	20
D5020	EXIT SIGNS (BATTERY)	44	EA	\$392.65		\$17,276	2008	20
D5020	EXTERIOR LIGHT (HID)	22	EA	\$844.09		\$18,570	1989	20
D5020	EXTERIOR LIGHT (HID)	7	EA	\$844.09		\$5,909	2008	20
D5020	LIGHTING - STUDENT UNION	81,018	SF	\$9.56		\$774,788	1989	20
D5020	LIGHTING - STUDENT UNION	121,526	SF	\$9.56		\$1,162,173	2008	20

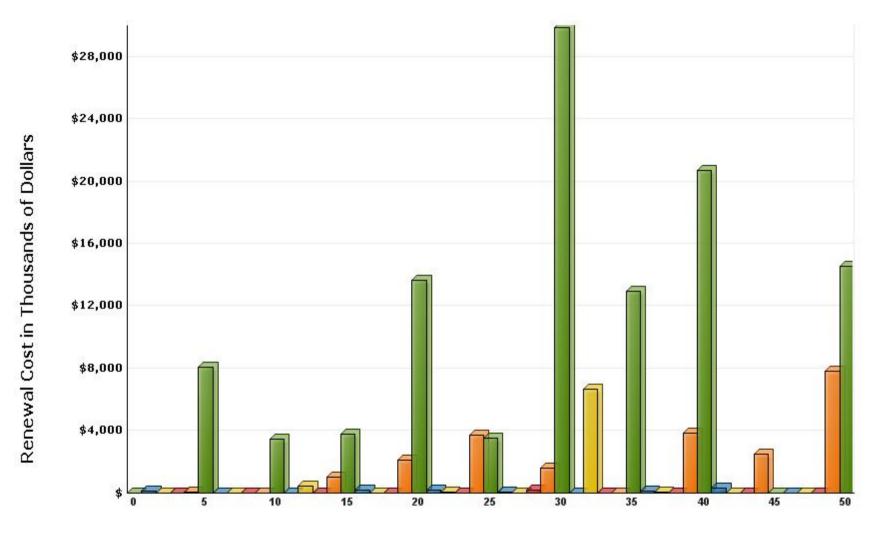
# Life Cycle Model Building Component Summary

### 6701: PRICE CENTER-WEST

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	202,544	SF	\$3.33		\$674,121	2008	15
E2010	STANDARD BASE OR WALL CABINETRY	80	LF	\$339.90		\$27,192	1989	20
E2010	PREMIUM FOLDING FIXED SEATING	360	EA	\$890.59		\$320,613	2001	20
F1020	ENVIRONMENTAL CHAMBER	144	SF	\$175.37		\$25,253	1989	35
F1020	ENVIRONMENTAL CHAMBER	104	SF	\$175.37		\$18,239	1989	35
F1020	ENVIRONMENTAL CHAMBER	27	SF	\$175.37		\$4,735	1989	35
F1020	ENVIRONMENTAL CHAMBER	40	SF	\$175.37	_	\$7,01 <u>5</u>	1989	35
						\$36,464,085		

# **Life Cycle Model Expenditure Projections**

6701: PRICE CENTER-WEST



Future Year

**Average Annual Renewal Cost Per SqFt \$5.87** 

## **FACILITY CONDITION ANALYSIS**

SECTION 6

# PHOTOGRAPHIC LOG

Photo ID No	Description	Location	Date
6701001a	North facade, south wing	Exterior elevation	7/13/2010
6701001e	Exit signage	Central wing, elevator bay	7/13/2010
6701002a	North facade at inside of L	Exterior elevation	7/13/2010
6701002e	Fire alarm horn strobe	Central wing, elevator bay	7/13/2010
6701003a	View looking west across west wing roof	Roof	7/13/2010
6701003e	Call station	Central wing, elevator bay	7/13/2010
6701004a	Cracked expansion joint cover, east end, west wing	Roof	7/13/2010
6701004e	Elevator car controls	Elevator	7/13/2010
6701005a	Typically aging finish on fake roof beam extensions at fascia, southwest corner, west wing	Exterior detail	7/13/2010
6701005e	Soffit light	Second floor, overhangs	7/13/2010
6701006a	View looking northeast along sloped standing seam metal siding showing growth of lichens, southwest corner of L	Roof	7/13/2010
6701006e	Obsolete sprinkler heads	Second floor, overhang	7/13/2010
6701007a	View looking northwest at west end, north wing	Exterior elevation	7/13/2010
6701007e	Architecturally significant exterior lighting	Exterior of Bookstore	7/13/2010
6701008a	View looking north at middle third, north wing	Exterior elevation	7/13/2010
6701008e	Renovated ductwork and piping systems	Bookstore, first floor	7/13/2010
6701009a	View looking northeast at west elevation, east wing	Exterior elevation	7/13/2010
6701009e	Motor control center	Bookstore, third floor, fan room	7/13/2010
6701010a	Deteriorated base flashing along north facade, south wing	Exterior elevation	7/13/2010
6701010e	HVAC controls	Bookstore, third floor, fan room	7/13/2010
6701011a	Single level drinking fountain	Third floor, south wing	7/13/2010
6701011e	Heat / smoke detector	Bookstore, third floor, fan room	7/13/2010
6701012a	View looking west across north wing roof	Roof	7/13/2010
6701012e	Exhaust fans that handle Building 2 restrooms	Bookstore, roof	7/13/2010
6701013a	View looking north along east edge, east wing, showing dangerous passageway requiring guardrail	Roof	7/13/2010
6701013e	Air handler 6	Bookstore, roof	7/13/2010
6701014a	Lack of wheelchair access to base cabinet	Third floor, room 3-311	7/13/2010
6701014e	VFD	Bookstore, roof, inside AH6	7/13/2010
6701015a	Subsiding concrete sidewalk over occupied space at southwest corner, north wing	Exterior detail	7/13/2010
6701015e	Original Pace single wall air handler 6.1.1	Central segment	7/13/2010

Photo ID No	Description	Location	Date
6701016a	Potential trip hazard intersection of semicircular plaza step to slope of plaza walking surface	Site detail	7/13/2010
6701016e	Lavatories and urinals	Third floor, restroom	7/13/2010
6701017a	View looking northwest up theater seating	First floor, theater	7/13/2010
6701017e	Side-projecting LED exit signage	Bookstore, third floor, office	7/13/2010
6701018a	Lack of wheelchair access to stage from house seating area	First floor, theater	7/13/2010
6701018e	Upgraded interior lighting	Bookstore, third floor, classroom	7/13/2010
6701019a	Deteriorating sound panels at rear wall	First floor, theater	7/13/2010
6701019e	Overhead fan coil unit ducted in from air handler room	Server room	7/13/2010
6701020a	View looking northeast along south facade, east wing	Exterior elevation	7/13/2010
6701020e	Iron hubless roof drain piping	Bookstore, mail sorting area	7/13/2010
6701021a	View of southeast corner, south wing	Exterior elevation	7/13/2010
6701021e	Grid track system	Bookstore, mail sorting area	7/13/2010
6701022a	View of southwest corner, south wing	Exterior elevation	7/13/2010
6701022e	Overhead recessed lighting	Second floor, outside of ballroom	7/13/2010
6701023a	West facade, south wing	Exterior elevation	7/13/2010
6701023e	Fluorescent lighting with battery backup	Third floor, corridor	7/13/2010
6701024a	View looking east across central plaza	Exterior elevation	7/13/2010
6701024e	Lighting tracts and internally insulated ductwork	Third floor, ballroom area	7/13/2010
6701025a	View looking southeast along north facade, south wing	Exterior elevation	7/13/2010
6701025e	15 hp Pace air handler	Roof	7/13/2010
6701026a	View looking southeast along west facade, north wing	Exterior elevation	7/13/2010
6701026e	20 hp Pace air handler	Roof	7/13/2010
6701027a	View looking southeast along north facade, north wing	Exterior elevation	7/13/2010
6701027e	10 hp Pace air handler	Roof	7/13/2010
6701028a	View looking southwest along north facade, north wing	Exterior elevation	7/13/2010
6701028e	Belt driven dishwasher exhaust	Roof, above ballroom	7/13/2010
6701029a	View looking southeast along west facade, east wing	Exterior elevation	7/13/2010
6701029e	Dry-type step transformer	Roof, flat above kitchen	7/13/2010
6701030a	View looking southwest along east facade, east wing	Exterior elevation	7/13/2010
6701030e	Refrigeration condenser	Roof, flat above kitchen	7/13/2010
6701031e	Deteriorated lenses on corridor lighting	Third floor, corridor	7/13/2010

6701032e         48 inch throat exhauster         Building 2, roof         7/13/2010           6701034e         Deteriorated condensing unit and exhaust fans         Building 2, roof         7/13/2010           6701034e         Air handler for Building 2         Building 2, roof         7/13/2010           6701035e         Main panel         Network systems room         7/13/2010           6701036e         Transducers         Network systems room         7/13/2010           6701037e         Food service furne hoods         Catering kitchen         7/13/2010           6701038e         Commercial-grade dishwasher         Catering kitchen         7/13/2010           6701039e         Power panels         Kitchen area, electrical room         7/13/2010           6701040e         Fresh air relief damper         Mechanical room 2.318         7/13/2010           6701041e         Old Johnson controls DCS lighting control for outdoor lighting         Machine room 2.334         7/13/2010           6701042e         DDC pneumatic hybrid design Siemens Apogee automatic controls automatic controls automatic control automa	Photo ID No	Description	Location	Date
6701034e         Air handler for Building 2         Building 2, roof         7/13/2010           6701035e         Main panel         Network systems room         7/13/2010           6701036e         Transducers         Network systems room         7/13/2010           6701037e         Food service furne hoods         Catering kitchen         7/13/2010           6701038e         Commercial-grade dishwasher         Catering kitchen         7/13/2010           6701039e         Power panels         Kitchen area, electrical room         7/13/2010           6701040e         Fresh air relief damper         Mechanical room 2.318         7/13/2010           6701041e         Old Johnson controls DCS lighting control for outdoor lighting         Machine room 2.334         7/13/2010           6701042e         DDC pneumatic hybrid design Slemens Apogee         Machine room 2.334         7/13/2010           6701043e         Two Metasys HVAC control panels         Machine room 2.334         7/13/2010           6701044e         Exit signage         Building 4, second floor         7/13/2010           6701047e         Typical battery pack         Building 4, second floor, north         7/13/2010           6701048e         Meter base, sub-panel main, and individual tenant main         Second floor, electrical room         7/13/2010	6701032e	48 inch throat exhauster	Building 2, roof	7/13/2010
6701035e         Main panel         Network systems room         7/13/2010           6701036e         Transducers         Network systems room         7/13/2010           6701037e         Food service furne hoods         Catering kitchen         7/13/2010           6701038e         Commercial-grade dishwasher         Catering kitchen         7/13/2010           6701040e         Fresh air relief damper         Mechanical room 2.318         7/13/2010           6701041e         Old Johnson controls DCS lighting control for outdoor lighting         Machine room 2.334         7/13/2010           6701042e         DDC pneumatic hybrid design Siemens Apogee automatic controls         Machine room 2.334         7/13/2010           6701043e         Two Metasys HVAC control panels         Machine room 2.334         7/13/2010           6701044e         Exit signage         Building 4, second floor         7/13/2010           6701046e         Typical battery pack         Building 4, second floor         7/13/2010           6701047e         Transformer         Second floor, electrical room         7/13/2010           6701048e         Meter base, sub-panel main, and individual tenant mains         Second floor, electrical room         7/13/2010           6701049e         Post-Indicator valve and 6 inch fire main         Building 4, second floor, north	6701033e	Deteriorated condensing unit and exhaust fans	Building 2, roof	7/13/2010
6701036e         Transducers         Network systems room         7/13/2010           6701037e         Food service fume hoods         Catering kitchen         7/13/2010           6701038e         Commercial-grade dishwasher         Catering kitchen         7/13/2010           6701039e         Power panels         Kitchen area, electrical room         7/13/2010           6701040e         Fresh air relief damper         Mechanical room 2.318         7/13/2010           6701041e         Old Johnson controls DCS lighting control for outdoor lighting         Machine room 2.334         7/13/2010           6701042e         DDCD pneumatic hybrid design Siemens Apogee automatic controls         Machine room 2.334         7/13/2010           6701043e         Two Metasys HVAC control panels         Building 4, second floor         7/13/2010           6701044e         Exit signage         Building 4, second floor         7/13/2010           6701045e         Typical battery pack         Building 4, second floor, porth promer         7/13/2010           6701046e         Water heater         Second floor, electrical room         7/13/2010           6701047e         Transformer         Second floor, electrical room         7/13/2010           6701048e         Meter base, sub-panel main, and individual tenant mains         Second floor, electrical room	6701034e	Air handler for Building 2	Building 2, roof	7/13/2010
6701037e         Food service fume hoods         Catering kitchen         7/13/2010           6701038e         Commercial-grade dishwasher         Catering kitchen         7/13/2010           6701039e         Power panels         Kitchen area, electrical room         7/13/2010           6701040e         Fresh air relief damper         Mechanical room 2.318         7/13/2010           6701041e         Old Johnson controls DCS lighting control for outdoor lighting         Machine room 2.334         7/13/2010           6701042e         DDC pneumatic hybrid design Siemens Apogee         Machine room 2.334         7/13/2010           6701043e         Two Metasys HVAC control panels         Machine room 2.334         7/13/2010           6701044e         Exit signage         Building 4, second floor         7/13/2010           6701045e         Typical battery pack         Building 4, second floor         7/13/2010           6701046e         Water heater         Second floor, electrical room         7/13/2010           6701047e         Transformer         Second floor, electrical room         7/13/2010           6701048e         Meter base, sub-panel main, and individual tenant mains         Second floor, electrical room         7/13/2010           6701049e         Post-indicator valve and 6 inch fire main         Building 4, second floor, north	6701035e	Main panel	Network systems room	7/13/2010
6701038e         Commercial-grade dishwasher         Catering kitchen         7/13/2010           6701039e         Power panels         Kitchen area, electrical room         7/13/2010           6701040e         Fresh air relief damper         Mechanical room 2.318         7/13/2010           6701041e         Old Johnson controls DCS lighting control for outdoor lighting         Machine room 2.334         7/13/2010           6701042e         DC pneumatic hybrid design Siemens Apogee automatic controls         Machine room 2.334         7/13/2010           6701043e         Two Metasys HVAC control panels         Machine room 2.334         7/13/2010           6701044e         Exit signage         Building 4, second floor         7/13/2010           6701045e         Typical battery pack         Building 4, second floor, housekeeping room         7/13/2010           6701046e         Water heater         Building 4, second floor, electrical room         7/13/2010           6701047e         Transformer         Second floor, electrical room         7/13/2010           6701048e         Meter base, sub-panel main, and individual tenant mains         Second floor, electrical room         7/13/2010           6701050e         Current power arrangement         Plaza area         7/13/2010           6701051e         Suspended overhead fan coil unit         Theat	6701036e	Transducers	Network systems room	7/13/2010
6701039e Power panels 6701040e Fresh air relief damper 6701040e Tresh air relief damper 6701041e Old Johnson controls DCS lighting control for outdoor lighting 6701041e DDC pneumatic hybrid design Siemens Apogee automatic controls 6701042e DDC pneumatic hybrid design Siemens Apogee automatic controls 6701043e Two Metasys HVAC control panels 67010440 Exit signage Building 4, second floor 7/13/2010 6701045e Typical battery pack Building 4, second floor, 7/13/2010 6701046e Water heater 6701047e Transformer 6701047e Transformer 6701048e Meter base, sub-panel main, and individual tenant mains 6701049e Post-indicator valve and 6 inch fire main Building 4, second floor, north end 6701050e Current power arrangement 6701052e Fire suppression 4 inch OS&Y valve 6701052e Fire suppression 4 inch OS&Y valve 6701055e Tenant and house gas meters and two seismic disconnects 6701056e Roof service grease trap off of the edge of the air handler 6701057e Pace air handler 6701058e Food service condensers 6701059e Building 4 water meter 6701059e Building 4 water meter 6701059e Solar power inverter 6701059e Solar power inverter 6701059e Solar power inverter	6701037e	Food service fume hoods	Catering kitchen	7/13/2010
6701040e         Fresh air relief damper         Mechanical room 2.318         7/13/2010           6701041e         Old Johnson controls DCS lighting control for outdoor lighting         Machine room 2.334         7/13/2010           6701042e         DDC pneumatic hybrid design Siemens Apogee automatic controls         Machine room 2.334         7/13/2010           6701043e         Two Metasys HVAC control panels         Machine room 2.334         7/13/2010           6701044e         Exit signage         Building 4, second floor         7/13/2010           6701045e         Typical battery pack         Building 4, second floor         7/13/2010           6701046e         Water heater         Building 4, second floor, Polacitical room         7/13/2010           6701047e         Transformer         Second floor, electrical room         7/13/2010           6701048e         Meter base, sub-panel main, and individual tenant mains         Second floor, north end         7/13/2010           6701049e         Post-indicator valve and 6 inch fire main         Building 4, second floor, north end         7/13/2010           6701050e         Current power arrangement         Plaza area         7/13/2010           6701051e         Suspended overhead fan coil unit         Theater area, projection booth         7/13/2010           6701052e         Fire suppression 4 inch	6701038e	Commercial-grade dishwasher	Catering kitchen	7/13/2010
6701041e Dld Johnson controls DCS lighting control for outdoor lighting DDC pneumatic hybrid design Siemens Apogee automatic controls 6701042e DDC pneumatic hybrid design Siemens Apogee automatic controls 6701043e Two Metasys HVAC control panels Machine room 2.334 7/13/2010 6701044e Exit signage Building 4, second floor 7/13/2010 6701045e Typical battery pack Building 4, second floor 7/13/2010 6701046e Water heater Building 4, second floor, housekeeping room 7/13/2010 6701046e Transformer Second floor, electrical room 7/13/2010 6701048e Meter base, sub-panel main, and individual tenant mains Second floor, electrical room 7/13/2010 6701049e Post-indicator valve and 6 inch fire main Building 4, second floor, north end 7/13/2010 6701050e Current power arrangement Plaza area 7/13/2010 6701051e Suspended overhead fan coil unit Theater area 7/13/2010 6701052e Fire suppression 4 inch OS&Y valve Theater area, projection booth 7/13/2010 6701053e Local power and lighting sub-panel Electrical room 1.434 7/13/2010 6701054e Water, gas, and domestic mains in various metals Theater, north end 7/13/2010 6701055e Tenant and house gas meters and two seismic disconnects 6701056e Roof service grease trap off of the edge of the air handler Food service area 7/13/2010 6701057e Pace air handler Food service area 7/13/2010 6701058e Food service condensers Machine room 7/13/2010 6701059e Electric water heater with fractional hp inline circulating Machine room 7/13/2010 6701060e Building 4 water meter Machine room 7/13/2010	6701039e	Power panels	Kitchen area, electrical room	7/13/2010
Bighting	6701040e	Fresh air relief damper	Mechanical room 2.318	7/13/2010
automatic controls  Two Metasys HVAC control panels  Machine room 2.334  7/13/2010  6701044e  Exit signage  Building 4, second floor  7/13/2010  6701046e  Water heater  Water heater  Transformer  Fransformer  Second floor, electrical room  7/13/2010  6701048e  Meter base, sub-panel main, and individual tenant mains  Second floor, electrical room  7/13/2010  6701049e  Post-indicator valve and 6 inch fire main  6701050e  Current power arrangement  Fire suppression 4 inch OS&Y valve  6701052e  Fire suppression 4 inch OS&Y valve  6701053e  Local power and lighting sub-panel  6701054e  Water, gas, and domestic mains in various metals  6701055e  Tenant and house gas meters and two seismic  disconnects  6701056e  Roof service grease trap off of the edge of the air handler  6701059e  Electric water heater with fractional hp inline circulating pump  6701059e  Building 4, second floor, north  7/13/2010	6701041e		Machine room 2.334	7/13/2010
6701044e         Exit signage         Building 4, second floor         7/13/2010           6701045e         Typical battery pack         Building 4, second floor         7/13/2010           6701046e         Water heater         Building 4, second floor, housekeeping room         7/13/2010           6701047e         Transformer         Second floor, electrical room         7/13/2010           6701048e         Meter base, sub-panel main, and individual tenant mains         Second floor, electrical room         7/13/2010           6701049e         Post-indicator valve and 6 inch fire main         Building 4, second floor, north ofform         7/13/2010           6701050e         Current power arrangement         Plaza area         7/13/2010           6701051e         Suspended overhead fan coil unit         Theater area         7/13/2010           6701052e         Fire suppression 4 inch OS&Y valve         Theater area, projection booth         7/13/2010           6701054e         Water, gas, and domestic mains in various metals         Theater, north end         7/13/2010           6701055e         Tenant and house gas meters and two seismic disconnects         Theater area way on exit ramp disconnects         7/13/2010           6701056e         Roof service grease trap off of the edge of the air handler         Food service area         7/13/2010           6701058e	6701042e		Machine room 2.334	7/13/2010
For 1045e Typical battery pack Building 4, second floor 7/13/2010 7/13/2010 8/1046e Water heater Building 4, second floor, housekeeping room 7/13/2010 8/1047e Transformer Second floor, electrical room 7/13/2010 8/1048e Meter base, sub-panel main, and individual tenant mains Second floor, electrical room 7/13/2010 8/1049e Post-indicator valve and 6 inch fire main Building 4, second floor, north 7/13/2010 8/1049e Suspended overhead fan coil unit Plaza area 7/13/2010 8/10406 For 1051e Suspended overhead fan coil unit Theater area 7/13/2010 8/10406 Fire suppression 4 inch OS&Y valve Theater area, projection booth 7/13/2010 8/10406 Water, gas, and domestic mains in various metals Theater, north end 7/13/2010 8/10406 Water, gas, and domestic mains in various metals Theater area way on exit ramp 7/13/2010 8/10406 Roof service grease trap off of the edge of the air handler Food service area 7/13/2010 8/10406 Pace air handler Fo	6701043e	Two Metasys HVAC control panels	Machine room 2.334	7/13/2010
6701046e Water heater Second floor, housekeeping room 7/13/2010 frootseeping 7/13/20	6701044e	Exit signage	Building 4, second floor	7/13/2010
Front 1970 Page arr handler for handler for 1970 Page arr handler for 1970 Page arr handler for	6701045e	Typical battery pack	Building 4, second floor	7/13/2010
Meter base, sub-panel main, and individual tenant mains Second floor, electrical room 7/13/2010 6701049e Post-indicator valve and 6 inch fire main Building 4, second floor, north 7/13/2010 6701050e Current power arrangement Plaza area 7/13/2010 6701051e Suspended overhead fan coil unit Theater area 7/13/2010 6701052e Fire suppression 4 inch OS&Y valve Theater area, projection booth 7/13/2010 6701053e Local power and lighting sub-panel Electrical room 1.434 7/13/2010 6701054e Water, gas, and domestic mains in various metals Theater, north end 7/13/2010 6701055e Tenant and house gas meters and two seismic disconnects 6701056e Roof service grease trap off of the edge of the air handler Food service area 7/13/2010 6701057e Pace air handler Food service area 7/13/2010 6701058e Food service condensers Machine room 7/13/2010 6701059e Electric water heater with fractional hp inline circulating pump 6701060e Building 4 water meter Machine room 7/13/2010 6701061e Solar power inverter Roof 7/13/2010	6701046e	Water heater		7/13/2010
Post-indicator valve and 6 inch fire main Building 4, second floor, north end 7/13/2010 6701050e Current power arrangement Plaza area 7/13/2010 6701051e Suspended overhead fan coil unit Theater area 7/13/2010 6701052e Fire suppression 4 inch OS&Y valve Theater area, projection booth 7/13/2010 6701053e Local power and lighting sub-panel Electrical room 1.434 7/13/2010 6701054e Water, gas, and domestic mains in various metals Theater, north end 7/13/2010 6701055e Tenant and house gas meters and two seismic disconnects Theater area way on exit ramp 7/13/2010 6701056e Roof service grease trap off of the edge of the air handler Food service area 7/13/2010 6701057e Pace air handler Machine room 7/13/2010 6701058e Food service condensers Machine room 7/13/2010 6701059e Electric water heater with fractional hp inline circulating pump 6701060e Building 4 water meter Machine room 7/13/2010 6701061e Solar power inverter Roof 7/13/2010	6701047e	Transformer	Second floor, electrical room	7/13/2010
6701050e Current power arrangement Plaza area 7/13/2010 6701051e Suspended overhead fan coil unit Theater area 7/13/2010 6701052e Fire suppression 4 inch OS&Y valve Theater area, projection booth 7/13/2010 6701053e Local power and lighting sub-panel Electrical room 1.434 7/13/2010 6701054e Water, gas, and domestic mains in various metals Theater, north end 7/13/2010 6701055e Tenant and house gas meters and two seismic disconnects 6701056e Roof service grease trap off of the edge of the air handler Food service area 7/13/2010 6701057e Pace air handler Machine room 7/13/2010 6701058e Food service condensers Machine room 7/13/2010 6701059e Electric water heater with fractional hp inline circulating pump 6701060e Building 4 water meter Machine room 7/13/2010 6701061e Solar power inverter Roof 7/13/2010	6701048e	Meter base, sub-panel main, and individual tenant mains	Second floor, electrical room	7/13/2010
Suspended overhead fan coil unit  Theater area  7/13/2010  Fire suppression 4 inch OS&Y valve  Theater area, projection booth  7/13/2010  Fire suppression 4 inch OS&Y valve  Theater area, projection booth  7/13/2010  Fire suppression 4 inch OS&Y valve  Theater area, projection booth  7/13/2010  Fire suppression 4 inch OS&Y valve  Theater area, projection booth  7/13/2010  Fire suppression 4 inch OS&Y valve  Theater area, projection booth  7/13/2010  Fire suppression 4 inch OS&Y valve  Theater area, projection booth  7/13/2010  Theater area way on exit ramp  7/13/2010  Theater area way on exit ramp  7/13/2010  Frood service grease trap off of the edge of the air handler  Food service area  7/13/2010  Frood service area  7/13/2010  Frood service condensers  Machine room  7/13/2010  Frood service water heater with fractional hp inline circulating pump  Frood service  Fire suppression 4 inch OS&Y valve  Theater area, projection booth  7/13/2010	6701049e	Post-indicator valve and 6 inch fire main		7/13/2010
Fire suppression 4 inch OS&Y valve Theater area, projection booth 7/13/2010 COUNTY TO SAY VALVE Theater area, projection booth 7/13/2010 COUNTY TO SAY VALVE Theater area, projection booth 7/13/2010 COUNTY TO SAY VALVE Theater area way on 1.434 Theater, north end 7/13/2010 Theater area way on exit ramp 7/13/2010 Theater area, projection booth 7/13/2010 Theater area, projection 1.434 Theater area, proj	6701050e	Current power arrangement	Plaza area	7/13/2010
6701053eLocal power and lighting sub-panelElectrical room 1.4347/13/20106701054eWater, gas, and domestic mains in various metalsTheater, north end7/13/20106701055eTenant and house gas meters and two seismic disconnectsTheater area way on exit ramp 7/13/20107/13/20106701056eRoof service grease trap off of the edge of the air handlerFood service area7/13/20106701057ePace air handlerMachine room7/13/20106701058eFood service condensersMachine room7/13/20106701059eElectric water heater with fractional hp inline circulating pumpMachine room7/13/20106701060eBuilding 4 water meterMachine room7/13/20106701061eSolar power inverterRoof7/13/2010	6701051e	Suspended overhead fan coil unit	Theater area	7/13/2010
6701054e Water, gas, and domestic mains in various metals Theater, north end 7/13/2010 6701055e Tenant and house gas meters and two seismic disconnects  6701056e Roof service grease trap off of the edge of the air handler Food service area 7/13/2010 6701057e Pace air handler Machine room 7/13/2010 6701058e Food service condensers Machine room 7/13/2010 6701059e Electric water heater with fractional hp inline circulating pump 6701060e Building 4 water meter Machine room 7/13/2010 6701061e Solar power inverter Roof 7/13/2010	6701052e	Fire suppression 4 inch OS&Y valve	Theater area, projection booth	7/13/2010
Tenant and house gas meters and two seismic disconnects  Roof service grease trap off of the edge of the air handler Food service area 7/13/2010  Roof service grease trap off of the edge of the air handler Food service area 7/13/2010  Roof service grease trap off of the edge of the air handler Food service area 7/13/2010  Roof service condensers Machine room 7/13/2010  Roof Service condensers Machine room 7/13/2010  Roof 7/13/2010  Roof 7/13/2010	6701053e	Local power and lighting sub-panel	Electrical room 1.434	7/13/2010
disconnects  Roof service grease trap off of the edge of the air handler Food service area 7/13/2010  Pace air handler Machine room 7/13/2010  Food service condensers Machine room 7/13/2010  Food service condensers Machine room 7/13/2010  Building 4 water meter Machine room 7/13/2010  Solar power inverter Roof 7/13/2010	6701054e	Water, gas, and domestic mains in various metals	Theater, north end	7/13/2010
6701057e Pace air handler Machine room 7/13/2010 6701058e Food service condensers Machine room 7/13/2010 6701059e Electric water heater with fractional hp inline circulating pump Machine room 7/13/2010 6701060e Building 4 water meter Machine room 7/13/2010 6701061e Solar power inverter Roof 7/13/2010	6701055e		Theater area way on exit ramp	7/13/2010
6701058e Food service condensers Machine room 7/13/2010 6701059e Electric water heater with fractional hp inline circulating pump Machine room 7/13/2010 6701060e Building 4 water meter Machine room 7/13/2010 6701061e Solar power inverter Roof 7/13/2010	6701056e	Roof service grease trap off of the edge of the air handler	Food service area	7/13/2010
6701059e Electric water heater with fractional hp inline circulating pump Machine room 7/13/2010 6701060e Building 4 water meter Machine room 7/13/2010 6701061e Solar power inverter Roof 7/13/2010	6701057e	Pace air handler	Machine room	7/13/2010
pump         Machine room         7/13/2010           6701060e         Building 4 water meter         Machine room         7/13/2010           6701061e         Solar power inverter         Roof         7/13/2010	6701058e	Food service condensers	Machine room	7/13/2010
6701061e Solar power inverter Roof 7/13/2010	6701059e	,	Machine room	7/13/2010
·	6701060e	Building 4 water meter	Machine room	7/13/2010
	6701061e	•	Roof	7/13/2010

Photo ID No	Description	Location	Date
6701062e	Various HID and incandescent lighting fixtures	First floor, food court area	7/13/2010
6701063e	Fire alarm control panel	Electrical room 1.311	7/13/2010
6701064e	480 volt switchgear	Electrical room 1.311	7/13/2010
6701065e	Main switchgear for the tenants and the 480 volt	Electrical room 1.311	7/13/2010
6701066e	Step transformer, power panel, and lighting panel	Electrical room 1.311	7/13/2010
6701067e	Tenant meter panel	Electrical room 1.311	7/13/2010
6701068e	Hot water circulating pump	Bookstore, west end, machine room	7/13/2010
6701069e	1 of 2 chilled water VFDs	Bookstore, west end, machine room	7/13/2010
6701070e	Control air compressor	Bookstore, west end, machine room	7/13/2010
6701071e	Heat exchanger	Bookstore, west end, machine room	7/13/2010
6701072e	Two chilled water pumps	Bookstore, west end, machine room	7/13/2010
6701073e	Motor control center	Bookstore, west end, machine room	7/13/2010
6701074e	Digital water meter	Bookstore, lower level	7/13/2010
6701075e	Small Pace air handler serving first floor computer desk	Bookstore, lower level	7/13/2010
6701076e	Other small air handler	Bookstore, lower level	7/13/2010
6701077e	Substation area	Electrical room 1.222	7/13/2010
6701078e	Food service exhaust	Building 4, roof	7/13/2010
6701079e	Make-up air unit and small fan	Building 4, roof	7/13/2010
6701080e	Rusted out relief vent	Building 4, roof	7/13/2010
6701081e	1 of 2 Pace air handlers on the roof deck section	Building 4, roof	7/13/2010









6701001A.jpg

6701001E.jpg

6701002A.jpg

6701002E.jpg









6701003A.jpg

6701003E.jpg

6701004A.jpg

6701004E.jpg









6701005A.jpg

6701005E.jpg

6701006A.jpg

6701006E.jpg









6701007A.jpg

6701007E.jpg

6701008A.jpg

6701008E.jpg









6701009A.jpg

6701009E.jpg

6701010A.jpg

6701010E.jpg







6701012A.jpg



6701014E.jpg

6701012E.jpg



6701013A.jpg



6701015E.jpg

6701013E.jpg





6701016E.jpg



6701015A.jpg







6701017A.jpg

6701017E.jpg

6701018A.jpg

6701018E.jpg









6701019A.jpg

6701019E.jpg

6701020A.jpg

6701020E.jpg









6701021A.jpg

6701021E.jpg

6701022A.jpg

6701022E.jpg









6701023A.jpg

6701023E.jpg

6701024A.jpg

6701024E.jpg









6701025A.jpg

6701025E.jpg

6701026A.jpg

6701026E.jpg









6701027A.jpg

6701027E.jpg

6701028A.jpg

6701028E.jpg









6701029A.jpg

6701029E.jpg

6701030A.jpg

6701030E.jpg









6701031E.jpg

6701032E.jpg

6701033E.jpg

6701034E.jpg









6701035E.jpg

6701036E.jpg

6701037E.jpg

6701038E.jpg









6701039E.jpg

6701040E.jpg

6701041E.jpg

6701042E.jpg









6701043E.jpg

6701044E.jpg

6701045E.jpg

6701046E.jpg









6701047E.jpg

6701048E.jpg

6701049E.jpg

6701050E.jpg









6701051E.jpg

6701052E.jpg

6701053E.jpg

6701054E.jpg









6701055E.jpg

6701056E.jpg

6701057E.jpg

6701058E.jpg









6701059E.jpg

6701060E.jpg

6701061E.jpg

6701062E.jpg









6701063E.jpg

6701064E.jpg

6701065E.jpg

6701066E.jpg









6701067E.jpg

6701068E.jpg

6701069E.jpg

6701070E.jpg









6701071E.jpg

6701072E.jpg

6701073E.jpg

6701074E.jpg









6701075E.jpg

6701076E.jpg

6701077E.jpg

6701078E.jpg







6701079E.jpg

6701080E.jpg

6701081E.jpg